UNIVERSITY SYSTEM of MARYLAND

3300 METZEROTT ROAD // ADELPHI, MD 20783
WWW.USMD.EDU // 301.445.1901

Board of Regents ~ Committee on Education Policy and Student Life and Safety

Thursday, May 15, 2025 ~ 9:30 a.m.

Zoom Details to be Provided to Committee
Public Listen-Only Access: 443-353-0686 – Conference ID: 452 013 41

Public Session Agenda

Action Items

1. Academic Program Proposals
    a. Bowie State University: B.A. in Dance
    b. Bowie State University: B.S. in Artificial Intelligence
    c. Frostburg State University: Bachelor of Music
    d. Salisbury University: B.S. in Biochemistry and Molecular Biology
    e. University of Maryland, College Park: M.S. in Information
    f. University of Maryland, College Park: M.S. in Artificial Intelligence
    g. University of Maryland, College Park: B.A. in Global Culture and Thought
    h. University of Maryland, College Park: B.A. in Global and Foreign Policy
    i. University of Maryland, College Park: B.A. in Public Service Interpreting and Translation
    j. University of Maryland Eastern Shore: B.S. in Mathematics
    k. University of Maryland Eastern Shore: B.S. in Private Club and Resort Management
    l. University of Maryland Global Campus: M.S. in Applied A.I.
2. Approval of Public and Closed Session Minutes from April 3, 2025 Meeting
3. Request for Temporary Exemption from a Clause in Policy on Undergraduate Admissions
4. III-6.10: Policy for the Numbering of Academic Courses
5. III-5.00: Policy on Academic Calendar

Information Items

6. VIII-2.30: Policy on Waiver of Tuition and Granting of Other Privileges for Senior Citizens of MD

7. VIII – 2.70–Policy on Student Classification for Admission and Tuition Purposes
8. Policy on Student Refund After Withdrawal for Extenuating Circumstances
9. Campus Safety Reports
10. 2025-2026 EPSLS Agenda Brainstorming

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Bowie State University (BSU) proposal for a Bachelor of Arts (BA) in Dance

COMMITTEE: Education Policy and Student Life and Safety
M
DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The Bachelor of Arts in Dance program, with an area of concentration in Technique, Performance, and Artistic Leadership, is integral to our mission of providing innovative academic programs and transformational experiences as students prepare for careers. The program provides an outlet for students' creativity in the arts to be fulfilled through a comprehensive program of study of the art of dance as tradition, history and purveyor of culture, and its performative power. Building on the existing dance and movement studies track in the Theater Arts program, and minors in Dance and African Diaspora Dance, the program links the scholarship of the humanities with the performance qualities of dance as an art form. The *Technique, Performance, and Artistic Leadership c*oncentration in the new program enhances students' dance technique and choreographic skills while allowing them to master advanced levels of dance skillsets and cultivate knowledge of global dance, kinesiology, somatics of movement, dance teaching methods, and dance scholarship.

Aside from technical proficiency in various dance techniques, the B.A. in Dance provides rigorous academic outlets including the study of the art of dance, its traditions and cultural heritage, and its power to engage audiences. This multidisciplinary foundation that develops proficiency in critical thinking as well as written and verbal communication, prepares the graduate for lifelong learning, and offers skills that translate into other areas of the workforce both inside and outside of the arts.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the proposal from Bowie State University to offer a Bachelor of Arts in Dance.

COMMITTEE RECOMMENDATION:	DATE: April 3, 2025
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

Aminta H. Breaux, Ph.D.
President

Henry Administration Bldg., Ste. 2000
14000 Jericho Park Rd, Bowie, MD 20715
P 301-860-3555
F 301-860-3510
E president@bowiestate.edu
bowiestate.edu

March 5, 2025

Jay A. Perman, MD
Chancellor
University System of Maryland
3300 Metzerott Road
Adelphi, Maryland 20783-1690

RE: New Academic Program – Bachelor of Arts in Dance

Dear Chancellor Perman:

Please find enclosed our proposal to offer the Bachelor of Arts (B.A.) in Dance (HEGIS 100800/CIP 50.0301).

The Department of Fine and Performing Arts seeks to transition its current track in Dance Movement within the Bachelor of Science in Theatre Arts to the Bachelor of Arts in Dance with a concentration in Technique, Performance, and Artistic Leadership. With increased student demand for a dance major, and the only Historically Black College and University in the southern portion of the state of Maryland, BSU's dance program would increase access to arts education in the region. The proposed program is integral to our mission of providing innovative academic programs and transformational experiences as students prepare for careers. The dance major provides an outlet for students' creativity in the arts, to be fulfilled through a comprehensive program of study of the art of dance as tradition, history and purveyor of culture, and its performative power while preparing students for graduate study, or careers in somatics, dance therapy or the therapeutic arts, the nonprofit sector, arts management, or a career in any of the technical aspects of performance.

We respectfully request the Board's consideration of this proposal.

Sincerely,

Aminta H. Breaux, Ph.D.

Cc: Dr. Guy-Alain Amoussou, Provost and Vice President for Academic Affairs
Dr. Alison Wrynn, Senior Vice Chancellor
Dr. Candace Caraco, Associate Vice Chancellor
Dr. George Acquaah, Dean, College of Arts and Sciences
Ms. Gayle Fink, Assistant Vice President for Institutional Effectiveness
Dr. Jacqueline Cade, Director, Institutional and Academic Programming
Ms. Brandy Wilson, Registrar

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
X	Within Existing Resources, or
	Requiring New Resources

Bowie State University

Institution Submitting Proposal

Dance

Title of Proposed Program

Bachelor of Arts (B.A.)
Award to be Offered

Spring 2026
Projected Implementation Date

100800
Proposed HEGIS Code

50.0301
Proposed CIP Code

Fine and Performing Arts
Department in which program will be located

Prof. Jennifer Dorsey
Department Contact

301-860-3718
Contact Phone Number

jdorsey@bowiestate.edu
Contact E-Mail Address

Signature of President or Designee

3-7-25
Date

Bachelor of Arts
Dance

A. Centrality to Institutional Mission and Planning Priorities:

1. Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.

The Bachelor of Arts in Dance, with an area of concentration in *Technique, Performance, and Artistic Leadership,* is integral to our mission of providing innovative academic programs and transformational experiences as students prepare for careers. The dance program provides an outlet for students' creativity in the arts to be fulfilled through a comprehensive program of study of the art of dance as tradition, history and purveyor of culture, and its performative power. The Bowie State University dance degree is designed to prepare students for a career in a variety of dance performance outlets; graduate study, somatics, dance therapy or the therapeutic arts, the nonprofit sector, arts management, or a career in any of the technical aspects of performance.
The proposed dance major builds on the existing dance and movement studies track of the Theater Arts program, which also houses minors in dance and African diaspora dance. Student demand and artistic relevancy call for a dedicated degree program in the dance arts. The new program links the scholarship of the humanities with the performance qualities of dance as an art form and is comprised of a comprehensive program of study that includes foundational and advanced dance techniques spanning many areas. The core courses include but are not limited to: History and Culture of Black American Dance, Tap Dance Technique, Jazz Dance Technique, Modern Dance Innovations, Hip Hop Dance Technique, West African Dance Technique, and Dance Internship/Apprentice Experience. Core courses prepare the student for advanced technical study within the concentration including Jazz Dance Technique II, Advanced Modern Dance and Contemporary Technique, Somatics in Dance, Entrepreneurship, and many more. The *Technique, Performance, and Artistic Leadership c*oncentration enhances students' dance technique and choreographic skills while also allowing them to master advanced levels of dance skillsets and cultivate knowledge of global dance, kinesiology, somatics of movement, dance teaching methods, and dance scholarship.

2. Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

The Bachelor of Arts in Dance program promotes our vision of building and strengthening Bowie State University's community of learners by *preserving the lasting legacy of Bowie State University.* The program enhances the university's legacy of providing educational and career opportunities, instilling a sense of connecting social responsibility with the arts, and artistically engaging in pertinent issues within the broader community of artists. Bowie State University has a commitment to civic engagement and the Department of Fine and Performing Arts fosters a conducive learning environment that promotes socially engaged art. Dance is and will continue to be part of that artistic relevancy, production, and scholarship.

Building Academic Excellence. This degree program provides an innovative academic and transformational experience as students prepare for careers in dance. The dance major provides another outlet (via the broader existing theater arts degree) for the full expression of students' creativity and scholarly excellence in the arts. Aside from technical proficiency in various dance techniques, the proposed degree program provides rigorous academic outlets including the study of the art of dance, its traditions and cultural heritage, and its power to engage audiences. This multidisciplinary foundation, that develops proficiency in critical thinking as well as written and verbal communication, prepares the graduate for lifelong learning, and offers skills that translate into other areas of the workforce both inside and outside of the arts.

Creating Opportunities to support and engage 21st century generation of learners. As a performance medium, dance traditionally has been deemed an ephemeral art form. Technology, however, has changed the way society engages and experiences most things—including the arts. This program incorporates several aspects of technology integrated into specific courses designed to engage the 21st century learner who strives to connect with the arts digitally and virtually. Internship opportunities with dance companies in the surrounding area will support majors in their pursuit of coupling dance with technology.

Encouraging and Supporting the Diversity of Learners enrolled at BSU. This inclusive program fosters a community of learners who seek to create dance through diverse perspectives. The major will attract students from many different backgrounds who are interested in fostering their dance education through transformational courses such as *History and Culture of Black American Dance, West African Dance Technique, Hip Hop Dance Technique, Global Dance, and Self Promotion and Marketing in the Arts.*

Developing new and distinctive programs that uniquely define Bowie State University. Traditionally, whether vernacular or on the concert stage, dance has the power to communicate (as a form of nonverbal communication) and document (as a testament to a people's traditions and culture). This dance major focuses on the African American impact on the art form of dance from its African roots through its global manifestations—since African American culture (inclusive of dance) is and has historically been the basis of American popular culture. Bowie State University's mission of providing innovative academic programs is realized in this new program.

3. Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.)

The funding for this program will be provided by Bowie State University's College of Arts and Sciences and the Department of Fine and Performing Arts. Present faculty members within the department and the theatre arts major will conduct many of the courses, however, additional instructors are needed to provide several of the course offerings required for this degree program. Bowie State University's administration affirms that funding for these new full-time faculty positions and technical support positions will be provided as they are dedicated to bringing a Dance program to Bowie State University. At least two new full-time professors are needed to fully implement the program with the possibility of adding more as the program grows. The department currently is seeking a credentialed dance instructor to fulfill the current workload. This faculty hire will transition into the new degree program.

4. Provide a description of the institution's commitment to:
    a) ongoing administrative, financial, and technical support of the proposed program.

Bowie State University is committed to providing ongoing administrative, financial, and technical support to the Dance program. The university administration and the College of Arts & Sciences have committed to funding a budget, separate from the Theatre Arts area, for this endeavor. As previously mentioned, a search is underway for a new, full-time professor.

    b) continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

As previously noted, Bowie State University has a significant number of theater arts students pursuing the dance and movement studies track and the dance minor. If, for some reason, the major is not able to continue, the degree program would transition back to its current iteration as a theater arts track and minor. The department would offer core classes until all enrolled students completed the program and graduated with the designated degree.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan:

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:

a) The need for the advancement and evolution of knowledge.

Several universities in the metropolitan area offer a Bachelor of Arts in dance, however, this program will have a focus on the intersection of scholarship and performance embodied in the evolution of the knowledge in the art of dance. The program offers a concentration, *Technique, Performance, and Artistic Leadership*, that enhances the students' knowledge of dance technique and pedagogy that prepares students to instruct in a school system or studio, lead a dance company through a breadth of choreography courses as well as production courses that teach students how to direct and produce dance performances. The program also offers opportunities for students to connect technology with the arts and marketing for the arts in addition to providing a foundation for eventual careers in dance entrepreneurship, kinesiology, or dance therapy. The African American and African diaspora emphasis enhances the students' unique cultural experience of dance and provides a distinctive scholarly course of study including the traditions and heritage of dance as performance and narrative through a culturally inclusive lens. It allows graduates of the program to pursue graduate study in dance or related subject or begin a career in the arts, whether that is starting a dance/arts nonprofit organization, a dance company, teaching dance at a school or studio, or working behind the scenes with a dance company to promote or produce performances.

b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education.

This program expands the educational opportunities and choices for minority and educationally disadvantaged students. Oftentimes successful artists from marginal backgrounds recount how the arts saved them. Their chosen artistic discipline took them away from whatever circumstance possibly threatened their very survival and showed them their potential to overcome those obstacles and succeed. While a focus on science, technology, engineering, and mathematics (STEM) for job security is stressed in most educational areas, the arts and entertainment is a billion dollar industry as well. Moreover, an arts background often provides the creativity that drives innovation and entrepreneurship forward.

c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs.

Dance as an art form cannot be separated from its cultural and historical base. Socially engaged art can chronicle, augment, and encourage activism that progresses humankind. This program expands the capacity of Bowie State University to provide high quality and unique programs that highlight how African Americans have impacted the field of dance. As an HBCU, Bowie State is deeply connected to African American culture and this dance program offers students a unique educational experience to explore dance as a means of cultural expression and deepen their understanding of the historical and cultural context of dance and its role in the African American community from highly trained faculty. Students who complete the program procure the ability to engage in a variety of career paths in dance with a spotlight on navigating the field through a culturally inclusive lens.

2. Provide evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education.

This program enhances post-secondary options for Maryland residents and effectively fulfills the evolving educational needs of students, the state, and the nation in accordance with the three primary goals set forth in the 2022 State Plan for Higher Education. Bowie State University's dance program contributes to the State's goals by providing diverse educational opportunities that cater to a wide range of students. As the only Maryland HBCU in the DMV area and one of the lowest tuition institutions in the State of Maryland with tuition well below the national average, a BSU education is an affordable option for all Marylanders. The dance program's rigorous structure, combining theoretical knowledge with practical experience, aligns with the State Plan's priority to promote and implement practices that ensure student success. By offering a curriculum that balances academic learning with hands-on application through performance and cultural studies, the program prepares students for

both professional performance, educational, and entrepreneurial roles in the arts, thereby contributing to the development of a skilled workforce and a more vibrant and inclusive environment in Maryland's arts sector.

Courses have been designed to offer quality and updated information in the field of dance, dance history, dance pedagogy, and dance performance and technique. The program is designed to be accessible for all students who seek a dance degree and who qualify to be enrolled at Bowie State University. This program is consistent with the Maryland State Plan to offer diversity of quality educational opportunities since it will be a new dedicated major and offer a BA in dance that differs from others in the state with the intersection of performance and scholarship that enhance both and can translate into viable employment skills. The Maryland State Plan for Postsecondary Education states in the 5th and 6th goals: The people of Maryland are entitled to efficient and effective management of higher education and creative leadership in it. Adding a dedicated dance major at Bowie State University satisfies an existing desire as apparent by the interest from current and prospective students. In addition, the dance major enhances the goal of creative leadership from the standpoint of adding new fields of study available to students, especially in the creative realm.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. Describe potential industry or industries, employment opportunities, and expected level of entry (*ex: mid-level management*) for graduates of the proposed program.

The arts industry is alive and well in the Washington metropolitan area. Maryland, the District of Columbia, and Virginia all have thriving performing arts communities that have persevered through the pandemic and are now including both in-person performances and livestreaming possibilities. Students who graduate with a degree in dance from Bowie State University will be well positioned to enter the field in a performance or choreographic role, technical, entrepreneurial, educational, fitness, or research capacity. After graduation the student could become a professional dancer or a choreographer or teach at a private dance studio. The proposed program will prepare students for jobs in many of the technical fields in dance and theatre: lighting design, technical director, backstage crew, and design of digital media. Additionally, graduates who wish to teach dance will be equipped with the pedagogical foundation to teach either at a dance studio, or within the K-12 school system. High schools, middle schools, and elementary schools now include dance programs and are actively seeking teachers educated in many different dance techniques and well versed in the many cultural aspects of dance. Currently, the undergraduate degree is sufficient for employment in many school systems in Maryland. Teachers would then be required to seek a certificate in dance education while employed. Bowie State University hopes to offer a Certificate in Dance Education in the future but currently suggests students complete it through the National Dance Education Organization, of which the Department of Fine and Performing Arts is a member.

Bowie State University surveyed students about their interest in a dance major. Students were asked questions about which type of dance classes sparked their interest. Out of 435 students surveyed, 78.85 percent are interested in the arts and 66 percent are specifically interested in dance. In addition, 180 students said they would be interested in declaring dance a major if offered by the university. This data clearly shows that a significant number of students are interested in pursuing a dance degree.

2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.

A search on Indeed.com listed over 200 dance positions, including instructor, performer, coach, dance therapist, choreographer, and administrator, in the District of Columbia – Maryland – Virginia (DMV) region. Recognizing the void of diversity in dance programs in the region, A degree in dance is recognized as the gateway to many of the careers available in the field of dance such as performer, educator, dance/stage technician, somatics practitioner, choreographer, fitness instructor, arts administrator, influencer, and dance studio owner. With

further study, one can pursue therapeutics, higher education, or other forms of writing/critiquing, research and scholarship.

Dance technique training, when combined with humanities-based cultural expertise, prepares the student to proceed within the field of dance with the ability to influence change in the world. Performance arts, such as dance, can affect social change in many aspects of marginalized communities by encouraging engagement in arts advocacy, providing a nonviolent means of protest, and providing opportunities for communal building. Alvin Ailey's American Dance Theater's "Revelations" is the most viewed work of modern dance choreography. Why? Obviously, it is a moving piece of dance that has touched audiences globally for more than sixty years. The United States Department of State, realizing the power of the arts and culture during the Cold War, sponsored international tours of performing arts companies to assist in spreading American ideals and diplomacy.

Community outreach job opportunities—such as internships with professional dance companies, dance studios, and other dance-based arts organizations that place emphasis on providing dance opportunities to underserved communities—will be afforded to students with a Dance degree which focuses on the historical context of dance in many communities. Students will be encouraged to forge relationships with area as well as national dance companies. Bowie State University's membership in the National Dance Education Organization enhances the students' education and serves as a networking opportunity for students to make connections and work with the dance community locally and nationally. Furthermore, the International Association of Blacks in Dance holds auditions for many of the major Black companies at its annual conference in January. The Department of Fine and Performing Arts will be joining this organization that champions and preserves Black dance and this membership will serve as an outlet for fourth-year students with performance ambitions to audition for major companies.

3. Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.

Bowie State University commissioned EAB Market Insights to gauge the feasibility of offering a dedicated dance degree. Although the market study yielded mixed results regarding employment opportunities, this program is designed to prepare students to enter the workforce with a variety of proficient skills in the technique and scholarship of dance that lends itself to a broader breadth of jobs than listed in the survey. As stated earlier, dance teachers are in high demand in the school system as well as in privately owned dance studios. The Higher Education Arts Task Force (HEAT), a committee within the Arts Education in Maryland Schools (AEMS) group, has compiled data that Maryland schools are actively seeking arts teachers including dance. In addition, dance students may opt to earn BSU's UDC in Entrepreneurship and take advantage of the resources of the Bowie Innovation Center to begin their own dance-centered business.

While Maryland occupational data indicated nominal job openings as indicated below, the Bureau of Labor noted that overall employment of Dancers and Choreographers is growing at 6%, faster than the average of all other occupations. To reiterate, there were over 200 dance-related postings in the DMV in April 2025.

			Employment				Separations		Total	
Occ Code	Occupational Titl	SOCLevel	2022	2032	NumericC	PercentCh	Exits	Transfers	TotalOpenings	AnnualTotalOpenings
27-2031	Dancers	4	69	77	8	11.59%	43	70	121	12
27-2032	Choreographers	4	110	124	14	12.73%	69	112	195	19
	TOTAL								316	31

Lastly, Dance USA, the industry-standard website, lists and promotes many job opportunities in the dance industry. There are over fifty employment opportunities listed for students with dance degrees. Although the EAB study outlines a moderate number of vacancies over the next five years, this figure belies actual amounts listed on current websites that dancers access to search for jobs.

4.Provide data showing the current and projected supply of prospective graduates.

The current programs in Maryland produced an average of 48 graduates annually over the past five years.

			GRADUATIONS				
INSTITUTION	PROGRAM	CIP	2020	2021	2022	2023	2024
Coppin State University	Dance	500301	1	0	1	3	3
Towson University	Dance Performance and Chorography	500301	16	11	15	19	18
UMBC	Dance	500301	10	2	7	8	10
UMCP	Dance	500301	16	5	9	9	11
Goucher College	Dance	500301	13	8	7	8	2
Johns Hopkins	Dance (BFA)	500301	0	0	11	9	9
			56	26	50	56	53

D. Reasonableness of Program Duplication:

1. Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.

Coppin State University, an HBCU in the surrounding area, has a dance major. While Coppin State University offers the Bachelor of Science in Dance with some similarities such as the emphasis on technical, cultural, and performance education, Bowie State University's dance major offers a more in-depth focus on artistic leadership through a cultural lens. The proposed BSU program is centered on culturally based foundational elements of dance as a culture carrier as well as transformative performance art. Moreover, the program provides students with a deep understanding of the African roots of the global phenomenon of dance, how dance is inherent in all humans, and the scholarly aspects of dance research and documentation.

Goucher College offers a BA in Dance with emphasis in technical competency in West African Diasporic Dance, Ballet, and Modern techniques as well as emphasis in the creative process. Goucher's program has more than 100 students in its well-established Dance Program within a private university. BSU's program will offer students a more intimate educational environment within an HBCU setting and at a lower cost.

The University of Maryland Baltimore County (UMBC) offers a dance program without the cultural competency and emphasis on African American dance. Bowie State University's program includes courses in Hip Hop Dance Technique, Global Dance, and West African Dance Technique as required courses offered each semester; UMBC offers similar coursework as "special topics" on a rotating basis.

Towson University has a BFA program that is audition-based and also solely specializing in dance performance. The program does not include the African diaspora or coursework in Hip Hop, West African Dance, or Global Dance, to name a few.

University of Maryland, College Park offers a Bachelor of Arts degree in dance but also grounds its curriculum in Western-based dance forms and techniques—not offering a variety of cultural dance techniques or diasporic dance courses. Bowie State University's program endeavors to provide training in vernacular, cultural, and concert dance styles and techniques as well as culturally focused scholarly based courses that focus on dance as an art form that help to cultivate employable skills. Further, it offers production and management leadership skills and basic pedagogy that can transfer to the classroom or studio.

2. Provide justification for the proposed program.

Bowie State University would be the first higher institution of learning in the area to offer students a Bachelor of Arts degree in dance with the unique concentration: *Technique, Performance, and Artistic Leadership* as well as

the option of a *Dance and the African Diaspora Minor*. This expands Bowie State University's capacity to offer high quality and unique programs that students desire. Students will hone their dance technique and choreography skills while also acquiring and applying research methods regarding the cultural roots and aesthetics of African American and African diaspora dance forms. This program will produce students who are ready to join the workforce in several different areas within the field of dance. Performer, choreographer, producer, technical director, teacher, studio director, fitness trainer and arts manager are all jobs that the degrees support. As previously mentioned, the solid academic foundation of the required courses allows for skills that are applicable to a variety of fields.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBIs.

Coppin State University is currently the only HBI that offers a dance major. The Bachelor of Science requires 120 credits and includes instruction in core movement techniques, dance history, choreography, performance, and professional development, with opportunities for interdisciplinary study in fields such as Black Studies, Urban Arts, Film, and Arts Administration. CSU reported just three (3) graduates in 2024 and a total of eight (8) since 2020.

According to the Morgan State University webpage, the institution offers the Bachelor of Science Degree in Physical Education with a Dance track consisting of seven courses, housed Department of Teacher Education & Professional Development, in the physical education major. While historically this was quite common with dance programs, it nevertheless detracts from both the performative and scholarly aspects of dance as an art form and cultural representation.

Morgan State University and Coppoin State University are centrally located in Baltimore within five (5) miles of each other. Bowie State University, the oldest historically Black institution in the state of Maryland and one of the oldest in the country, is distinguished from Coppin State University and Morgan State University as the only HBCU in the southern portion of the state west of the Bay Bridge and is geographically positioned to add to the diversity of dance programs available in the this region of the state. Offering instruction in dance techniques, including modern, jazz, ballet, and hip-hop, alongside courses in choreography, performance, and dance history, which may be combined with the Entrepreneurship certificate, enhances students' versatility and marketability in the arts sector. The Dance program is designed to ready the student for many of the in-demand jobs within the dance industry. The program's concentration *Technique, Performance, and Artistic Leadership* and foundation in scholarship and dance as an art form provide students with a unique breadth of knowledge that other Dance degrees in surrounding area programs do not afford. The African American and African diaspora emphasis enhances the students' particular cultural experience of dance and provides a distinctive scholarly course of study including the traditions and heritage of dance as performance and narrative through a culturally inclusive lens.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.

Bowie State University's proposed Bachelor of Arts in dance has nominal potential impact on Coppin State University's Bachelor of Science in Dance. Coppin State University is currently the only HBI that offers a dance major, which requires 120 credits and includes instruction in core movement techniques, dance history, choreography, performance, and professional development, with opportunities for interdisciplinary study in fields such as Black Studies, Urban Arts, Film, and Arts Administration. Coppin's mission emphasizes its role as an urban higher education leader promoting lifelong learning while offering educational opportunities to a multigenerational student population. A hallmark of CSU's program is its emphasis community-rooted practice, sacred and diasporic traditions, and urban empowerment.

This program is a wonderful addition to the distinct, institutional identity, and mission of Bowie State University. The impact of offering a dance major would be large. The Department of Fine and Performing Arts has already experienced a great impact on student success and student creativity in the departmental dance company, *The Collective*. Students who are members of this company perform in at least three dance concerts per year as well as travel off campus to participate in dance conferences and performances at other schools and universities. The experience of participating in a pre-professional dance company while enrolled as a student at Bowie State University, has strengthened their dance proficiency and enhances Bowie State University's mission and its commitment to civic engagement while honoring Black identity, amplifying marginalized voices, and preserving cultural memory. As stated in section A: *As Maryland's first historically Black public university, Bowie State University empowers a diverse population of students to reach their potential by providing innovative academic programs and transformational experiences as they prepare for careers, lifelong learning, and civic responsibility.* This new Dance degree program is integral to providing innovative academic programs and transformational experiences as students prepare for careers. The dance major furnishes an outlet for students' creativity in the arts, encouraging students to explore identity, justice, and liberation through movement, using choreography and performance as tools for activism and personal empowerment through a comprehensive program of the academic study of the art of dance, its cultural heritage, and its performative power. This scholarly and artistic foundation guides students into a performance or arts related career and prepares them for further study in graduate or professional school. Finally, honing one's creativity while in the academic environment gives the student the necessary tools for employment opportunities that require a creative thinker.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10):

1. Describe how the proposed program was established, and also describe the faculty who will oversee the program.

The proposed bachelor's degree program was established with several faculty members from the Department of Fine and Performing Arts and a group of professionals from the surrounding area who are proficient in the field of dance including performance, choreography, heritage, and cultural dance. Ryan Johnson, Sylvia Soumah, Rachel Oneika Phillips, and former faculty member Truly Davis served as curriculum consultants.

Jennifer Dorsey, a full-time tenured associate professor of dance, will oversee the program. Professor Dorsey studied dance at New York University and University of Maryland, College Park. She has been a faculty member at BSU since 2003, receiving tenure in 2008 and promotion to Associate Professor in 2023. She has taught dance within the Theatre Arts degree for twenty years and has written both the dance minor and the dance and movement studies concentration under the Theatre Arts major. She is qualified to teach and guide the students through this new program.

There are several adjunct faculty members who will assist with the program who have degrees in dance as well as extensive professional dance experience: Brelyn Brooks, Paula Brown, Angel Chinn, Quynn Johnson, Ayanna Smith, Monique Walker and Serene Webber. A listing of faculty members is provided in section: I. Adequacy of Faculty Resources section starting on page 13.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

The proposed Bachelor of Arts in Dance will provide students with a comprehensive, rigorous, and culturally grounded dance education. The program prepares students to become versatile artists, educators, and leaders within the dance and performing arts communities, while remaining aligned with BSU's mission as an HBCU. These objectives and outcomes also reflect the program's

interdisciplinary approach and its emphasis on both technical proficiency and cultural understanding. The program includes the following educational objectives and learning outcomes:

Program Objectives:

1. Cultivate proficiency in the application of dance techniques in modern/contemporary, ballet, jazz, tap, hip hop, African dance and global dance.
2. Encourage students to apply the accrued knowledge to their dance performances.
3. Prepare students for employment and/or graduate study in dance and/or related fields.
4. Develop students' critical thinking, communication, and writing skills to apply to their knowledge of dance performance, choreography, and culture.
5. Develop skills in technical aspects of dance and artistic leadership in dance.
6. Develop entrepreneurial and marketing skills.

Student Learning Outcomes:

1. Demonstrate knowledge of dance techniques within performance and artistic leadership responsibilities.
2. Conduct analytical research within the field of cultural dance and dance for social change.
3. Construct critical essays related to the study of dance and culture.
4. Present and perform choreography in a chosen genre of dance.
5. Apply entrepreneurial thinking when developing ideas and strategies to build a successful dance venture.

3. Explain how the institution will:
   a) provide for assessment of student achievement of learning outcomes in the program.

The Department of Fine and Performing Arts and the theatre arts major utilize various methods for assessing student progress. The Dance program will implement a portfolio review at the second-year level where students will present to the faculty what courses they have completed, which performances they have participated in, and evidence of choreography such as photos and recordings. Students will also have a portfolio review at the senior level. A capstone performance is required for senior students where students will share a work of choreography or a research paper concerning a chosen topic. Assessments are also embedded into the dance technique courses as shown in Appendix C—sample rubrics for dance technique courses.

   b) document student achievement of learning outcomes in the program.

The degree program will document student achievement of the learning outcomes through recordings of showings and formal performances and through compiling the research writings of students in the concentration. Detailed documentation will be compiled through the portfolio assessment courses both at the second-year level and at the fourth-year level. These portfolio reviews not only demonstrate an assessment of the student's progress through the program but further provide a basis for her/his/their industry-standard performance reels necessary for securing employment.

4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.

Please find course descriptions in Appendix A.

GENERAL EDUCATION AND INSTITUTIONAL REQUIREMENTS

FRSE 101 Freshman Seminar	3 credits
ENGL 101 Composition and Literature	3 credits

ENGL 102 Argument and Research	3 credits
HEED 102 Life Health and Fitness OR	
HEED 200 Fundamentals of Sex OR	
IDIS 210 Contemporary Health Issues for Women	3 credits
COMM 101 Oral Communications	3 credits
COSC 110 Computer Literacy	3 credits
MATH 125 College Algebra OR	
MATH 127 Introduction to Mathematical Ideas	3 credits
PSYC 101 Introduction to Psychology OR	
SOCI 101 Introduction to Sociology	3 credits
HIST 114 African American History to 1865 OR	
HIST 115 African American History since 1865	3 credits
BIO ___ Elective	4 credits
Science_ Elective	3 credits
MUSC 101 Fundamentals of Music OR	
MUSC 302 Introduction to Music	3 credits
General Education Elective- THEA 110 Pilates Fitness	3 credits
Foreign Language (2 courses: Ex: SPAN 101, 102)	6 credits
	Total: 46 credits

DANCE CORE REQUIREMENTS

DANC 123 Fundamentals of Modern Dance OR	
THEA 107 Stage Movement I OR	
THEA 108 Stage Movement II	3 credits
DANC 200 History and Culture of Black American Dance	3 credits
DANC 316 Dance and Technology	3 credits
DANC 259 Tap Dance Technique	3 credits
DANC 205 Ballet Technique I	3 credits
DANC 251 Jazz Dance Technique I	3 credits
DANC 250 Modern Dance Innovations	3 credits
DANC 252 Hip Hop Dance Technique	3 credits
DANC 340 West African Dance Technique I	3 credits
VCDM 470 Self Promotion and Marketing in the Arts	3 credits
MUSC 409 Black Contemporary Music in Society **OR**	
MUSC 345 Black American Music **OR**	
THEA 330 Kinesiology of Movement	3 credits
DANC 219 & DANC 419 Portfolio Reviews Assessment	
sophomore and senior fall semesters)	0 credits
DANC 461 Senior Seminar Capstone-Research and Performance	3 credits
DANC 408 Internship/Apprenticeship Experience	0 credit
Additional BA Requirements:	
SPAN 201 OR FREN 201	3 credits
SPAN 202 OR FREN 202	3 credits
	Total: 42 credits

Concentration:
Technique, Performance, and Artistic Leadership

DANC 260 Tap Dance Technique II	3 credits
DANC 300 Choreography I	3 credits
DANC 351 Jazz Dance Technique II	3 credits
DANC 301 Play Production or 302, 401, 402	2 credits
DANC 305 Ballet Technique II	3 credits
DANC 341 West African Dance Technique II	3 credits
DANC 350 Advanced Modern Dance/Contemporary Technique	3 credits
DANC 400 Practicum in Dance Choreography and Performance OR THEA 406 Acting IV: Musical Theatre	3 credits
DANC 403 Somatics in Dance	3 credits
DANC 420 Choreography II	3 credits
DANC 460 Dance Studio Instruction (Teaching Methods)	3 credits
	Total: 32 credits

120 credit hours

5. Discuss how general education requirements will be met, if applicable.

Students will complete the general education requirements as detailed at the beginning of the major requirements in Section #4 above. The general education and institutional requirements (GEIR) are structured to provide a coherent, integrated liberal arts education to a diverse population. A flexible program of general courses and major requirements is designed to enable students to acquire a broad general education and competence in a field of concentration.

6. Identify any specialized accreditation or graduate certification requirements for this program and its students.

At the onset of this program there is no requirement for graduate certification or accreditation requirement. As the program proceeds, there may be the opportunity and possibility of offering certificate programs to the students in dance pedagogy and education.

7. If contracting with another institution or non-collegiate organization, provide a copy of the written contract, clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.

Bowie State University is not contracting with another entity for this program.

8. Provide assurance and any appropriate evidence that the proposed program will clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.

The Dance program seeks to provide students with clear, complete and timely information about the curriculum and course and degree requirements. Faculty/student interaction will be discussed and outlined at a majors' meeting at the start of each semester. Technology competence and skills needed will be discussed, as well as

academic support, financial aid, and payment policies of Bowie State University outlined in detail. The curriculum, course, and degree requirements will be published in the university course catalog and on the university website for all students to view. The number of credit hours required and a general graduation mapping which illustrates how long it will take to finish this degree is shown in APPENDIX B.

9. Provide assurance and any appropriate evidence that advertising, recruiting, and admission materials will clearly and accurately represent the proposed program and the services available.

The Department of Fine and Performing Arts in conjunction with University Relations and Marketing seeks to develop advertising, recruiting, and admission materials that clearly and accurately represent the Dance degree program. The program will also develop a social media strategy and accounts to attract students and funnel information about the dance major's existing programs and events. Departmental budget resources will be used to advertise the new program to students for recruitment purposes.

H. Adequacy of Articulation

1. If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements.

Bowie State University has an articulation agreement with Prince George's County Community College for the AA in Dance to the BA in Dance. We are also exploring opportunities for articulation agreements with several community colleges. Howard County Community College, Montgomery Community College, Prince George's Community College, and Baltimore County Community College are all community colleges that have two-year associate dance degrees from which students can smoothly transition to Bowie State University to complete the proposed major.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

1. Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faulty member will teach in the proposed program.

The Dance program will include quality faculty who are highly acclaimed in their specific fields within the realm of dance. We will seek out the very best in each area so that our students can benefit from each faculty member's expertise.

Name	Credentials	Title	Courses
Jennifer Dorsey	MFA in Dance Choreography and Performance, University of Maryland-College Park	Associate Professor, Full-Time, Tenured	Fundamentals of Modern Dance, Modern Dance Innovations, Advanced Modern Dance/Contemporary Technique, Pilates Fitness, Practicum in Dance Performance and Choreography, Choreography I & II, Play Production, Senior Seminar,

			Portfolio Reviews Assessment.
Shawn Short	MFA in Dance: University of Wisconsin-Milwaukee BFA in Theatre: Howard University	Full-time Faculty	Ballet Technique I and II, Kinesiology of Movement, Teaching Methods: Dance, Musical Theatre, Modern Dance Innovations, Dance and Technology, Internship Experience
Angel Chinn	MFA in Dance: Hollins University Founder and Director of Nona Lee Dance Theatre	Adjunct Faculty	Teaching Methods: Dance
Ayanna Smith	Yoga Certified – Yoga Alliance BA in Economics: Clark Atlanta University Professor at American University	Adjunct Faculty	Pilates Fitness
Quynn Johnson	Master of Education: Education, Leadership, Organization, Entrepreneurship with Concentration in Arts in Learning -Harvard University Graduate School of Education Graduate Certificate: Responsive Pedagogy in Teaching Artistry Columbia University Co-Director of Sole Defined: Percussive Dance Company Recipient of the 2020 John F. Kennedy Center Local Dance Commissioning Project. Performance highlights include being a soloist in the tour of Broadway's	Adjunct Faculty	Tap Dance Technique I and Tap Dance Technique II, History and Culture of Black American Dance

	After Midnight (NCL), Chasing Magic by Ayodele Casel and Torya Beard, Great Gatsby by The Washington Ballet, and Savion Glover's TiiDii3000 Company.		
Serene Webber	BFA Dance Performance, Towson University MSDE Certification in Pre K- 12 Dance Education CMA Laban/Bartenieff Institute of Movement Studies (LIMS)	Adjunct Faculty	Somatics in Dance
Brelyn Brooks	Masters of Science- MS in Sociology Professor at Morgan State University Member of Morgan State Hip-Hop Dance Team, "Morganettes" Performed a "Bad Boy Production" Hip-Hop piece at the Kennedy Center with Dare U2 Dance Company Judge for youth Hip-Hop competition dances at NewFit Kids LLC. Member of the Dance Ensemble group at Dance and Bodyworks, performing Hip-Hop dances at Six Flags Hip Hop Instructor at Baltimore City YMCA locations. Choreographer for Greek Pageant at Morgan State University, "Havana Nights".	Adjunct Faculty	Hip Hop Dance Technique, History of American Club and Street Dance Culture.

Erica Smith	BFA in Dance- University of the Arts Director of Raedient Movement Dance Company	Adjunct Faculty	Fundamentals of Modern Dance, Global Dance, Modern Dance Innovations
Monique Walker	Artistic Director of MoDance Works- Contemporary African Dance Company Professor at The College of Southern Maryland: School of Visual and Performing Arts Member of the National Association of American African Dance Teachers	Adjunct Faculty	West African Dance Technique I and West African Dance Technique II

2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:

    a) Pedagogy that meets the needs of the students

Faculty will attend regular faculty development courses and conferences which will continue their learning process so that faculty can bring new developments in dance education to our students. Bowie State University's Center for Excellence in Teaching and Learning (CETL) hosts workshops at the beginning of the fall and spring semesters that all faculty attend for professional development. BSU is a member of the National Dance Education Organization which will help faculty support their continual learning. Faculty also plan to join the organization, the International Association of Blacks in Dance (IABD).

    b) The learning management system

The university's faculty continually attend courses to update knowledge of Blackboard, the university's learning management system. The Department of Fine and Performing Arts has Blackboard course coordinators who assist faculty with loading and creating their courses in Blackboard. Academic Computing also offers workshops each semester on how to utilize Blackboard and Starfish.

    c) Evidenced-based best practices for distance education, if distance education is offered.

This program is not a distance education program. Although this is not an online program, Bowie State University utilizes Blackboard as its learning management system. Online and hybrid courses are conducted in accordance with the university's policies and procedures overseen by the Division of Academic Affairs and the Division of Information Technology's (DoIT) Academic Computing and Instructional Technology unit.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12)**.**

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

The Thurgood Marshall Library of Bowie State University supports the university's mission of teaching and learning with a collection of over 280,000 volumes (physical and electronic), over 700academic subscription titles, an electronic portal (Research Port) to over 70 databases, as well as videos and DVD recordings, and an experienced staff. The library also promotes information literacy education by collaborating with the University faculty in utilizing current technology and teaching methods to enhance an instructional program that teaches library clientele how to access, evaluate, and utilize **information.**

As a member of the University System of Maryland and affiliated institutions (USMAI), Bowie State also has access to the collections of thirteen university libraries in the state of Maryland. A daily delivery between the participating libraries is provided to assist patrons in obtaining materials from other libraries in the system. In addition, all registered patrons have access to interlibrary loan services, which is a resource sharing system, for materials not available within the USMAI.

The library's physical collection of books in the field of dance are typical in scope and size for a university the size of Bowie State University. This collection is presently serviceable for the instructional and research expectations for this program's majors. To ensure that this collection is more than sufficient for background reading and research undertakings by students in all of this program's core and elective courses, the program's faculty are making requests for acquisitions of many additional volumes, and those requests will be fulfilled during the coming academic year.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

1. Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.

Physical facilities, infrastructure and instruction equipment are adequate to initiate the program. The Fine and Performing Arts Center (FPAC) was built recently in 2011 and is a state-of-the-art performance space as well as classroom space. Recently, the 450-seat theatre was named after music legend, Dionne Warwick. As the program grows, assessment of space will be necessary as FPAC contains one movement studio and the black box theatre, which can be used for class meetings.

2. Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:
    a) An institutional electronic mailing system, and
    b) A learning management system that provides the necessary technological support for distance education.

The Blackboard learning management system provides the necessary technological support as well as the Microsoft Outlook institutional electronic mailing system that is currently in place and in working order. Bowie State University is a Microsoft campus and uses Microsoft 365 to handle institutional emails, calendars, and scheduling.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

1. Resources and Narrative Rationale: This proposal's enrollment and resources projections are conservative. Based on current enrollment in tangential offerings, we project five to ten students will adopt the major initially and it will gain at least five additional students in the following years. By the fifth year we project 15 full-time students. (Tables 1 & 2: Resources and Expenditures).

2. Program Expenditures and Narrative Rationale: Program expenditures beyond current capabilities are requested in the form of at least two additional full-time faculty. Current adjunct and full-time faculty in the Department of Fine and Performing Arts will continue to teach dance courses. No additional support staff are needed. (Tables 1 & 2: Resources and Expenditures).

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1. Discuss procedures for evaluating courses, faculty and student learning outcomes.

The Department of Fine and Performing Arts and the Theatre Arts major utilize the university's standard procedures for evaluating courses, faculty, and student learning outcomes. Students will have a portfolio assessment at the second-year level and at the fourth-year level as well as participate in a Senior Capstone/Seminar course through which a capstone performance and/or written research paper will be evaluated.

2. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.

The institution will evaluate the program's educational effectiveness in the same manner as the Department of Fine and Performing Arts conducts program reviews every five years. Additionally, the department has an assessment coordinator to assist programs with self-reviews and a Faculty Senate standing committee—Committee for the Assessment of Student Learning Experience (CASTLE)—that conducts reviews each year of every program's annual assessment report.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05).

1. Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

Bowie State University, Maryland's oldest historically Black institution, proposes this new program in order to address minority student access and success, as explained in Section B. This new program also fits with Bowie State University's cultural diversity, goals and initiatives, as explained in Section A.

O. Relationship to Low Productivity Programs Identified by the Commission:

1. If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.

This program is not related to an identified know productivity program.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)
This program is not a distance education program.

Tables and Appendixes:
Complete Table 1: Resources and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.

Table 1 projects revenue for full-time-equivalent students and part-time equivalent students for the initial five-year period. The department estimates that 10 new students will be admitted in the first year, 2-5 the second year, etc., increasing to a max of 30 full-time students in Years Four and Five, respectively. Part-time students are expected to be nominal. Graduates are expected by the fourth year.

TABLE 1: RESOURCES					
Resource Categories	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
1.Reallocated Funds[1]	0	0	0	0	0
2. Tuition/Fee Revenue[2] (c+ g x 65%)	72, 500	85,880	152,900	214,280	302,700
a. #Full-time Students	10	12	18	25	30
b. Annual Tuition/Fee[4]	8,753	8,928	9,107	9,289	9,475
c. Annual Full-Time Revenue (a x b)	87,530	107,137	163,919	232,219	284, 236
d. # Part-Time Students	3	4	6	8	10
e. Credit Hour Rate[5]	258	263	268	274	279
f. Annual Credit Hours	18	20	40	40	60
g. Total Part-Time Revenue (d x e x f)	13,932	21.053	64,422	87,613	167,560
3. Grants, Contracts, & Other External Sources[3]	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 - 4)	72,500	85,880	152,900	214,280	302,700

1- Whenever reallocated funds are included among the resources available to new programs, the following information must be provided in a footnote: origin(s) of reallocated funds, impact of the reallocation on the existing academic program(s), and manner in which the reallocation is consistent with the institution's strategic plan.
2 -This value represents 65% of the projected total Tuition & Fee revenues for Full-Time & Part-Ti
3- Whenever external funds are included among the resources, the following information must be provided in a footnote: source of the funding and alternative methods of funding the program after the cessation of external funding.
4 -Tuition Rate is based on the posted AY 2020.2021 In-state Tuition & Fees schedule with a 3% increase in the subsequent years, rounded up.
5- Credit Hour Rate is based on the posted AY 2020.2021 In-state Tuition & Fees Schedule with a 2% increase in the subsequent years.

Complete Table 2: Program Expenditures and Narrative. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.

Although most of the faculty and support staff, instructional tools, and facilities are already in place in the Department of Fine and Performing Arts, it is anticipated that the new proposed program will require one additional full-time faculty member, and one additional adjunct faculty, and the possibility of administrative assistance as the program grows. Additional costs for advertising and promotional materials are estimated at

$2,500/year.
New or Renovated Space is cost of renovating space in the James Gym for additional dance studio space needed for classes and rehearsals or for re-configuring alternate spaces into dance studios.

TABLE 2: EXPENDITURES					
Expenditure Categories	**FY 2023**	**FY 2024**	**FY 2025**	**FY 2026**	**FY 2027**
1. Total Faculty Expenses (b + c below)	92,249	94,094	95,975	97,895	99,852
a. # FTE	1	1	1	1	1
b. Total Salary[1]	65,000	70,747	72,162	73,605	75,077
c. Total Benefits[2]	21,450	23,347	23,813	24,290	24,775
2. Total Faculty Coordinator Expenses Expenses (b + c below)	94,750	99,070	101,153	103,176	105,240
a. # FTE	1	1	1	1	1
b. Total Salary[3]	70,000	71,400	72,828	74,285	75,771
c. Total Benefits[4]	24,750	27,670	28,325	28.891	29,469
3. Total Adjunct Expenses (b + c below)	6,480	6,610	6,741	6,876	7,014
a. # FTE	1	1	1	1	1
b. Total Salary[5]	6,000	6,120	6,242	6,367	6,494
c. Total Benefits[6]	480	490	499	509	520
4. Equipment[7]	0	0	0	0	0
5. Library	0	0	0	0	0
6. New or Renovated Space	50,000	0	0	75,000	0
7. Other Expenses	2,500	2,500	2,500	2,500	2,500
TOTAL (Add 1 - 7)	**240,180**	**196,359**	**207,836**	**204,294**	**208,571**

1-Average Salary for Assistant Professors in DFPA for FY 2022 with a 2% increase in subsequent years.

2-Average Benefits for Assistant Professors in DFPA for FY 2022 is 33% of salary with a 1% increase in subsequent years.

3-Average Salary for Program Coordinator in FY 2022 with a 2% increase in subsequent years.

4-Average Benefits for Program Coordinator in FY 2022 is 33% with a 1% increase in subsequent years.

5-Average Salary for Adjunct Faculty ($3,000 per course x2 courses) in FY 2022 with a 2% increase in subsequent years.

6- Average Benefits for Adjunct Faculty in FY 2022 is 8% with a 1% increase in subsequent years.

7-New or Renovated Space is cost of renovating space in the James Gym for additional dance studio space needed for classes and rehearsals.

APPENDIX A – COURSE DESCRIPTIONS:

THEA 107 Stage Movement I: This course introduces the novice performer to the importance of understanding the movement capabilities inherent in one's body. Presented in a studio environment, the course will focus on developing correct body alignment, core strength, flexibility, efficiency of motion, and coordination. Students will be able to relate the coursework, which will include exercises in Pilates, Yoga, Alexander Technique, and beginning dance vocabulary, to the movements performed in a stage production. Majors only or instructor permission.

THEA 108 Stage Movement II: This course is designed to provide understanding of the lifetime skills utilized by theater artists in developing and maintaining strength, flexibility, posture, and muscle tone. Various dance styles also will be explored, including modern, ballet, jazz, and tap to enable the student to function in the theatrical performance area. Majors only or instructor permission

THEA 110 Pilates Fitness: Pilates Fitness course is designed for the student wishing to tone, strengthen, and lengthen his/her body through challenging exercises in a studio environment. Pilates exercises will develop core/abdominal strength, promoting correct body alignment and posture. Yoga postures will increase flexibility and strength within the entire body. Students will be given the opportunity to understand the importance of physical fitness for performance and for everyday life

DANC 123 Fundamentals of Modern Dance: This course will include an introduction to basic movement and skills in various modern dance styles. Students will also utilize the combined elements of modern dance technique: body alignment, strength, efficiency of motion, musicality, and dance vocabulary.

DANC 200 History of Black American Dance: This course will examine the impact of black dancing bodies on the field of dance through tracing the divergence from the African continent, via the Transatlantic Slave Trade, to current iterations of black dance in America. Students are encouraged to contemplate dance as a means of communication, a vital component to a functional society, a political device, and as a means to develop and grow community.

DANC 205 Ballet Technique: Students will be introduced to traditional ballet and center work with an emphasis on body alignment, strength, flexibility and coordination. Students will gain knowledge of ballet terminology and a critical awareness of ballet as a dance art form.

DANC 250 Modern Dance Innovations: This course will include an introduction to basic movement and skills in various modern dance styles. Artists who have made an historical impact on the diverse American modern dance form will be presented and studied in this dance technique course. Students will also utilize the combined elements of modern dance technique: body alignment, strength, efficiency of motion, musicality, and dance vocabulary.

DANC 251 Jazz Dance Technique: This course will teach the fundamental principles of movement through the stylized technique of jazz dance. The basic exercises and steps used in jazz will be taught during each class period consisting of a warm-up, movement patterns across the floor, and jazz combinations. A critical awareness of jazz dance movement will be achieved through attendance of dance performances and reflecting on one's progress through the course.

DANC 252 Hip Hop Dance Technique: Hip Hop Dance Technique is an introduction to the basic movements, techniques, and skills associated with the various styles of hip hop dance from its origins to the present. Students utilize the combined elements of dance technique as well as research how the dance form has influenced popular culture through the artists and choreographers who have globally impacted the discipline.

DANC 259 Tap Dance Technique I: This course will develop the ability and understanding of tap movement techniques which will increase strength, endurance, coordination, muscle memory, balance, locomotive skills, body alignment, posture, rhythmic sensitivity. A critical awareness of tap dance movement will be achieved through attendance of dance performances and reflecting on one's progress through the course.

DANC 260 Tap Dance Technique II: Students will learn tap dance as a percussive art form displayed via execution of intermediate level movements. The course will include technique, improvisation, composition, performance skills, discussion of percussive dance styles, tap history, tap vernacular, and musicality within tap dance.

DANC 219 Portfolio Review: The portfolio review is an initial assessment of the sophomore/junior level portfolio for all students in the dance major, taken by the second semester of the sophomore year or as required. Members of the dance

faculty, program coordinator, and the academic advisor use this portfolio to evaluate and document the students' performance.

DANC 301, 302, 401, 402 Play Production: In this lab course, majors are offered co-curricular hands-on experiences in developing departmental theatre productions. This will involve participation in at least one of the many areas in play production including design, acting, dramaturgy, stage managing, stagecraft or other technical crew areas. Students are required to work 20-30+ hours. An acting journal or reflective paper is required at the end of the experience. Majors only.

DANC 300 Choreography I: Students will learn the basic principles of dance composition; space, time, dynamics, and movement invention. Students will then examine how to use these principles to produce dance choreography. The elements of choreography; theme, development, repetition, transition, contrast, and continuity will be emphasized in reference to structuring a dance work. Students will also study Abstraction, Choreographic Styles, and The Relationship of Music to Choreography, Theatrical and Performances Elements. The course will emphasize solo and duet work. Informal showings will present the students' work and a development of critical awareness will be achieved.

DANC 305 Ballet Technique II: Students will further their technical foundation in this advanced ballet technique course. Emphasis will be on placement, alignment of the body, terminology, style, and historical context. A critical awareness of ballet movement is achieved through attendance of dance performances and reflecting on one's progress through the course.

DANC 316: Dance and Technology: This course examines current directions and technologies in the field of dance and new media. Video production with the concept of the camera as an alternate stage space is explored through creative projects concerning the moving body. Students develop one dance film or new media work that is presented as the culmination of the course.

DANC 315 Global Dance: *Prerequisite(s): THEA 123.* This course offers students insight into cultural dances from a global perspective. Dance from Africa, India, South America, Asia, and various other areas are contextualized with their cultural, historical, and contemporary significance.

DANC 330 Kinesiology of Movement: Kinesiology of Movement is an introduction to the study of human movement, performance, and function by applying the sciences of biomechanics, anatomy, and physiology. Emphasis is placed on anatomical analysis, conditioning principles and injury prevention, with special attention given to application of information to dance technique classes, rehearsal, choreography and individual anomalies. The course will also cover the skeleton, specific muscles and their actions, chronic injuries common to dancers, methods of assessing posture and fitness, and healthy lifestyle choices.

DANC 340 West African Dance Technique I: *Prerequisite(s): THEA 250 and THEA 251.* This course is an immersion into knowing, understanding and experiencing the cultural traditions within West African Dance. Students will learn traditional dances, songs, and rhythms from various cultures in the region and become familiar with the purpose of African dance forms: to communicate and celebrate within the community.

DANC **341 West African Dance Technique II:** This course is an advanced exploration of the aesthetic, movement, music and rituals found in West African dance forms. It builds on principles from West African Dance Technique I and introduces more complex and physically demanding repertory. The cultural context of movement behavior, sociopolitical aspects of the dances, and the derivation of the movement techniques within West African dance are examined.

DANC **350 Advanced Modern Dance & Contemporary Technique:** Advanced Modern Dance & Contemporary Dance Technique consists of technical and artistic training in modern and contemporary dance techniques at an advanced level. The course emphasizes increased complexity of movement sequences, clarity of expression, musicality, quality of performance, and freedom in movement through release technique and improvisation.

DANC **351: Jazz Dance Technique II:** *Prerequisite(s): THEA 251.* With emphasis on musical time and rhythms, coordination, jazz vocabulary, jazz dance positions, and expanded knowledge of theatrical jazz dance and its historical context, students further their technical foundation in this advanced jazz dance technique course.

DANC 400 Practicum in Dance Choreography and Performance: *Prerequisite: THEA 300.* This course is designed to give the student the opportunity to learn, rehearse, and perform dance works either choreographed by the company director or by a student member. The student will be challenged to bring the choreographer's vision to life through his/her dancing. Students will learn dance technique, performance skills, and choreographic creativity. Students will also develop a critical awareness through viewing professional dance company performances and through critiquing their own work throughout the course.

DANC 403 Somatics in Dance: This course will examine how an individual's physical perception and movement experiences relate to dance as a performance art. Somatics in Dance is designed to approach dance education as a means to

ethically train reflective and autonomous dancers; it is underscored by the foundational principles of Somatic education: acceptance, inclusivity, privacy, respect, and non-judgment. Somatic education encourages responding to complex problems with intelligent, movement-centered practice within the larger sphere of dance arts. To support their methods of expressing movement verbally and graphically, students will also study systems that incorporate movement vocabulary and choreographic notation, such as Laban Movement Analysis.

DANC **409 Hip Hop Theatre:** *Prerequisite(s): NON-Theatre Majors: THEA 105, ENGL 102; Theatre Majors: THEA 363.* An interdisciplinary course that incorporates workshop, lecture, and studio into the creation of plays that integrate the elements of Hip-Hop (Mc-ing, Dj-ing, Graffiti, and Hip-hop dance/movement with traditional theater techniques (acting, playwriting, directing). Students will also learn about the history of Hip-Hop Theatre.

DANC **408 Dance Internship:** This course-introduces students to working directly in the field of dance and allows them to explore the role of nonprofit institutions in dance. Students will explore community engagement, ethics, management, organization formation, and dancer well-being as they partner with a dance organization.

DANC **409 Black Contemporary Music in Society:** *Prerequisite(s): ENGL 102 and Departmental Permission.* From blues and jazz to R&B and Hip Hop, Black contemporary music has evolved technologically, politically, and economically with society, yet it still retains many of its salient African and African-American characteristics. This course explores the cultural, social, and historical growth of Black contemporary music. We will look at some of the surrounding art forms that contributed to the formation of the music and some that came about because of it. We will also explore the styles and structures of the music itself as well as some of the major creators and innovators that shaped it into the powerful and influential force it has become.

-OR-

MUSC 345 Black American Music: *Prerequisite(s): ENGL 101.* This course is a study of the history of Black American Music from 1819 to the present. Designed for the general student.

VCDM 410 Hip Hop Studio: *Prerequisite(s): By Instructor permission only [A minimum of 3 courses or (9) nine credits in studio and/or related courses in the Arts, Humanities; VCDMA, Music, History, Theatre, Dance, English/Modern Languages, Communications and others. See Instructor for details.].* Interdisciplinary Projects in Hip-Hop Studies and Visual Culture. An interdisciplinary and advanced course that incorporates an innovate approach to combining workshop, lecture and studio into actual creative projects using hip-hop and the elements of MC-ing, DJ-ing, Graffiti, B-Boy/B-Girl (Dance) and Knowledge as the catalyst for creative, collaborative research projects rooted within hip-hop and visual culture.

VCDM 408 Visual Culture: A visual study and critical discourse on the aesthetics of contemporary art and theory as it intersects with urban culture, and artistic movements such as hip-hop (and others). This course explores the aesthetics, philosophies and foundations of contemporary Black culture, by focusing on technology, music, spoken word and visual expressions rooted within the culture.

DANC **420 Choreography II:** *Prerequisite(s): THEA 300 or permission of instructor.* This course is designed for the aspiring choreographer to continue his/her studies, learning about the theoretical and creative aspects of choreography for small groups. PRINCIPLES of dance composition and the elements of choreography will be reviewed and expanded upon by the student. Production of the student's work will be required.

DANC 460 Teaching Methods: Dance: This course is designed to educate the student about how to teach dance and movement courses. Students will learn to enhance school based dance programs through planning and implementing effective dance curriculums in K-12 and higher education programs based on current research. Students will also learn how to apply educational theories to dance and movement and build portfolios that demonstrate the ability to create lesson plans and curriculum.

DANC 462 Senior Seminar: Research and Performance**:** This course provides the student with a systematic examination of and practical experience in the advanced principles and methods of scholarly research, writing, performance, and production in dance arts. The student is expected to select and research individually a specific question or problem, culminating in a paper worthy of a scholarly presentation and an individual choreographic project or experience culminating in a type of dance production. Majors only or instructor permission

DANC 419 Portfolio Review: *Prerequisites: THEA 219 and all major courses in area 300/400 level; Permission by instructor only*. A final assessment of the junior/senior level portfolio for all students in the dance major. Dance faculty members, program coordinator, and academic advisor use this portfolio to evaluate and document the students' performance. It should be taken and passed by the final semester of the senior year or as required This faculty portfolio review is the final of two assessments required to meet graduation requirements.

APPENDIX B:

BA in Dance – FOUR-YEAR PROGRAM, Major in Dance, **Concentration:** ***Technique, Performance, and Artistic Leadership***

Freshman Year

First Semester	Credits	Second Semester	Credits
FRSE 101 Freshman Seminar	3	ENGL 102 Argument and Research	3
ENGL 101 Expository Writing	3	HEED 102 Life Health and Fitness	3
COMM 101 Oral Communications	3	MUSC 101 Fundamentals of Music **OR** MUSC 302 Introduction to Music	3
DANC 123 Fundamental of Modern Dance	3	DANC 200 History and Culture of Black American Dance	3
THEA 110 Pilates Fitness	3	DANC 251 Jazz Dance Technique I	3
Total:	15	*Total* :	15

Sophomore Year

First Semester	Credits	Second Semester	Credits
COSC 110 Computer Literacy	3	PSYC 101 Introduction to Psychology	3
SPAN 101	3	DANC 250 Modern Dance Innovations	3
HIST 114/115 African American History to 1865	3	MATH 125 College Algebra	3
BIOL 101 Biology	4	SPAN 102	3
THEA 301 Play Production	2	DANC 205 Ballet Technique DANC 219 Portfolio Review	3 0
Total:	15	*Total* :	15

Junior Year

First Semester	Credits	Second Semester	Credits
DANC 259 Tap Dance Technique	3	DANC 260 Tap Dance Technique II	3
DANC 316 Dance and Technology	3	VCDM 470 Self Promotion and Marketing in the Arts	3
SPAN 201	3	DANC 351 Jazz Dance Technique II	3
DANC 300 Choreography I	3	DANC 252 Hip Hop Dance Technique	3
DANC 340 West African Dance Technique	3	DANC 400 Practicum in Dance Performance and Choreography	3
Total:	15	*Total* :	15

Senior Year

First Semester	Credits	Second Semester	Credits
DANC 403 Somatics in Dance	3	Science Elective	3
SPAN 202	3	THEA 460 Teaching Methods: Dance	3
DANC 350 Advanced Modern Dance Technique	3	DANC 341 West African Dance Technique II	3
DANC 305 Ballet Technique II	3	DANC 462 Senior Seminar: Capstone Performance	3
DANC 420 Choreography II	3	MUSC 409 Black Contemporary Music in Society OR MUSC 345 Black American Music	3
DANC 408 Internship	0	DANC 419 Portfolio Review	0
Total:	16	*Total* :	15

Total Credits: 120

Appendix C: Assessment Strategy

Bowie State University (BSU) has a long-standing tradition of consistently evaluating courses throughout the semester. The Office of Planning, Analysis and Accountability (OPAA) administers course evaluation surveys to students every semester and the feedback from students is shared with faculty the following semester. In addition, each course is peer reviewed annually. The students evaluate their instructor each semester while faculty peers and the department chairs evaluate faculty annually. All degree programs undergo comprehensive review every seven years as mandated by the University System of Maryland. BSU's Center for Academic Program Assessment (CAPA) has the goal "to assist chairs, deans, faculty, staff, and administrators as they develop assessment plans at the institutional level, college level, departmental level, and the academic program level."

The DFPA has kept up the culture of assessment, working closely with CAPA. The DFPA is also subjected to external reviews of its program by the accreditation body. The evaluation of the Fine and Performing Arts curriculum, faculty, and the student learning outcomes therefore will be routine. The courses and internship requirements are designed to achieve the program objectives and the student learning outcomes. When launched, various assessment activities will be included in selected courses. These will help monitor the progress in students' learning and help instructors improve their teaching. Summative assessment of the program outcomes will take place in the capstone courses. The data collected and results of analysis will be shared with faculty in the program for use in making any necessary decisions to improve the attainment of student learning outcomes. Assessment results will be published on the university's website and archived.

Program rubrics are included on the following pages.

Rubrics for Dance Technique Courses:
Group Composition Rubric: Used for Final Performance Assessment: **Group Dance Choreography and Performance**:

Name: Title:

Excellent work in each section yields 12.5 points per category of assessment for a potential total of 100 points.

	Exemplary 11.5-12.5 points	Satisfactory 8-11 points	Below Expectations 0-6 points	Score
Choreographic Structure 12.5 points	Effectively demonstrates consistent usage of the choreographic tools that may include AB, ABA, rondo, theme and variation, canon,	Inconsistently demonstrates choreographic tools that may include AB, ABA, rondo, theme and variation, canon, retrograde,	Little to no evidence of the use of the choreographic tools that may include AB, ABA, rondo, theme and variation, canon,	

	retrograde, beginning - middle - and end, narrative, collage, accumulation, call and response, chance dance, motif and development, suite, and ground bass.	beginning - middle - and end, narrative, collage, accumulation, call and response, chance dance, motif and development, suite, and ground bass.	retrograde, beginning - middle - and end, narrative, collage, accumulation, call and response, chance dance, motif and development, suite, and ground bass.	
Choreographic Dance Elements 12.5 points	Group utilized all 5 elements of dance in their choreography project including body, space, time, movement, and rhythm.	Group utilized 3 or 4 elements of dance in their choreography project.	Group utilized only 1 or 2 elements of dance in their choreography project.	
Cooperative Collaboration 12.5 points	Strong evidence that the group worked well as a team. All members participated and demonstrated the personal skill and knowledge of choreography.	Demonstrates some evidence that the group worked well as a team. Most members participated and demonstrated the personal skill and knowledge of choreography.	Little to no evidence that the group worked well as a team. Not all students represented or participated.	
Dance Development 12.5 points	Strong evidence of continued development of the work based on the chosen concept, theme, and tone.	Inconsistently demonstrates evidence of continued development of the work based on the chosen concept, theme, and tone.	Little to no evidence of continued development of the work based on the chosen concept, theme, and tone.	
Movement Knowledge and Clarity 12.5 points	Dancers are confident, know the movement extremely well, and don't need to follow downstage dancer(s). Dancers have a great sense of space, time, and energy. The dance is consistently precise and well-rehearsed. There is strong evidence of clear direction, precise floor and aerial pathways,	Dancers are mostly confident, know the movement in a satisfactory manner, and don't need to follow downstage dancer(s). Dancers have a satisfactory sense of space, time, and energy. The dance was somewhat well-rehearsed. There is some evidence of clear direction, precise floor and	Dancers are not fully confident, do not know the movement fully, and require movement assistance. Dancers lack the ability to consistently demonstrate a sense of space, time, and energy. There is a lack of clarity in precision, therefore indicating a lack of rehearsal.	

	and all transitions are natural and seamless.	aerial pathways, and transitions are mostly natural and seamless.	Direction, precise floor and aerial pathways, and transitions suffer from a lack of flow.	
Movement Originality and Creativity 12.5 points	Movement or movement combinations derived from an original source. Movement is consistently dynamic and unique to the group's composition only. Phrases are not borrowed from in-class material. The choreography is extremely creative and innovative.	Movement or movement combinations derived from an original source. Movement is inconsistently dynamic and unique to the group's composition only. Phrases are somewhat borrowed from in-class material. The choreography is moderately creative and innovative.	Movement or movement combinations are not derived from an unoriginal source. Movement is not dynamic and unique to the group's composition only. Phrases are borrowed from in-class material. The choreography is not creative, nor innovative	
Technical Execution 12.5 points	Dancers have a clear understanding of choreographic vision and can strongly execute it consistently. The ability to execute movements with proper alignment, rotation, initiation of movement, focus and intent is extremely clear.	Dancers have a somewhat clear understanding of choreographic vision and can execute it mostly consistently. The ability to execute movements with proper alignment, rotation, initiation of movement, focus and intent is somewhat clear.	Dancers have no understanding of choreographic vision and execution. The ability to execute movements with proper alignment, rotation, initiation of movement, focus and intent is nonexistent.	
Overall Performance 12.5 points	The choreography and production value are a complete representation of the artistic intention. Overall, the dance composition reflects creativity, talent, determination, and responsibility through the choreographic	The choreography and production value are a mostly complete representation of the artistic intention. Overall, the dance composition reflects creativity, talent, determination, and responsibility mostly through the choreographic	The choreography and production value are not a representation of the artistic intention. Overall, the dance composition is not a reflection of creativity, talent, determination, and responsibility through the choreographic process. The	

	process. The choreographic presentation is extremely well thought out and developed	process. The choreographic presentation is well thought out and developed.	choreographic presentation is not thought out, nor developed.	

Individual Composition Rubric:

Name: Title:

Excellent work in each section yields 12.5 points per category of assessment for a potential total of 100 points.

	Exemplary 11.5-12.5 points	Satisfactory 8-11 points	Below Expectations 0-6 points	Score
Choreographic Structure 12.5 points	Effectively demonstrates consistent usage of the choreographic tools that may include AB, ABA, rondo, theme and variation, canon, retrograde, beginning - middle - and end, narrative, collage, accumulation, call and response, chance dance, motif and development, suite, and ground bass.	Inconsistently demonstrates choreographic tools that may include AB, ABA, rondo, theme and variation, canon, retrograde, beginning - middle - and end, narrative, collage, accumulation, call and response, chance dance, motif and development, suite, and ground bass.	Little to no evidence of the use of the choreographic tools that may include AB, ABA, rondo, theme and variation, canon, retrograde, beginning - middle - and end, narrative, collage, accumulation, call and response, chance dance, motif and development, suite, and ground bass.	
Choreographic Dance Elements 12.5 points	The student utilized all 5 elements of dance in their choreography project including body, space, time, movement, and rhythm.	Student utilized 3 or 4 elements of dance in their choreography project.	Student utilized only 1 or 2 elements of dance in their choreography project.	
Feedback Reception 12.5 points	Choreographer is extremely receptive to the feedback given and applies the information immediately.	Choreographer is somewhat receptive to the feedback given and applies the information sporadically.	Choreographer is not receptive to the feedback given and does not apply the information.	

Dance Development 12.5 points	Strong evidence of continued development of the work based on the chosen concept, theme, and tone.	Inconsistently demonstrates evidence of continued development of the work based on the chosen concept, theme, and tone.	Little to no evidence of continued development of the work based on the chosen concept, theme, and tone.	
Movement Knowledge and Clarity 12.5 points	Dancer is confident, knows the movement extremely well. Dancer has a great sense of space, time, and energy. The dance is consistently precise and well-rehearsed. There is strong evidence of clear direction, precise floor and aerial pathways, and all transitions are natural and seamless.	Dancer is mostly confident, knows the movement in a satisfactory manner. Dancer has a satisfactory sense of space, time, and energy. The dance is somewhat well-rehearsed. There is some evidence of clear direction, precise floor and aerial pathways, and transitions are mostly natural and seamless.	Dancer is not fully confident, does not know the movement fully. Dancer lacks the ability to consistently demonstrate a sense of space, time, and energy. There is lack of clarity in precision, therefore indicating a lack of rehearsal. Direction, precise floor and aerial pathways, and transitions suffer from a lack of flow.	
Movement Originality and Creativity 12.5 points	Movement or movement combinations derived from an original source. Movement is consistently dynamic and unique to the group's composition only. Phrases are not borrowed from in class material. The choreography is extremely creative and innovative.	Movement or movement combinations derived from an original source. Movement is inconsistently dynamic and unique to the group's composition only. Phrases are somewhat borrowed from in class material. The choreography is moderately creative and innovative.	Movement or movement combinations are not derived from an unoriginal source. Movement is not dynamic and unique to the group's composition only. Phrases are borrowed from in class material. The choreography is not creative, nor innovative	
Technical Execution 12.5 points	Dancer has an extremely clear understanding of choreographic vision and can execute it. The ability to execute	Dancer has a clear understanding of choreographic vision and can execute it. The ability to execute movements with	Dancer has no understanding of choreographic vision and execution. The ability to execute movements with	

	movements with proper alignment, rotation, initiation of movement, focus and intent is consistent and clear.	proper alignment, rotation, initiation of movement, focus and intent is somewhat consistent and clear.	proper alignment, rotation, initiation of movement, focus and intent is nonexistent.	
Overall Performance 12.5 points	The choreography and production value are a complete representation of the artistic intention. Overall, the dance composition reflects creativity, talent, determination, and responsibility through the choreographic process. The choreographic presentation is extremely well thought out and developed.	The choreography and production value are a mostly complete representation of the artistic intention. Overall, the dance composition reflects creativity, talent, determination, and responsibility mostly through the choreographic process. The choreographic presentation is well thought out and developed.	The choreography and production value are not a representation of the artistic intention. Overall, the dance composition is not a reflection creativity, talent, determination, and responsibility through the choreographic process. The choreographic presentation is not thought out, nor developed.	

Individual Performance Rubric:

Name:

Excellent work in each section yields 12.5 points per category of assessment for a potential total of 100 points.

	Exemplary 11.5-12.5 points	Satisfactory 8-11 points	Below Expectations 0-6 points	Score
Appearance 12.5 points	Hair pulled away from face, no jewelry, proper designated attire (female and male proper designated attire).	Hair not fully secured, jewelry is not removed, and attire is somewhat improper.	Hair is inappropriately styled, excessive jewelry, and the designated attire is not worn.	

Flexibility/Extension 12.5 points	Effectively demonstrates mastery of flexibility in the following areas - feet, hamstrings/knees, hip flexors, back, and arms.	Inconsistently demonstrates understanding of flexibility in the following areas - feet, hamstrings/knees, hip flexors, back, and arms.	Does not demonstrate flexibility in the following areas - feet, hamstrings/knees, hip flexors, back, and arms.	
Alignment 12.5 points	Effectively demonstrates mastery, support and orientation of center strength, control, and correct alignment of all body parts.	Inconsistently demonstrates, support and orientation of center strength, control, correct alignment and orientation of all body parts.	Does not demonstrate, support and orientation of center strength, control, correct alignment and orientation of all body parts is not aligned.	
Movement Memory and Ability to pick up movement 12.5 points	Movements performed with great attention to quality of movement, body position, placement and other details of dance. Focused, concentrated and committed to instruction and execution of movement.	Inconsistent memorization and understanding of technical elements (i.e., footwork, quality of movements, body positions). Basic attention to specific details.	Demonstrates very little knowledge of movement and/or is unsure of movements. Hesitates, watches others and makes several errors.	
Musicality and Timing 12.5 points	Demonstrates a complete understanding of tempo and beat and stays on rhythm throughout the dance.	Demonstrates a basic understanding of tempo and beat. Starts out on time, but eventually falls behind and/or speeds up or makes errors in rhythm.	Minimal attention to dynamic and style changes in the music, tempo and counts. Is not on time with the music/counting	
Projection of Movement and Artistry 12.5 points	Has a thorough understanding of movement with the correct definition of line, shape and fluidity within space. Excels in artistic interpretation during performance.	Has a general understanding of movement with the correct definition of line, shape and fluidity within space. Striving for accurate artistic interpretation	Has a poor understanding of movement with the correction definition of line, shape and fluidity within space. lacks artistic interpretation during performance.	

		during performance		
Technique 12.5 points	Consistently demonstrates mastery of technique in all areas	Demonstrates good use of technique, inconsistent in areas.	Demonstrates a lack of technique, inconsistent in areas.	
Overall Performance 12.5 points	Demonstrates a high level of concentration, energy, and confidence when executing movement with consistent technical accuracy.	Demonstrates an inconsistent level of concentration, energy, and confidence when executing movement in class.	Poor demonstration of concentration, energy, and confidence with executing movement in class.	

Critique Paper Rubric:

Context of and Purpose for Writing: Includes considerations of audience, purpose, and the circumstances surrounding Weight 25.00%	**100.00 %** Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	**75.00 %** Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	**50.00 %** Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	**25.00 %** Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
Content Development Weight 25.00%	**100.00 %** Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	**75.00 %** Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	**50.00 %** Uses appropriate and relevant content to develop and explore ideas through most of the work.	**25.00 %** Does not use appropriate and relevant content to develop simple ideas in some parts of the work.
Genre and Disciplinary Conventions: Formal and informal rules inherent in the expectations for writing in particular forms. Weight 25.00%	**100.00 %** Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices.	**75.00 %** Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices.	**50.00 %** Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation.	**25.00 %** Does not attempt to use a consistent system for basic organization and presentation.
Sources and Evidence Weight 25.00%	**100.00 %** Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing.	**75.00 %** Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the	**50.00 %** Demonstrates an attempt to use credible and/or relevant sources to support ideas	**25.00 %** Few or no attempts to use sources to support ideas in the writing.

		discipline and genre of the writing.	that are appropriate for the discipline and genre of the writing.	

Reflection Paper Rubric: 100 Points total

Context of and Purpose for Writing: Includes considerations of audience, purpose, and the circumstances surrounding connection to the experience reflected upon. Weight 25.00%	**100.00 %** Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of connections to the experience reflected upon.	**75.00 %** Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	**50.00 %** Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	**25.00 %** Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).
Progress Summary: How has your dance technique improved? What experiences have you learned from? Weight 25.00%	**100.00 %** Uses appropriate, relevant, and compelling content to illustrate and explain personal progress throughout the course.	**75.00 %** Uses appropriate and relevant, content to illustrate and explain personal progress throughout the course.	**50.00 %** Uses appropriate content to develop and explore ideas through most of the work.	**25.00 %** Does not use appropriate and relevant content to develop simple ideas in some parts of the work.
Genre and Disciplinary Conventions: Formal and informal rules inherent in the expectations for writing in particular forms. Weight 25.00%	**100.00 %** Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices.	**75.00 %** Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices.	**50.00 %** Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation.	**25.00 %** Does not attempt to use a consistent system for basic organization and presentation.

Performance and Choreography Critique-demonstrates writing that critiques and examines the student's performance of the Final Dance as well as the Final Dance choreography. Weight 25.00%	**100.00 %** Demonstrates skillful use of high-quality writing that critiques and examines the student's performance of the Final Dance as well as the Final Dance choreography.	**75.00 %** Demonstrates consistent use quality writing that critiques and examines the student's performance of the Final Dance as well as the Final Dance choreography.	**50.00 %** Demonstrates an attempt to use writing that critiques and examines the student's performance of the Final Dance as well as the Final Dance choreography.	**25.00 %** Few or no attempts to write about and critique, and examine the student's performance of the Final Dance as well as the Final Dance choreography. .

Participation & Readiness (Used for Experiential Activities):

	Always/ Completely (100%)	Frequently (75%)	Sometimes (50%)	Never/ Not at All (0%)
Active Disc. Participation	40%	30%	30%	0%
Demonstrates Reading Prep	20%	15%	10%	0%
Evidence Used from Reading	20%	15%	10%	0%
Attentive & Engaged	20%	15%	10%	0%

Capstone Rubric:

Senior Seminar: Capstone Rubric for Research Paper:
Student Name _____

Category	Superior-	Satisfactory-	Needs Improvement-	Unsatisfactory-	
Content: 70 Points Total	-Fully Responds to all criteria of the research question. -Clearly identifies and fully develops all ideas/themes. -Provides logical, valid and specific	-Sufficiently responds to most criteria of the research question. -Identifies and develops main ideas/themes, but some may lack clarity or depth.	-Does not respond or incompletely responds to some criteria of the research question. -Does not identify or develop some main ideas/themes.	-Does not respond to most criteria of the research question. -Does not identify or develop some main ideas/themes. -Provides few details and little support that is illogical or invalid. -Omits relevant information; outside sources are inappropriate or missing.	____Points out of 70

	details and support. -Effectively uses all relevant information, including outside sources. -Draws clear and appropriate conclusions. 70 Points	52.5 Points	-Provides support but may not be logical or valid, some details may be missing. 35 Points	-Draws unclear/inappropriate conclusions. 0-17.5 Points	
Organization /Length 20 Points Total	Information is very organized with well-constructed paragraphs. -The paper is a minimum of 5 pages long. 20 Points	Information is organized with well-constructed paragraphs. -The paper is a minimum of 3 pages long. 15 Points	Information is organized but paragraphs are not well-constructed. -The paper is a minimum of 2 pages long. 10 Points	The Information appears to be disorganized -The paper is too short 0-5 Points	____Points of of 20
Mechanics 10 Points Total	No grammatical, spelling, or punctuation errors. 10 Points	Almost no grammatical, spelling, or punctuation errors. 7.5 Points	A few grammatical, spelling, or punctuation errors. 5 Points	Many grammatical, spelling, or punctuation errors. 0-2.5 Points	___ Points out of 10

Senior Seminar: Capstone Rubric for Dance Performance:

Student Name _____

	Superior	Standard	Minimum	Sub-standard	Points awarded:
Initiative (20 Points Total)	Student consistently includes new ideas and concepts in rehearsals and performance, and actively seeks out ideas from peers and the instructor. 20 Points	Student occasionally includes new ideas and concepts and asks for the input of others. 15 Points	Students rarely explores new ideas or seeks input from others. 10 Points	Student does not explore new ideas and concepts or include input from others. 0-5 Points	
Preparation (10 Points Total)	Student is always	Student is most often prepared	Student is rarely prepared	Student is not	

	organized and prepared to present during scheduled feedback sessions, is ahead of schedule in gathering necessary resources and production book is exceptional. 10 Points	to present during scheduled feedback session, generally on schedule with gathering resources, production book is current. 7.5 Points	to present, poorly equipped with necessary resources, and production book is mostly current. 5 Points	prepared to show, not prepared or equipped with resources, and production book is not current. 0-2.5 Points	
Depth of Investigation (20 Points Total)	Student deeply deconstructs and investigates their subject, has explored background and related material with great attention to detail. 20 Points	Student investigates their subject and related background material with clarity and understanding. 15 Points	Student is familiar with their subject and has explored minimal background material. 10 Points	Student has not investigated their subject area. 0-5 Points	
Responsiveness to Feedback (10 Points Total)	Student always respects feedback in both directions and thereby makes serious efforts to enhance their work. 10 Points	Student respects feedback in both directions and generally attempts to include ideas presented. 7.5 Points	Student occasionally respects feedback in both directions, but rarely attempts to include ideas presented. 5 Points	Student does not respect or include feedback. 0-2.5 Points	
Clarity of Communication (15 Points Total)	Production is exceptionally clear and effective in communicating student's artistic choices. 15 Points	Production communicates student's artistic choices. 11.25 Points	Production only rarely communicates student's artistic choices. 7.5 Points	Production fails to communicate student's artistic choices. 0-3.75 Points	
Creativity, Risk Taking, Invention (15 Points Total)	Production demonstrates outstanding ingenuity, risk-taking, and original thought. 15 Points	Production demonstrates creativity, risk-taking, and original thought. 11.25 Points	Production includes moments of ingenuity, risk-taking, and original thought. 7.5 Points	Production fails to demonstrate ingenuity, risk-taking, or original thought.	

				0-3.75 Points	
Leadership Skills (10 Points Total)	Student provides exceptionally clear and focused guidance, develops a strong ensemble, engenders a productive, organized rehearsal atmosphere, and is always respectful of cast and crew. 10 Points	Student provides clear and focused guidance, develops a strong ensemble, engenders a productive, organized rehearsal atmosphere, and is respectful of cast and crew. 7.5 Points	Student provides adequate guidance, a minimally productive and organized rehearsal atmosphere, and has difficulty respecting cast and crew. 5 Points	Student does not provide clear and focused guidance and fails to create a productive, organized, and respectful rehearsal atmosphere. 0-2.5 Points	

Appendix D: Internship Forms

DANC 408: INTERNSHIP LEARNING AGREEMENT FORM

Instructions: a) The student must fill-out and sign this form; and b) Return the completed form to the professor/instructor prior to the start of the program.

STUDENT-FACULTY MEMORANDUM OF UNDERSTANDING (This form must be completed and signed by the student prior to undertaking the fieldwork/internship program):

Name of the Student: _____ SID #: _____
Course Title & Number: _____
Department: _____ Semester & Year: _____
Student's Contact Phone #: _____ _____
Student's (Current) E-Mail Address: _____
Work Placement Address: _____
_____
Name & Title of Immediate Supervisor: _____
His/her Contact Phone #: _____
E-Mail Address (es): _____

STUDENT RESPONSIBILITIES: As a student seeking course credit for an Internship in Dance, please agree to the following terms:

1. Endeavor to receive my job description and orientation from my workplace supervisor;
2. Be respectful, deferential to, and supportive of my supervisor and colleagues at the workplace;
3. Learn and perform the assigned duties and responsibilities to the best of my ability;
4. Follow the rules, instructions and guidelines as provided for the desired outcomes;
5. Be both a reliable and dependable, as well as collaborative and trusting, team player;
6. Have the ability to learn fast, communicate effectively, and make the right choices; and
7. Exercise exemplary leadership style, professional skills, and ethical judgment.

Student's Signature: _____ Date: _____

INTERNSHIP LEARNING AGREEMENT FORM

Instructions: a) The workplace site supervisor must fill out and sign this form; and b) Return the completed form to the professor/instructor, fax or e-mail it to him/her prior to the start of the program.

FIELDWORK OR INTERNSHIP SITE SUPERVISOR (This form must be completed and signed by the appropriate workplace site supervisor or representative):

Name of the Supervisor: _____ Title: _____
Name of the Organization or Agency: _____ Department:
_____

Workplace Address: _____
_____
Contact Phone #: _____ __
E-Mail Address (es): _____

SITE OR PLACEMENT SUPERVISOR'S RESPONSIBILITIES (Our academic institution appreciates your participation in our program, and we value your support for our students. Your role is critical and integral to making the student's fieldwork successful and a rewarding learning experience).

As the site supervisor, I agree to:
• Clearly guide and discuss the requirements of the program with the student upon arrival;
• Work with the student to complete the onsite goals, duties and learning objectives;
• Providing an ongoing supervision and feedback to the student for high performance;
• Periodically discuss with the professor/instructor to ascertain the student's performance or progress;
• At the completion of the fieldwork or internship, please complete the (enclosed) SUPERVISOR'S EVALUATION FORM.

Site Supervisor's Signature: _____Date: _____

DANC 408 Supervisor's Evaluation Form

Name of the Student: _____ Semester/Year: _____
Name of the Organization/Agency/Fieldwork Site: _____
Mailing Address: _____
_____
Program Start Date: _____ End Date: _____
Number of Weeks: _____ Approximate Number of Hours: _____

Please rank the Student in the following categories:

Qualities	Below Standard (F Communicate Ability to Learn	Below Average (D) Improve	Average (C) Adapt	Very Good (B)	Excellent (A)
Ability to Accept Criticism					
Ability to Listen					
Attendance					

Positive Attitude					
Collaborative & Cooperative					
Dependability & Good Judgment					
Professionalism					
Initiative & Self Direction					

Please describe the work performed by the student during the time that he/she interned with your organization/agency:

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Overall Assessment:

Assessment Questions :	Yes	Maybe	No
Would you like to supervise this student again in the future?			

Would your organization host or accommodate the student again? Would you recommend the student to work for any other organization? Were you satisfied of the student's overall performance or quality of work?			

Supervisor's Name: _____ Position: _____ Supervisor's Signature: _____ Date: _____

INTERNSHIP LEARNING AGREEMENT FORM

INTERNSHIP FACULTY ADVISOR OR FACILITATOR (This form must be completed and signed by the appropriate professor/instructor or departmental representative):
Name of the Professor/Instructor: _____
Title: _____
Workplace Address: _____
Contact Phone #: _____
E-Mail Address (es): _____

FACULTY ADVISOR'S RESPONSIBILITIES (The professor's role is critical and integral to making the student's fieldwork successful and a rewarding learning experience).
As the faculty advisor or facilitator, I agree to:
• Keep in weekly contact or meet with the student (at least, once a week) to provide guidance, direction and support;
• Visit the student's workplace or site, when or if appropriate, and occasionally contact or communicate with the Site Supervisor to discuss student's performance;
• Review student's weekly online conference with other students for collaboration and shared experience, monitor student's journal or log;
• Periodically discuss with and evaluate the student submitted assignments to ascertain the level of quality performance and progress; and
• At the completion of the fieldwork or internship, the professor/instructor will provide an overall evaluation and issue the student with the final grade.

Faculty Advisor/Facilitator's Signature: _____ Date: _____

Appendix E: US Bureau of Labor Statistics—Dance employment

National Estimates for Dancers:

Employment estimate and mean wage estimates for Dancers:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
8,930	13.7 %	$ 24.62	(4)	3.9 %

Percentile wage estimates for Dancers:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$ 13.20	$ 15.51	$ 21.64	$ 29.18	$ 39.03

(4)

Industry profile for Dancers:

Industries with the highest published employment and wages for Dancers are provided. For a list of all industries with employment in Dancers, see the Create Customized Tables function.
Industries with the highest levels of employment in Dancers:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Performing Arts Companies	3,290	2.73	$ 28.19	(4)
Other Amusement and Recreation Industries	2,190	0.17	$ 19.76	(4)
Drinking Places (Alcoholic Beverages)	1,390	0.35	$ 19.02	(4)
Spectator Sports	190	0.14	$ 13.37	(4)
Promoters of Performing Arts, Sports, and Similar Events	60	0.05	$ 20.54	(4)

Industries with the highest concentration of employment in Dancers:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Performing Arts Companies	3,290	2.73	$ 28.19	(4)
Drinking Places (Alcoholic Beverages)	1,390	0.35	$ 19.02	(4)
Other Amusement and Recreation Industries	2,190	0.17	$ 19.76	(4)
Spectator Sports	190	0.14	$ 13.37	(4)
Promoters of Performing Arts, Sports, and Similar Events	60	0.05	$ 20.54	(4)

Top paying industries for Dancers:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Colleges, Universities, and Professional Schools	50	(7)	$ 29.43	(4)
Performing Arts Companies	3,290	2.73	$ 28.19	(4)
Promoters of Performing Arts, Sports, and Similar Events	60	0.05	$ 20.54	(4)
Other Amusement and Recreation Industries	2,190	0.17	$ 19.76	(4)
Drinking Places (Alcoholic Beverages)	1,390	0.35	$ 19.02	(4)

Geographic profile for Dancers:

States and areas with the highest published employment, location quotients, and wages for Dancers are provided. For a list of all areas with employment in Dancers, see the Create Customized Tables function.

States with the highest employment level in Dancers:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
California	2,950	0.17	2.76	$ 24.30	(4)
New York	2,080	0.23	3.78	$ 29.08	(4)
Texas	410	0.03	0.52	$ 28.23	(4)
Missouri	350	0.13	2.08	$ 28.75	(4)
Illinois	320	0.06	0.91	$ 22.90	(4)

States with the highest concentration of jobs and location quotients in Dancers:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Hawaii	290	0.49	8.19	$ 21.98	(4)
New York	2,080	0.23	3.78	$ 29.08	(4)
Nevada	280	0.20	3.29	(8)	(8)
California	2,950	0.17	2.76	$ 24.30	(4)
District of Columbia	100	0.14	2.33	$ 21.43	(4)

Top paying states for Dancers:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York	2,080	0.23	3.78	$ 29.08	(4)
Missouri	350	0.13	2.08	$ 28.75	(4)
Texas	410	0.03	0.52	$ 28.23	(4)
Michigan	(8)	(8)	(8)	$ 27.17	(4)
Indiana	120	0.04	0.67	$ 27.14	(4)

Metropolitan areas with the highest employment level in Dancers:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York-Newark-Jersey City, NY-NJ-PA	1,630	0.18	2.94	$ 31.37	(4)
San Francisco-Oakland-Hayward, CA	400	0.17	2.79	$ 27.44	(4)
San Diego-Carlsbad, CA	300	0.20	3.31	$ 23.22	(4)
Chicago-Naperville-Elgin, IL-IN-WI	270	0.06	1.02	$ 23.28	(4)
Las Vegas-Henderson-Paradise, NV	240	0.23	3.86	(8)	(8)
Urban Honolulu, HI	180	0.41	6.85	$ 17.58	(4)
Denver-Aurora-Lakewood, CO	130	0.09	1.41	$ 19.36	(4)
Albany-Schenectady-Troy, NY	130	0.31	5.08	$ 21.31	(4)
Washington-Arlington-Alexandria, DC-VA-MD-WV	110	0.04	0.59	$ 21.11	(4)
Nashville-Davidson--Murfreesboro--Franklin, TN	90	0.08	1.36	$ 19.95	(4)

Metropolitan areas with the highest concentration of jobs and location quotients in Dancers:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)

Hilton Head Island-Bluffton-Beaufort, SC	60	0.78	12.96	$ 15.08	(4)
Urban Honolulu, HI	180	0.41	6.85	$ 17.58	(4)
Lincoln, NE	60	0.33	5.48	(8)	(8)
Albany-Schenectady-Troy, NY	130	0.31	5.08	$ 21.31	(4)
Las Vegas-Henderson-Paradise, NV	240	0.23	3.86	(8)	(8)
San Diego-Carlsbad, CA	300	0.20	3.31	$ 23.22	(4)
New York-Newark-Jersey City, NY-NJ-PA	1,630	0.18	2.94	$ 31.37	(4)
San Francisco-Oakland-Hayward, CA	400	0.17	2.79	$ 27.44	(4)
Salt Lake City, UT	70	0.09	1.45	$ 14.64	(4)
Denver-Aurora-Lakewood, CO	130	0.09	1.41	$ 19.36	(4)

Top paying metropolitan areas for Dancers:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York-Newark-Jersey City, NY-NJ-PA	1,630	0.18	2.94	$ 31.37	(4)
San Francisco-Oakland-Hayward, CA	400	0.17	2.79	$ 27.44	(4)
Indianapolis-Carmel-Anderson, IN	50	0.05	0.75	$ 24.23	(4)
Chicago-Naperville-Elgin, IL-IN-WI	270	0.06	1.02	$ 23.28	(4)
San Diego-Carlsbad, CA	300	0.20	3.31	$ 23.22	(4)
Pittsburgh, PA	80	0.07	1.17	$ 21.87	(4)
Albany-Schenectady-Troy, NY	130	0.31	5.08	$ 21.31	(4)
Washington-Arlington-Alexandria, DC-VA-MD-WV	110	0.04	0.59	$ 21.11	(4)
Nashville-Davidson--Murfreesboro--Franklin, TN	90	0.08	1.36	$ 19.95	(4)
Denver-Aurora-Lakewood, CO	130	0.09	1.41	$ 19.36	(4)

About May 2022 National, State, Metropolitan, and Nonmetropolitan Area Occupational Employment and Wage Estimates

These estimates are calculated with data collected from employers in all industry sectors, all metropolitan and nonmetropolitan areas, and all states and the District of Columbia. The top employment and wage figures are provided above. The complete list is available in the downloadable XLS files.

The percentile wage estimate is the value of a wage below which a certain percent of workers fall. The median wage is the 50th percentile wage estimate—50 percent of workers earn less than the median and 50 percent of workers earn more than the median. More about percentile wages.

(1) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.

(2) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly wage published, the annual wage has been directly calculated from the reported survey data.

(3) The relative standard error (RSE) is a measure of the reliability of a survey statistic. The smaller the relative standard error, the more precise the estimate.

(4) Wages for some occupations that do not generally work year-round, full time, are reported either as hourly wages or annual salaries depending on how they are typically paid.

(7) The value is less than .005 percent of industry employment.

(8) Estimate not released.

(9) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

Other OEWS estimates and related information:

May 2022 National Occupational Employment and Wage Estimates
May 2022 State Occupational Employment and Wage Estimates
May 2022 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates
May 2022 National Industry-Specific Occupational Employment and Wage Estimates
May 2022 Occupation Profiles
Technical Notes

Last Modified Date: April 25, 2023

Appendix F: Careers in Dance—Beyond the Barre.com

Source: https://beyondthebarreusa.com/blogs/dance-skills-techniques/10-dance-based-career-options

CAREERS IN DANCE - REQUIRED SKILLS & 10 ALTERNATE DANCE BASED CAREER OPTIONS

by Danielle Hernandez

No longer want to dance but your passion and love for the art is making your wonder which way to head? Here are ten great dance based careers for you to explore.

A professional dancer uses movement to convey stories and ideas. With expertise in a particular type of dance such as jazz, ballet, modern dance, ballroom or tap, some excel in more than one of these dance forms. We are most familiar with the dance profession having dancers perform on stage, in movies, on television, in music videos, at theme parks, and on cruise ships, but performance is not the only career option. A variety of career paths and jobs are open to dance majors, no matter what dance form they specialize in. Dance majors bring a wealth of workplace skills besides pointe work and jazz hands to the table.

Career Paths for Dance Majors

For many dance majors, performing is an obvious career path. In today's world, the list of arts organizations that hire dancers goes far beyond New York's Lincoln Center or the Bellagio in Vegas. From music videos and commercials to cruise lines and theme parks, the entertainment and service industry employs dancers, and employers are not limited to just Ballet companies, Opera houses, and Broadway theaters. Dancers are also much in demand in large-scale theme parks, Vegas productions, and smaller productions on cruise lines.

Education Requirements

For a job in Arts administration, usually, a bachelor's degree is required. An internship is more accessible with a Bachelor's degree or Masters of fine arts degree from a respected performing arts school. Additionally, it not only increases a dancer's skills and experience but becomes invaluable for networking (a lifeline in the small world of dance) Performance jobs value experience and training over diplomas.

Salaries in Dance

Dance performance jobs are not known to command high salaries. Arts organizations are typically non-profit organizations, and wages reflect that. According to the U.S. Bureau of Labor Statistics, the median wage was at $16.85 per hour in 2015. The organization also noted that dancers had a high on-the-job injury rate and a brief performing career. Professional dance companies offer slightly better wages. Choreographers earn an average hourly salary of $22.09

10 Great Dance Related Jobs for Dancers

Professional dancing is a challenging career path, and not everyone is made for it- an injury could bring your career to a halt, or you may feel drawn to another kind of job. Dancers are known to being resourceful, disciplined, creative, and intelligent with a multitude of skills that can be utilized in many different professions and here are some of the arenas with dance-related jobs that will quench your thirst to be in the dance industry.

Choreographer / Director

For many dancers who decide to step off the stage, taking the route to run their own dance company or choreographing for Broadway seems like the natural next choice. Many people find that they enjoy this creative line and are more suited to creating dances than performing them.

Search for grant programs in the city to fund your work and scout the local theater groups are often interested in hiring a choreographer for their plays or musicals as may be large scale entertainment companies who may need a choreographer for corporate or commercial work.

Within choreography you could become more specialized and become a dance notator, recording and preserving choreography and repertoire for the future, using Benesh or Laban notation methods, which take specialized training.

Lighting Designer / Set Designer

If you love the theater and have both an artistic eye and a technological bent of mind, a career as a lighting designer could be just the path for you.
Creating sets for theaters provide dance enthusiasts an alternate career choice where they can bring to life the sets that form the backdrop to dance performances. If you enjoy painting and are artistic, a set designer job might reap great dividends.

Stage Management / Production Crew

A good stage manager will have problem-solving skills (a must for crisis situations), excellent attention to detail and enjoys overseeing the multitude of people involved in a show. If you enjoy these aspects, you might be the type of person the dance world needs to run their shows!
Being on a production crew can use all those team building skills, and give you an insider view of what happens backstage, and the technological aspects may make you consider pursuing associated learning programs.

Company Managing / Administration

Company managers are at the heart of dance companies. From booking gigs to taking care of the accounting books from organizing international tours to seeking out venues, company managers make many of the critical decisions that keep the dance companies running successfully.
In larger dance companies, there may be many specialized roles, such as general office management, marketing, fundraising, etc.

Having been a part of the dance world, you will be able to relate more to the mechanics of how a dance production company world. You will enjoy the insider understanding of the arts in general, and moving to a desk job that is entirely dance-oriented will help you stay in touch with the dance industry without having to be as physically active as a performer.
These roles are excellent for those who are good at working on budgets and finances, scheduling meetings, setting up rehearsals or shows, organizing fundraisers. These positions are also immense support to the artistic director and the overall vision of the company.

Physical Therapist / Dance Movement Therapist

The career of a physical therapist can be, and it is highly crucial in the field of dance. The job involves learning about the body, enjoying science, and working with people to help them achieve the goals they want.

Your understanding of what dancers need and go through on a regular basis with their bodies can provide you with insight an experience that is unmatched. Couple these with the natural empathy and you can be a compassionate physical therapist who can guide dancers through a healing process that goes beyond just the body.
You will need formal education for this career to get the full range of anatomy and kinesiology knowledge, but the ability to relate to a dancer and understand the dancer's body as a physical therapist is an invaluable gift.

Graphic Designer / Marketing for Dancers

Support dance by creating the images that draw people into the theater! Graphic designers work on website design and posters, and other visual merchandise are much required for dancers to promote their work.

The work of a full-fledged graphic designer involves designing and maintaining web pages, designing flyers and other promotional materials, while that of marketing is about promoting events through social media, and more. Get additional training through online courses or community classes, or attending college to obtain a degree.

Athletic Coach / Personal Trainer / Group Fitness Instructor

Dance is an incredibly aerobic activity and has always been associated with fitness. For dancers who have enjoyed this aspect, some additional training can convert this passion for fitness into a career as a coach, either for private clients, cheer-leading squads, sports teams, fitness centers or dance studios. Group fitness classes, especially dance based ones are all the rage because they are fun! 'Barre' classes use techniques from ballet to give students a full body workout and the dance party kind of exercise set to hot Latino music are hugely

popular. If you like teaching, are energetic and innovative, you can turn your passion for movement into a teaching career.

Costume Designer
As a dancer, you have been surrounded by costumes all your life. You have been trained to appreciate beautiful costumes, have an idea of what color schemes work and may even have noticed how fabric, colors, and patterns are brought together in costumes. You also know what dancers like and find comfortable. With this advantage, you can create costumes, dancewear, or clothing that is designed to be moved in or move well with the body! Designing costumes can be an excellent way to stay connected to the world of dance and performance- you will be on top of trends and work in collaboration with directors/choreographers and often lighting/set designers. You could even start your line if you are highly passionate about creating costumes or be a niche designer who is known for her one of a kind customized outfits. With online marketplaces such as Etsy and independent online storefronts powered by PayPal or Shopify, a brick and mortar store may not be necessary and lessen the cost of starting your own business.

Photographer / Videographer
As a dancer, you have been on the other side of the lens many times. With the keen awareness of movement you have as a dancer, you may have developed an innate ability to predict great photo moments or video framing. Dancers are in constant need of photos for promotional materials, as well as for personal head-shots and dance based websites. Choreographers also need video record of their work for both archival and promotional purposes. So there is a definite market for those who are skilled with a camera and other avenues apart from dance that you may become keen on exploring.

Dance Teacher
Many college dance programs offer a K-12 certification that will allow you to teach dance in public schools, as well as other subjects. If you enjoy working with children, this can be a rewarding way to use the creativity of dance in an educational format. Dance teacher roles are available at studios, in a public school system and colleges. Teaching a college dance program will need a Master's degree. Teaching in schools and colleges give you the opportunity to remain creative through choreographing routines for class and performances regularly. Determine the age group you want to teach, as some will require extra training or college degrees. The above career options are just a few to get you thinking about how you can explore avenues that are associated with dance but are non-performing roles. When scouting for new jobs, be sure to highlight and present experiences that honed skills like self-discipline, punctuality, dedication, creativity, kinesthetic awareness, team spirit and more. Your dance career does not have to end with stepping off from the front of the camera. Your passion for the art and the life skills it has taught you can open new doors, build new bridges, and have a successful and happy life, no matter what you do. Keep networking, physically active and business savvy to continue 'dancing'!

Appendix G: New York Film Academy—Job Opportunities (example)
Source: https://www.nyfa.edu/student-resources/dance-professions-and-hobbies/

Performers or aspiring dancers are artists and possess a number of skills. With experience in movement and performance, many dancers are known for their discipline, punctuality, dedication, creativity, and kinesthetic awareness. These traits can easily translate to a number of other creative interests and dance professions, giving aspiring performers even more ways to express themselves.

DANCE PROFESSIONS, INTERESTS, AND PASSIONS TO PURSUE

The world of dance is an ephemeral field. For those passionate about dance and movement, there are a number of ways to continue to hone their craft off-stage.

1. Teaching dance to others.
Those who can do, teach! Performers passionate about dance can teach or volunteer at a studio, in a public school system with the proper qualifications, or in a college dance program with a Master's degree. Being a dance teacher allows dance enthusiasts to remain active physically while sharing knowledge with others. Performers can also remain creative by choreographing routines for class and performances regularly. Without dance teachers, the field of dance, as we know it today, would not exist!

Many of the NYFA Musical Theatre faculty members are former dancers and performers, including Kristy Cates, the Chair of the Musical Theatre department at NYFA New York. A member of the original Broadway Cast of *Wicked,* as well as *Finding Neverland* on Broadway, Kristy is an extremely experienced and passionate performer who uses her expertise and knowledge to work with NYFA's musical theatre students.

2. Creating dance-related content.
Dancers have been on the other side of the lens many times, and already have an awareness of movement. When dancers take the leap into the photography world, they have an edge and can predict great photo moments or video framing. It could even lead to a bigger passion or interest in photography. Dancers and choreographers, especially, often have a great eye for creating imagery – after all, dance is essentially creating images with their bodies. That's why individuals who love to perform and dance are a natural fit for platforms like Instagram and TikTok. Anyone can start their own channel, and get started on the social media outlets right away. This provides a fun way to express love and enthusiasm for dancing and movement. NYFA Australia alum Nathan Lust has his own TikTok channel dedicated to dancing and has over 4.8 million followers. In many of his TikToks, Lust re-enacts dances from movies and pop culture.

3. Choreographing for local groups and teams.
Many dancers are also choreographers, including iconic performers like George Balanchine, a founder of the New York City Ballet, Jerome Robbins, Crystal Pite, Akram Khan, and many more. Aspiring dancers who want to practice their skills, even more, can volunteer to choreograph for local theater groups, dance, or cheerleading teams. For more experienced

dancers, another option can be seeking out large-scale entertainment companies that may need a choreographer for corporate or commercial work.

4. Volunteering in arts administration for a dance company or theater.

Experience in the dance world gives performers a thorough understanding of the arts in general, and transitioning to a desk job is a good option to stay involved in the field. This is a great option for those who can organize budgetary finances, schedule meetings, rehearsals, or shows, organize fundraisers, and be a support to the artistic director.

5. Doing yoga or Pilates.

Yoga and Pilates are great conditioning supplements for dancers, and the language of dance crosses over well into these hobbies. Dancers who went on to become experts in yoga, such as Tara Stiles, founder of Strala Yoga in New York City, Shiva Rea, founder of Prana Vinyasa Yoga, and Duncan Wong, founder of Yogic Arts, show the breadth of kinesthetic knowledge from dance training translates effectively when teaching these mind-body techniques.

These are great passions for dancers who either wish to continue to dance or transition into a field that may be gentler on their body while allowing them to remain physically active. Shiva Rea (Wanderlust) came up with a yoga "Trance Dance" that combined two of her interests.

6. Participating in dance competitions.

Dancers with expertise in specific dances can participate in a number of competitions around the world. NYFA Musical Theatre and Acting workshop alum Joanne Kirsty Clifton won the World Ballroom 6. Photograph or record performances. Showdance Championship, as well as the European Professional Ballroom Championship and World Dancesport Games. Alum Majeste Pearson performed on FOX's *The Four: Battle for Stardom* and advanced to the final round of the reality competition.
Ilda Mason, another Musical Theatre alum at NYFA and accomplished performer was also a professional dancer on *Dancing with the Stars: Panama.*

7. Writing and performing an original show.

Performers are particularly suited to creating their own shows, with a lot of experience on stage. Dancers with an idea for an original story can write and create their own show, with the limit being only as high as their imagination. NYFA Musical Theatre alum Roy Khoury created, starred, and directed his own musical concert "One Night on Broadway." The show won an award of appreciation in the "Murex D'Or" 2015, and he showcased "One Night on Broadway" at the "Zouk Mikael International Festival."

8. Making costumes or designing clothing.

Dancers are surrounded by costumes their entire life and know what feels good to practice in. With this advantage, dancers can create costumes, dancewear, or clothing that is designed to be moved in or move well with the body. Learning to sew and create their own costumes could lead to becoming involved in the costume department of a dance company.

9. Trying voice/voiceover work.

A lot of dancers are confident performers. For dancers with voice skills, voiceover work is a great way to explore another method of performance. Audrey-Louise Beauséjour, an NYFA

Musical Theatre alum, recently did the voice for the French version of *The Little Mermaid* (2023), showcasing her incredible singing voice. Bringing everyone's favorite mermaid to life is a dream for any performer, and NYFA congratulates Audrey-Louise for all of her hard work! Aspiring voiceover performers can also explore our online workshops in Acting and Musical Theatre, with many teaching skills in voiceover.

10. Singing and performing at events.

A lot of dancers and performers pursue roles at local and/or special events. Miisha Shimizu, a Musical Theatre Conservatory alum, performed in the global, year-long Walt Disney event "Ultimate Princess Celebration." She sang the Japanese version of "Starting Now."

11. Getting started in acting.

As confident performers, dancers are also a great fit for acting. Performance skills on stage can translate to on-screen, as many NYFA alum has demonstrated. Mey Novak, a graduate of an NYFA Musical Theatre workshop, acted in the feature film *River Runs Red*, starring Taye Diggs, John Cusack, and George Lopez.

Exploring Film, Media, and Performing Arts at NYFA

Dancers can take these many of their wonderful qualities to open new doors, build new bridges, and have a successful and happy life full of creative exploration

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Bowie State University proposal for a new Bachelor of Science in Artificial Intelligence

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The field of AI historically has lacked diversity, which has led to certain populations being underserved. In support of our mission to empower a diverse population of students to reach their potential by providing innovative academic programs and transformational experiences as they prepare for careers, lifelong learning, and civic responsibility, this program seeks to make AI education and careers more accessible to underserved populations and to create more inclusive pathways into the field. It utilizes an approach designed to create well-rounded students and enhances our campus culture of diversity, inclusion, and civic engagement through corporate and government partnerships in STEM fields. If approved, BSU will be the first HBCU in Maryland to offer the BS. in Artificial Intelligence.

BSU's proposed program provides instruction in the symbolic inference, representation, and simulation by computers and software of human learning and reasoning processes and capabilities, as well as the computer modeling of human motor control and motion. The program includes instruction in computing theory, software design and development, data structures, algorithms, cybernetics, artificial intelligence theory and applications, mechatronics, robotic operating systems, natural language processing, machine learning, deep learning, cloud computing, parallel and distributed computing, robotic perception, and robotic motions. Our program distinctly focuses on preparing students for careers in AI technology by incorporating comprehensive topics such as traditional AI/ML theories, systems for AI/ML, robotics perception and motions, etc.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the Bowie State University proposal to offer a Bachelor of Science in Artificial Intelligence.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

Aminta H. Breaux, Ph.D.
President

Henry Administration Bldg., Ste. 2000
14000 Jericho Park Rd, Bowie, MD 20715
P 301-860-3555
F 301-860-3510
E president@bowiestate.edu
bowiestate.edu

March 5, 2025

Jay A. Perman, MD
Chancellor
University System of Maryland
3300 Metzerott Road
Adelphi, Maryland 20783-1690

RE: New Academic Program – Bachelor of Science in Artificial Intelligence

Dear Chancellor Perman:

Please find enclosed our proposal to offer the Bachelor of Science (B.S.) in Artificial Intelligence (HEGIS 079901/CIP 11.0102).

Bowie State University is committed to contributing to the state's qualified workforce in STEM fields, providing educational opportunities to traditionally underrepresented populations. This program advances our progress as a top HBCUs to become one of the top-rated STEM institutions for higher learning. The interdisciplinary, dual modality program will serve any student interested in interdisciplinary AI instruction and research, offering instruction in the symbolic inference, representation, and simulation by computers and software of human learning and reasoning processes and capabilities, as well as the computer modeling of human motor control and motion. Upon completion of the program, students will be prepared for careers in computer and information research science, software development, data science, and machine learning.

We respectfully request the Board's consideration of this proposal.

Sincerely,

Aminta H. Breaux, Ph.D.

Cc: Dr. Guy-Alain Amoussou, Provost and Vice President for Academic Affairs
Dr. Alison Wrynn, Senior Vice Chancellor
Dr. Candace Caraco, Associate Vice Chancellor
Dr. George Acquaah, Dean, College of Arts and Sciences
Dr. Jacqueline Cade, Director of Institutional and Academic Programming
Ms. Gayle Fink, Office of Planning, Analysis and Accountability
Ms. Brandy Wilson, Registrar

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
X	Within Existing Resources, or
	Requiring New Resources

Bowie State University

Institution Submitting Proposal

Artificial Intelligence

Title of Proposed Program

Bachelor of Science (B.S.)	**Fall 2026**
Award to be Offered	Projected Implementation Date
079901	11.0102
Proposed HEGIS Code	Proposed CIP Code
Computer Science	Dr. Rosemary Shumba
Department in which program will be located	Department Contact
301-860- 4446	rshumba@bowiestate.edu
Contact Phone Number	Contact E-Mail Address
	3-7-25
Signature of President or Designee	Date

Bachelor of Science
in Artificial Intelligence

Centrality to Institutional Mission and Planning Priorities

1. **Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.**

   Bowie State University (BSU) is a comprehensive university providing 21st-century learners with a strong foundation for success with a well-rounded academic experience, an inclusive environment, and hands-on learning opportunities. Building on its rich legacy as a training ground for teachers since 1865, the university is committed to providing access to high-quality education and cultivating emerging leaders who are prepared to succeed in a changing global society. As part of BSU's mission to support the Maryland workforce, the accelerated BS & MS degree in Artificial Intelligence will help supply well-trained graduates to support this critical element of the state's economy.

   The Department of Computer Science at Bowie State University proposes a new BS degree in Artificial Intelligence. The Association for Computing Machinery (ACM) defines artificial intelligence as the study of intelligence and its realization in computer systems. On the other hand, general computer science degree programs focus on the study of computers and computing, including their theoretical and algorithmic foundations, hardware and software, and their uses for processing information.

   The program is unique because it prepares students for professional careers and advanced study by focusing on the symbolic inference, representation, and simulation by computers and software of human learning and reasoning processes and capabilities, and the computer modeling of human motor control and motion. The program includes instruction in computing theory, software design and development, data structures, algorithms, cybernetics, artificial intelligence theory and applications, mechatronics, robotic operating systems, natural language processing, machine learning, deep learning, cloud computing, parallel and distributed computing, robotic perception, and robotic motions. The program culminates in a capstone experience on an in-depth project that assesses students' ability to apply learned employable AI skills.

   The proposal is aligned with BSU's mission to empower a diverse population of students to reach their potential by providing innovative academic programs and transformational experiences as they prepare for careers, lifelong learning, and civic responsibility. The addition of this program addresses the growing disparity in minority participation in the STEM workforce at the state and national levels. With its proximity to the nation's capital and innumerable federal government contractors throughout the state and Washington,

D.C./Maryland/Virginia region, BSU is strategically positioned to increase diversity in the STEM workforce.

The demand for professionals with expertise in artificial intelligence is proliferating. According to Lightcast online patform [1], the demand for bachelor's level occupations have increased in the most immediate term (2020-2021) and are expected to increase further in the near future. In the period 2020-2021, the occupation area grew 2.4 percent, per BLS. In the near future, 2021-2026, the occupation is expected to grow at 9.8 percent among master's level occupations. Within the study Maryland and Washington D.C. region, there were 148,355 unique job postings within the region earmarked for the bachelor's level. This number of job postings outpaces the number of completions in the region. In total, across all levels of study, there were 227,045 unique job postings, with over half at the bachelor's level.

2. Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

The proposed Artificial Intelligence program contributes to the university's strategic goals (1, 2, 4 and 5) as follows:[1]

Goal 1 - Achieve academic excellence supported by curricular and co-curricular experiences
The BS program in Artificial Intelligence contribute to the achievement of Bowie's FY 2019 – FY 2024 Racing to Excellence Strategic Plan, specifically Goal 1 Academic Excellence, Objective 1.1 High-demand, innovative academic programs.

Goal 2 - Promote a holistic and coordinated approach to student success
The Artificial Intelligence program consists of components from various disciplines and utilizes an approach designed to create a well-rounded student.

Goal 4 - Enhance our campus culture of diversity, inclusion, and civic engagement
According to *Diverse: Issues in Higher Education*, Bowie State University is among the top five universities in Maryland which graduates African Americans with bachelor's degrees in nursing, biology, and computer/information sciences. The university is committed to providing opportunities to traditionally underrepresented populations in STEM fields. The Artificial Intelligence program will empower "a diverse population of students to reach their potential, by providing innovative academic programs" and by supporting Maryland's workforce and economy. It further will allow Bowie State University to progress among other HBCUs to become one of the top-rated STEM institutions for higher learning.

Goal 5 - Ensure long-term viability of Bowie State University (BSU)
Due to the market demand for specialists in Artificial Intelligence, this new program will attract a large number of interested students that, in turn, will enhance the viability of BSU through

[1] https://bowiestate.edu/about/administration-and-governance/office-of-the-president/reports/bsu-strategic-plan-fy19-fy24.pdf

attracting a culturally diverse student body and engaging partenrs to address the critical needs of the Prince George's County and surrounding region.

3. **Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in Section L.)**

   The funding of the program will come from tuition and course fees for the first five years. The department will fund the programs through existing resources and budgets. Additional funding would be further supported through possible grants, partnerships, and research opportunities with related companies, organizations, agencies and the industries of artificial intelligence. The programs rely on existing Computer Science and Mathematics related courses and will require limited new expertise beyond current faculty resources. We intend to use existing courses from among the programs and will need to create new courses to support this program. The Department of Computer Science has existing relationships with government agencies and private industry. The plan is to enhance these partnerships and develop a pool of experts to bring real working experience to the class, and also provide extracurricular learning opportunities.

   The course projections will be revised annually based on current program enrollments and entering freshman interest in the program degrees or minors. Several new courses specific to artificial intelligence are anticipated within the first two to three years of degree rollout. The courses have all been developed and reviewed using existing faculty expertise.

   Over time, program demand could necessitate additional full-time faculty. The need for new faculty will be evaluated by the administration based on sustained course needs within foundational courses, new course development needs, and critical expertise gaps. We will request the administration for new faculty as the need arises.

4. **Provide a description of the institution's commitment to:**
   a. **Ongoing administrative, financial, and technical support of the proposed program**

      BSU has demonstrated its unwavering commitment to technology-related programs. The university's policy is to support program growth by providing funds to hire new faculty, support the development of new courses, and provide additional library resources. The Artificial Intelligence program will receive similar support from the university administration. The University Administration has made acommitment to financially support this program.

      BSU is part of 13-Million-dollar NSF HDR institute grant focusing on harnessing data and model revolution in the polar regions from 2022 to 2027. Computer Science department at BSU is also part of a 1.2 million dollars collaborative NSF Grant on Harnessing the Data Revolution (HDR) Data Science Corps (DSC) for creating and integrating data science corps to improve the quality of life in urban areas. Besides, BSU has also received 1 Million Dollar NSF grant on high-performance intelligent Data-Science Institute (HIDI) from 2021-2024.

The four computer labs located in the Thurgood Marshall Library support all technology-related classroom instruction and currently have sufficient capacity to simultaneously support most of the new courses proposed for the Artificial Intelligence program. The department has several labs technology-infused classrooms and labs for instruction and student use students use. In addition to these campus labs (described in greater detail below in Section K: Adequacy of Physical Facilities, Infrastructure and Instructional Equipment of this proposal), the university has also approved the acquisition of access to cloud-based laboratory resources, providing students with state-of-the-art computing resources. For research purposes BSU has acquired a $445.5K Cray supercomputer called the Sphinx awarded through a grant from the Department of Defense U.S. Army Research Office. This machine is perfect for large-scale parallel and distributed computing and will be used for Artificial Intelligence research.

b. **Continuation of the program for a period of time sufficient to allow enrolled students to complete the program.**

Given the established nature of the computer science degree programs, the proposed Artificial Intelligence degree will be able to handle the incremental resource needs by leveraging the existing curriculum and laboratory infrastructure. With each new year of the new degree offering, only those required for the initial student class will need to be added. Thus, only the classes that are needed for newly incoming students will be added to the class offerings in the first year of the program. In the second year, the first-year classes will be repeated, and second-yearl level courses will be added. This process will be repeated in the third and fourth year. This incremental increase in curricular offerings requires only a gradual increase in expenditure, to which the administration has committed. If at any point, after the full program launch, the university decides to discontinue the degree program, no new students will be admitted to the program. Therefore, enrolled students will be provided with the required classes to complete their degrees. The Department of Computer Science and BSU are committed to recruiting interested students and providing the necessary institutional support for them to succeed in this demanding and necessary major.

Critical and Compelling Regional or Statewide Need as Identified in the State Plan

1. **Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:**
   a. **The need for the advancement and evolution of knowledge**

Advancement in artic=ficial intelligence is increasingly needed to develop techniques for the analysis and synthesis of systems that interact with an external world via perception, communication, and action, and that learn, make decisions and adapt in a changing environment. BSU faculty and students will have the opportunity to advance knowledge in the area of artificial intelligence. Faculty will advance knowledge through independent research and in collaboration with students while directing capstone projects and research seminar course projects. The research results may enhance the industry in addressing industrial pain-points for customer value creation, productivity improvement, cost reduction, site optimization, predictive analysis and insight discovery, etc.

b. Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education

As Maryland's oldest historically Black institution, Bowie State University has long served an underrepresented minority population. Understanding and respecting diversity is central to the university's goals of student success, academic excellence, and the long-term viability of the institution. The proposed Artificial Intelligence degree aims include the following:

- Helping to close the gap between Black or African American students who seek a STEM degree and those able to achieve this goal.
- Meeting the demand for additional STEM programs at HBCUs,
- Supporting other STEM programs on campus, and
- Increasing the number of minority artificial intelligence experts in a geographical area desperate to hire qualified graduates to populate the field.

Additionally, Bowie State University is compliant with all stipulations of Title VI, Title IX, and Section 504.

c. The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs

According to a commissioned report from Education Dynamics, within the Greater Maryland region, across the entire population of those employed within the occupations related to AI/ML, the racial or ethnic background with the largest percentage of employees identify as White (51%) – and is higher than the percentage of those who complete a bachelor's degree who identify as white (45%). Those who are employed in the field and identify as Asian also outpace completions by 10 percent. Those who identify as Black African American are on par between employment and completion percentages (both at 13%). However, given that there is a gulf between the percentage of those who identify as Black or African American who complete a bachelor's degree in these AI/ML fields and overall bachelor's completions, this filters down to the employment figure in Table 1 – thus enrolling more who identify as Black or African American may have an employment impact.

Table 1: Greater Washington Region Employment

Race/Ethnicity	Percent Within Occupation Greater Maryland Region All Employed	Percent of Completions Within CIP Codes MD,DC,VA Bachelor's Level
White	51%	45%
Black or African American	13%	13%
Asian	29%	19%
Hispanic or Latino	4%	7%
Two or More Races	2%	4%

Native Hawaiian or Other Pacific Islander	0%	0%
American Indian or Alaska Native	0%	0%
Other	--	12%

2. Provide evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education.

The 2022 Maryland State Plan for Postsecondary Education has three basic tenets Access, Success, and Innovation. The B.S. in Artificial Intelligence

Access: BSU provides opportunities for many underrepresented Maryland citizens to obtain a postsecondary education at an affordable cost. The Artificial Intelligence proposed program will provide an avenue for underrepresented students to enter the high demand field of data science. Aligned with Priority Three, our inclusive curriculum development process coupled with culturally responsive teaching , BSU's AI program is designed to be accessible to students from diverse backgrounds, including those this underrepresented STEM field. This approach directly supports the state's goal of equitable access to higher education.A Bowie State University education is one of the most affordable in the state among pubic universities, yet we recognize that Priority One of Access is affordability of a Maryland postsecondary education. In concert with our commitment to ensure that students from diverse populations and underrepresented fields in STEM have access to a quality education, we realize that finances can cereate a burden for students and their families. The university offers scholarships and financial aid packages including private donor scholarship to make a BSU education more affordable.

Success: The B.S. in Artificial Inteligence demonstrates our continued commitment to quality postsecondary education and timey completion of the program as stated in Priorites Five and Six. As aforementioned, BSU aims to address equity gaps in STEM. We do this by engaging students early in research and experiential learning, and engaging partners in the classroom to deliver real world practical instruction to prepare them for graduate school and employment. Students entering the Artificial Intelligence program at BSU will have access to an affordable education, mentoring by a caring faculty, quality advising, and a nurturing environment which will help ensure their success in the Artificial Intelligence program.

The Computer Science department prepares students for leadership and innovation in the rapidly evolving fields of computing and technology. Grounded in a strong technical foundation, the program emphasizes critical thinking, problem-solving, and real-world application of computing principles across disciplines. In alignment with the university’s mission to promote excellence and inclusivity, the program is also deeply committed to culturally responsive teaching as a core element of its strategic approach to student success. Faculty incorporate inclusive pedagogical strategies, culturally relevant problem sets, and collaborative projects that connect computing concepts to real-world issues affecting diverse communities to foster a more engaging and

equitable learning environment where all students—particularly those from historically underrepresented backgrounds in STEM—can thrive.

This approach not only enhances retention and graduation rates but also prepares students to enter the tech workforce as socially conscious innovators and leaders. Through partnerships with industry, research opportunities, and a strong emphasis on ethical and inclusive computing, the program empowers students to apply their knowledge in ways that contribute to a more just and equitable digital future.

The Computer Science department ensures that students receive hands-on experience in their field, enhancing their practical skills and ensuring timely completion of academic programs making them employer ready. This initiative supports the state's priority to improve systems that prevent timely completion of academic programs. To ensure student success regardless oof academic readiness, BSU offers a plethora of wraparound services and interventions, such as mentorship, tutoring, writing support, and career counseling, as well as health and counseling services, addressing the state's priority to provide more resources for student success.

Innovation: To support Priority Eight of the State Plan, students in the program are encouraged to pursue bold, creative solutions to complex problems, often through interdisciplinary and community-based projects that highlight the power of technology to drive social change. The department also promotes innovation through strong industry partnerships, cutting-edge research opportunities, and entrepreneurship support.Students in the Artificial Intelligence program at BSU will be involved with research projects with faculty mentors and industry partners. This exposure to research and cutting-edge techniques under the guidance of academic and industry experts will help develop the innovation techniques needed to become successful industry leaders.

Bowie State University's BS in Artificial Intelligence program exemplifies Maryland's commitment to student success in their pursuit of higher education, creating innovative programs in accessible environment. Through its inclusive curriculum, student support services, and industry partnerships, BSU is actively contributing to the state's strategic goals and preparing students for success in the evolving field of artificial intelligence. efforts aim to prepare students for the growing demand for AI professionals and to increase diversity in the technology sector. Prospective students interested in AI-related fields may consider BSU's evolving programs in data science, analytics, and digital learning.

Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

1. **Describe potential industry or industries, employment opportunities, and expected level of entry (ex: mid-level management) for graduates of the proposed program.**

   Research by EducationDynamics identified potential industries for graduates of the BSU Artificial Intelligence Program by utilizing the Standard Occupational Classification (SOC) code in the fields related to the CIP codes. This analysis is conducted via the NCES/BLS crosswalk which correlates CIP codes and SOC codes. Additional data are provided by the

LightCast data platform [1] operated by Economic Modeling, Inc. These industries include software development, manufacturing, healthcare, gaming, defense, cybersecurity, and tech industries among others. Job postings in these industries were seeking computer and information research scientist, computer and information systems managers, computer systems analysts, data scientists, information security analysts, management analysts, market research analysts and marketing specialists, operations research analysts, software developers, software quality assurance analysts and testers, statisticians, and mathematical scientists. Graduates can expect to obtain mid-level positions.

2. **Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.**

   The Education Dynamics research report indicated that, within the study region, there were 148,355 unique job postings within the region earmarked for the bachelor's level. The number of job postings is taken by "scraping" job boards to see which associated SOC code occupations require a bachelor's degree for employment. While this number of job postings outpaces the number of completions in the region, graduates will have to compete with those who come to the region from further flung areas. In total, across all levels of study, there were 227,045 unique job postings, with over half at the bachelor's level.

3. **Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.**

   To support the value of the Artificial Intelligence degree, an analysis of the job skills required by the referenced vacancies presented yields the following table.[2] Presented are the top hard skills for artificial intelligence related positions. Graduates of the proposed degree program at BSU will receive instruction with opportunities to practice and develop competency in those areas highlighted in the table.

[2] Data presented by Education Dynamics from a commissioned report.

Table 2: Job Postings

Skill	Frequency in Postings
Computer Science	54,222
Agile Methodology	36,893
Python (Programming Language)	27,786
Software Development	25,679
Java (Programming Language)	25,607
Amazon Web Services	25,530
Project Management	24,991
SQL (Programming Language)	24,650
Systems Engineering	22,620
Software Engineering	22,006
Automation	21,546
Linux	19,234
Data Analysis	17,581
JavaScript (Programming Language)	17,254
Scripting	16,016
Information Systems	15,240
DevOps	14,609
Cyber Security	14,514
Scrum (Software Development)	14,193
Microsoft Azure	13,912
Workflow Management	13,583
JIRA	13,026
Application Programming Interface (API)	12,989
Operating Systems	12,265
Business Process	11,864

According to the Education Dynamics research report, the SOC codes under investigation for bachelor's level occupations have increased in the most immediate term (2020-2021) and are expected to increase further in the near future. In the period 2020-2021, the occupation area grew 2.4 percent, per BLS. In the near future, 2021-2026, the occupation is expected to grow at 9.8 percent among master's level occupations. This is on par with future growth across all levels combined, with 9.9 percent growth. Note that bachelor's level growth is lower than graduate level growth (at only 11 percent).

4. **Provide data showing the current and projected supply of prospective graduates.**

Across all bachelor's level programs, regardless of format, institutions operating within the region saw an increase in the number of completions from 2012-2021 within the AI/ML CIP codes. Within these CIP codes, the highwatermark was in 2018 with 1,557 completions. The completions figure in 2021 is the largest since that year. It is important to note that all completions were within the CIP code for Computer and Information Sciences, General. There were no reported completions in 2021 in Artificial Intelligence nor Data Analytics. Additionally, there were no reported bachelor's level completions in these two CIP codes in the 10 years prior (note that Data Analytics was introduced as a CIP code in 2020).

Table 3: Graduation Rates

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Percent Change 2012-2021
Number of Completions	710	753	835	1,052	1,094	1,227	1,557	1,133	1,117	1,205	70%

Reasonableness of Program Duplication

1. **Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.**

   There are currently three (3) undergraduate AI programs available in Maryland:

   Capitol Technology University offers the B.S. in Artificial Intelligence. The first of its kind in Maryland, the curriculum includes machine learning, neural networks, natural language processing, robotics, and AI ethics. Tuition per semester is $13,175 (2024–2025), nearly four time the semester tuition at BSU. BSU's curriculum includes robotics, deep learning, cloud essentials, machine learning, and mechatronics.

   University of Maryland Global Campus (UMGC) offers a fully online B.S. inArtificial Intelligence, scheduled to launch in Fall 2025. The program includes two tracks: AI Applications (focus on leveraging existing AI tools across various industries) and AI Developer (emphasizes building and implementing AI solutions). Curriculum includes Python, deep learning, generative AI, and AI ethics with an emphasis on real-world applications and industry tools with exposure to generative AI techniques, such as content creation and prompt engineering. The program is ideally suited for working professionals seeking flexible, remote learning options.

   University of Baltimore offers the B.S. in Artificial Intelligence for IT Operations Analysis. his program emphasizes the application of AI techniques to IT operations, including system monitoring, automation, and predictive analytics. Courses cover machine learning, data analysis,

and AI algorithms, with a focus on IT infrastructure, cloud computing, and network management with training in tools and platforms used for automating IT tasks and workflows. The program prepares students for careers as AI specialists in IT operations, system administrators, or IT automation engineers.

The table below summarizes the differences between the general computer and information sciences, artificial intelligence and robotics, and general data analytics programs based on the descriptions provided with the CIP codes. There are significant differences in their focus areas according to the descriptions given in the table.

Table 4: Descriptions of 3 programs

Title	CIP Code	Description
Computer and Information Sciences, General	11.0101	A general program that focuses on computing, computer science, and information science and systems. Such programs are undifferentiated as to title and content and are not to be confused with specific programs in computer science, information science, or related support services.
Artificial Intelligence and Robotics	11.0102	A program that focuses on the symbolic inference, representation, and simulation by computers and software of human learning and reasoning processes and capabilities, and the computer modeling of human motor control and motion. Includes instruction in computing theory, cybernetics, human factors, natural language processing, and applicable aspects of engineering, technology, and specific end-use applications.
Data Analytics, General	30.7101	A program that prepares individuals to apply data science to generate insights from data and identify and predict trends. Includes instruction in computer databases, computer programming, inference, machine learning, optimization, probability and stochastic models, statistics, strategy, uncertainty quantification, and visual analytics

2. Provide justification for the proposed program.

Artificial intelligence is rapidly changing the world, with applications in fields ranging from autonomous vehicles, fraud detection and medicine to personal assistants, epidemiology, industrial robots and smart appliances.

There is a great demand for artificial intelligence experts that will not be satisfied by tapping the traditional pool of students. Bowie State University serves a diverse demographic of marginalized groups and is uniquely poised to attract large numbers of minorities into the

artificial intelligence field. The proposed Artificial Intelligence program at BSU is, therefore, timely and necessary.

The U.S. Department of Education published "Charting a Course for Success: America's Strategy for STEM Education" in December 2018 . The authors state, "The national benefits of a strong STEM foundation cannot be fully realized until all members of society have equitable access to STEM fields and employment" (p. 7). One of the three aspirational goals discussed in the document is to "increase diversity, equity, and inclusion in STEM and [to] provide all Americans with lifelong access to high-quality STEM education, especially those historically underserved and underrepresented in STEM fields and employment." An analysis by the United Negro College Fund (UNCF) documents the disparity between degrees awarded to Black college students compared to the percentage who seek a STEM education. "Black and white students across the country intend to pursue STEM degrees at similar rates, but black students in any STEM field struggle to achieve comparable representation in degree attainment."

The Artificial Intelligence program at Bowie State University will give students the in-depth knowledge to transform large amounts of data into actionable decisions. The program and its curriculum focus on how complex inputs can be used to make decisions or enhance human capabilities. The curriculum includes coursework in computing theory, software design and development, data structures, algorithms, cybernetics, artificial intelligence theory and applications, mechatronics, robotic operating systems, natural language processing, machine learning, deep learning, cloud computing, parallel and distributed computing, robotic perception, and robotic motions. The program culminates in a capstone experience on an in-depth project that assesses students' ability to apply learned employable AI skills.

When students graduate with a BS in AI from Bowie State University, they will have the expertise in artificial intelligence, machine learning, automated reasoning, and robotics that they will need to build the AI of tomorrow.

Relevance to High-demand Programs at Historically Black Institutions (HBIs)

1. **Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBIs.**

There is current no HBI offering the B.S. in Artificial Intelligence. As one of Maryland's historically Black institutions, Bowie State serves an underrepresented minority population. Respect and understanding of diversity are central to its mission of advancing minority student achievement. The proposed Artificial Intelligence degree goals include helping to close the gap between Black or African American students who seek a postgraduate STEM degree and those able to achieve this goal. It will help meet the demand for additional STEM programs at HBCUs, support other STEM programs on campus, and increase the number of minority artificial intelligence experts in a geographical area desperate to hire qualified graduates to populate the field. Additionally, Bowie State University is compliant with all stipulations of Title VI, Title IX, and Section 504.

Relevance to the Identity of Historically Black Institutions (HBIs)

1. **Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.**

   While there is no HBI currently offering the B.S. inArtyifical Intellligence, as Maryland's first historically Black public university, this program is mission-critical when considering STEM degrees, and serves to further promote BSU's identity in STEM and undergraduate research. Given the existing prominence of HBCUs graduating African Americans in science, technology, engineering, and math fields, these institutions must play a more prominent role in increasing the number of domestic STEM graduates with focused efforts toward supporting individuals from underrepresented minorities. BSU is committed to providing opportunities to traditionally underrepresented populations in STEM fields. BSU is located in the heart of one of the world's most influential technology hubs and surrounded by world-renowned government agencies, tech company headquarters, and key technology users in government, healthcare, defense, space, and professional services. The university is strategically positioned to affect an increased diversity in the STEM workforce.

   Increasing the STEM opportunities for students at BSU helps fulfill the mission of the university, the needs of the state, and, most importantly, the needs of the student body to enter a field where they can earn a significant income in a stable and growing industry. The Artificial Intelligence degree will most certainly fulfill and enhance the identity of Bowie State University.

Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10)

1. **Describe how the proposed program was established, and also describe the faculty who will oversee the program.**

   The Bowie State University computer science faculty and its Technical Advisory Board designed the Artificial Intelligence program. The development of this program was driven in part by the growing interest expressed by students in the computer science and math programs and inquiries by potential students who have a strong interest in artificial intelligence discipline.

   Artificial intelligence is expanding swiftly into every aspect of the modern workplace and daily life. In response to our mission to diversify the STEM workforce, the faculty sought to meet the need as expressed by the multiple stakeholders of the department. The graduates of this program will boast the highest level of accreditation available for this and similar programs in the industry. The BSU program prepares students with the ability to contribute to any related industry or government position successfully. Of the 15 faculty members involved in developing the Artificial Intelligence curriculum, 14 have doctoral degrees in computer science or related fields. The academic strength of this faculty meets the Middle States Commission on Higher Education (MSCHE) requirements as rigorous and effective teachers, skilled in assessment, active in developing scholarship and participating in discipline-specific organizations. Further,

they meet the more stringent requirements of the ABET Commission regarding their academic credentials and ability to analyze and improve the program continuously.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

Program Educational Goals:

Five years after completing the Artificial Intelligence BS program, students will be able to:

a. Apply computing, mathematical, and statistical skills, practical tools, and techniques in artificial intelligence to solve real-world problems to facilitate successful careers in artificial intelligence and related fields.
b. Facilitate professional communications in team environments, with colleagues and clients of varying backgrounds.
c. Build career skills through graduate studies, continuing self-directed learning and professional development.

Student Outcomes:

After completing the Artificial Intelligence BS program, students will be able to:

1. Build expertise in artificial intelligence and robotics.
2. Implement techniques to transform large amounts of data into actionable decisions.
3. Display capability to utilize large-scale high-performance computing platforms.
4. Articulate machine learning and symbolic computation techniques.
5. Lead artificial intelligence and robotics projects with ethical and professional management skills.

3. Explain how the institution will:

a. provide for assessment of student achievement of learning outcomes in the program
b. document student achievement of learning outcomes in the program

Assessment involves one or more processes that identify, collect, and prepare data to evaluate the attainment of student outcomes. Effective assessment uses relevant direct, indirect, quantitative, and qualitative measures as appropriate to the outcome being measured. Appropriate sampling methods may be used as part of an assessment process. The faculty authors of the program developed educational objectives based upon the needs of the program's constituencies (students and employers of the graduates). The BSU Computer Science program is ABET-accredited. The same assessment approach will be used for the program. The student outcomes, as stated above, are ABET student outcomes.

Courses and curricula will be reviewed annually for effectiveness via course evaluations, course reviews, and assessments of student work, research, and projects that include senior capstones, senior seminar, student internship data. etc. An Assessment Committee will interpret assessment data and make recommendations to the department. This evaluation will also feed strategic decisions on program improvement steps each year. Such incremental improvements will guide the

continuous corrections required in a dynamic field such as artificial intelligence. And this will help maintain the relevance of the offering and assure continued value to the program's constituents.

Faculty members are evaluated on teaching performance by the students every semester. Peer faculty observations occur annually. The department chair also evaluates faculty performance against standards developed by the Faculty Evaluation Committee.

4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements

B.S. in AI will require the courses listed under years 1 - 4. Course and credit hours requirements for the Artificial Intelligence program are listed in the table below. Course descriptions are provided in Appendix A.

Required Courses for BS in AI: (57 credits)

Course #	Course Title	Credit Hours
COSC 173	Introduction to AI Concepts and Applications	4
COSC 112	Computer Science I	4
COSC 113	Computer Science II	4
COSC 208	Discrete Structures	3
COSC 214	Data Structures and Algorithms	4
COSC 279	Mechatronics	4
COSC 328	Applied Algorithms and Structures	3
COSC 379	Robotic Operating System	4
COSC 381	Cloud Essentials for Developers	3
COSC 473	Artificial Intelligence	3
COSC 474	Machine Learning and Discovery	3
COSC 476	Natural Language Processing	3
COSC 478	Deep Learning for Visual Recognition	3
COSC 479	Robotics	3
COSC 486	Parallel and Distributed Computing	3
COSC 480	Senior Capstone	3
COSC 495	Senior Seminar	3
Total Core Requirements		**57**

Artificial Intelligence BS Electives: (6 credits)

Select 2 of the following courses

Course #	Course Title	Credit Hours
COSC 274	Prompt Engineering	3
COSC 439	Big Data Systems	3
COSC 471	Social Network Analysis	3
COSC 477	Virtual Reality and its Principles	3
MATH 460	Numerical Analysis I	3
MATH 461	Numerical Analysis II	3
Artificial Intelligence BS Electives		**6**

Supporting Courses for Artificial Intelligence BS: (24 credits)

Course #	Course Title	Credit Hours
MATH 155	Probability and Statistics	3
MATH 225	Calculus I	4
MATH 226	Calculus II	4
MATH 228	Linear Algebra	3
ENGL 362	Technical Writing	3
Science	Two Science courses for science majors	7
Total Supporting Requirements		24

General Education Requirements and Institutional Requirements: (24 credits)

Course #	Course Title	Credit Hours
Institutional Requirements		**6**
FRSE 101	Freshman Seminar	3
HEED 102	Life and Health	3
English		**6**
ENGL 101	Expository Writing	3
ENGL 102	Argument and Research	3
Arts and Humanities (two different disciplines)		**6**
COMM 101	Oral Communications	3
Arts and Humanities Elective		3
Social Sciences		**6**
HIST 114 or HIST 115	African American History to 1865 African American History since 1865	3
Social Sciences Elective		3
Technology FULFILLED BY MAJOR		
Total General Education		**24**

Table 5: Program Requirements

5. Discuss how general education requirements will be met, if applicable.

The general education requirements for the Artificial Intelligence program will be met by students completing the following courses in the program curriculum, as prescribed in COMAR, Title 13B:

English Composition (6 semester hours)		
ENGL 101	Expository Writing	3 credits
ENGL 102	Argument and Research	3 credits
Arts and Humanities (6 semester hours)		
COMM 101	Oral Communication	3 credits
TBD	Arts and Humanities Elective	3 credits
Social Sciences (6 semester hours)		
HIST 114	African American History to 1865	3 credits

HIST 115	African American History Since 1865	3 credits
Free General Education Electives (9 semester hours)		

Note that Science (7-8 semester hours), Mathematics (3 semester hours), and Technology (3 semester hours) General Education Requirements are satisfied by taking the required courses in the degree curriculum. Free General Education Electives (9 semester hours) are usually satisfied by courses in the degree requirements area I (Technology category) and courses in the Science category of the degree plan. Additional Free General Education Electives, if needed, are chosen, with Department advisement, from designated General Education courses in any category.

6. **Identify any specialized accreditation or graduate certification requirements for this program and its students.**

None needed

7. **If contracting with another institution or non-collegiate organization, provide a copy of the written contract.**

Not Applicable

8. **Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

The department will develop, maintain, and publicly post clear, complete, and accurate information related to curriculum, course requirements, degree requirements, timing of course offerings, and technology requirements for the students. The Department of Computer Science will make this information available to current and potential students electronically. It will also post the information within the student and faculty areas of the computer science department on campus.

The new BS students will benefit from all of the existing support mechanisms in place to ensure students are fully engaged and aware of their path to success: providing detailed information including course sequencing examples, recommended hardware requirements, providing training on learning management systems, financial aid resources, and costs and payment policies at student orientation.

Students will be assigned to an advisor in the first semester of their first year. Students must meet with the advisor at least twice each year before course registration for the coming semester. Advisor work with students at those advising sessions to map out and continually revise a plan to complete the desired major within a timeline goal.

The Artificial Intelligence course syllabi will include detailed specifications of course requirements, goals, outcome objectives, and mode of professor-student interaction for effective learning.

9. **Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available**

The department will develop, maintain, and publicly post clear, complete, and accurate curriculum and course offerings information. The program will use the existing promotion mechanisms in the Department of Computer Science and the university. These include the graduate course catalog, departmental and university web pages, and marketing literature. Typically, coordinators provide the program study plan to potential students at admission events. Additionally, folders with information on the major will be available at open house events and scholarship meetings sponsored by Admissions.

More information is available online at https://www.bowiestate.edu/academics/colleges/college-of-arts-and-sciences/departments/computer-science/

Adequacy of Articulation

1. **If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements.**

Bowie State has researched offerings at community colleges and did not ifentify an articulation partner for the B.S. in Artificial Intelligence. No community college in Maryland offers an associate degree in artificial intelligence.

Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11)

1. **Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faculty member will teach in the proposed program.**

The department currently employs 15 faculty and staff members to support the extant degree offerings.

The table below catalogs the current full-time, tenure/tenure-track faculty members from the department who will support the launch of the Artificial Intelligence degree. Other part-time faculty are rotated each semester.

Name	Appointment Type & Rank	Terminal Degree	Field	Status	Courses to be taught
Dr. James Gil de Lamadrid	Tenured / Professor	Ph.D.-Univ of Minnesota	Computer Science	Full-time	All Computer Science courses

Ms. Patricia Hughes	Tenured / Asst Professor	MA-Univ of Wisconsin-Madison	Computer Science	Full-Time	Data Privacy and Ethics, Programming courses
Dr. Soo-Yeon Ji	Tenured / Assoc Professor	Ph.D.-Virginia Commonwealth Univ	Computer Science	Full-Time	All Data Science and Computer Science.
Dr. Darsana Josyula	Tenured / Professor	Ph.D.-Univ of Maryland-College Park	Computer Science	Full-Time	All Data Science and Computer Science.
Dr. Manohar Mareboyana	Tenured / Professor	Ph.D.-Indian Institute of Science	Computer Engineering	Full-Time	All Computer Science courses
Dr. Rosemary Shumba	Tenured / Professor, Chair	Ph.D.-Univ of Birmingham	Computer Science	Full-Time	All Computer Science courses
Dr. Seonho Choi	Tenured/Professor	Ph.D.- University of Maryland College Park	Computer Science	Full-Time	All Computer Science courses
Dr. Jie Yan	Tenured / Professor	Ph.D.- Harbin Institute of Technology	Computer Science	Full-Time	All Computer Science courses
Dr. Bo Yang	Tenured / Professor	Ph.D.-Pennsylvania State University	Computer Science	Full-Time	All Computer Science courses
Dr. Hoda El-Sayed	Tenured/Professor	D.Sc, The George Washington University	Computer Science	Full-time	All Data Science and Computer Science.
Dr. Vivek M Shandilya	Tenure-track / Assistant Professor	Ph.D.-University of Memphis	Computer Science	Full-Time	All Computer Science courses
Dr. Sreenivasan Ramasamy Ramamurthy	Tenure-track / Assistant Professor	Ph.D.-University of Maryland Baltimore County	Computer Science	Full-Time	All Computer Science courses
Dr. Avijoy Chakma	Tenure-track / Assistant Professor	Ph.D.-University of Maryland Baltimore County	Computer Science	Full-Time	All Computer Science courses
Dr. Md Kamruzzaman Sarker	Tenure-track / Assistant Professor	Ph.D.-Kansas State University	Computer Science	Full-Time	All Computer Science courses
Dr. Appolo Tankeh	Tenure-track / Assistant Professor	Ph.D.-Imperial College London	Electrical Engineering	Full-Time	All Computer Science courses

2. **Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:**

   a. **Pedagogy that meets the needs of the students**
   b. **The learning management system**
   c. **Evidence-based best practices for distance education, if distance education is offered.**

   Bowie State University provides:
   - Continuous training for faculty in all departments relative to the Blackboard learning management system.
   - Teaching best practices (for both classroom and online courses).

- Other tools and techniques to support course delivery.

Additionally, the university supports faculty member involvement in discipline-specific professional memberships, which provide access to best practices in teaching subject matter, such as Artificial Intelligence. Faculty evaluations include how individual faculty members avail themselves of the available resources and implement improvements in their courses. Continuous faculty improvement also factors into ABET accreditation self-studies, providing additional incentive for all professors to remain engaged with their discipline and craft.

Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12)

1. **Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.**

The Thurgood Marshall Library supports teaching and learning through a variety of materials and resources which can support a curriculum for Artificial Intelligence. The two most highly regarded resources pertinent to Artificial Intelligence coursework are: IEEE (Institute of Electrical and Electronics Engineers) and the ACM (Association of Computing Machinery). The Thurgood Marshall Library subscribes to both the **IEEE Xplore Digital Library** and **ACM Digital Library**. Both of these electronic databases include peer reviewed journal articles, conference proceedings, industry standards, products and services, interest groups, people of note, announcements of events, book reviews, forthcoming book announcements, and job announcements. Some of the top journal titles included in these databases are

- IEEE Transactions on Artificial Intelligence
- ACM Transactions on Intelligent Systems and Technology
- IEEE Communication Magazine
- Communications of the ACM
- Journal of Machine Learning Research
- Journal of Systems and Software
- Innovations in Systems and Software
- MIS Quarterly
- Information Systems

Elsevier's Science Direct is a third database that contains sciences including computer science, engineering, business management, and information systems. This database is helpful for the researcher and students for peer-reviewed sources, including journal articles, books, textbooks, handbooks, and reference works.
Another resource for faculty to use to strengthen the library collection is a database entitled Choice Review Online, which includes the subject area for science and technology. Review categories are: Outstanding Academic Books, Essential Works, Reference Titles, and Recommended Websites. This publication enables faculty to make timely recommendations to the library for purchases and students to identify resources for their academic studies.
The library has a print book collection of 145,991 volumes, e-books 12,751, and media 4,241.
The Thurgood Marshall Library is a member of the University of Maryland and Affiliated

Institutions (USMAI), strengthening the resource base for all users. As a member of USMAI, Bowie students have borrowing privileges to the circulating collections of all 17 institutions. In addition to borrowing privileges, the Marshall Library also offers interlibrary loan (ILL). Materials not available within USMAI can be requested through interlibrary loan, a nationwide resource for library users.

Adequacy of Physical Facilities, Infrastructure, and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

1. **Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.**

   The Computer Science Building opened to the BSU community in 2002 as a "state of the art" facility that houses instructional, laboratory, and research spaces for Computer Science and related disciplines. The laboratory space will serve the complete needs of Artificial Intelligence students. The computer science building includes sufficient flexibility in both classroom, office space, and laboratory space to accommodate the student body increases resulting from the launch of the Artificial Intelligence degree.

   The computer resources are available to faculty members and students in the Computer Science Department at Bowie State University (BSU). These include 15 general-purpose computing labs and five research labs. The research labs are described in the project description. Each of the general-purpose labs has 10 to 20 computers. Ten of the labs have computers with 22-inch monitors of the following specification:

   - Platform: Windows 10 (64bit), Memory: 16 GB,
   - Processor: Intel Xeon CPU E5-1620 v3 @ 3.50GHz,
   - Motherboard: Dell Inc. 0K240Y,
   - Graphics: NVIDIA Quadro K620 2.0 GB,
   - Audio: NVIDIA High Definition Audio, Realtek Audio,
   - Optical: TSSTcorp DVD+-RW SH-216DB,
   - Network: IntelI Ethernet Connection I217-LM, and
   - Hard Drive : 500GB

   Another ten labs have computers with the following specification:

   - Dell Precision Tower 5810,
   - Platform: Windows 10 (64bit), Memory:16 GB,
   - Processor: Intel Xeon CPU E5-1620 v3 @ 3.50GHz,
   - Motherboard: Dell Inc. 0HHV7N,
   - Graphics: AMD FirePro W2100 (FireGL V) Graphics Adapter 2.0 GB,
   - Audio: AMD High Definition,
   - Audio Device Realtek Audio,
   - Optical: HL-DT-ST DVD+-RW GTA0N,
   - Network: IntelI Ethernet Connection I217-LM, and
   - Hard Drive: 350GB

There are conference rooms where faculty and students meet to discuss research and make presentations when needed.

2. **Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:**

   a. **An institutional electronic mailing system, and**
   b. **A learning management system that provides the necessary technological support for distance education**

   Online students of the program will receive support comparable to that provided to residential students. All students will receive access to technology tools required to complete coursework and research, including university email support, LMS support, software development environment tools (compilers, editors, DBMS), and full access to the BSU IT help desk personnel.

   The department has signed an agreement with TeleCommunications Systems to provide a cloud-based virtual lab environment and lab exercises accessible to online and residential students.

Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

BSU demonstrates its commitment through budget reallocation and support from staff offices such as the library and IT department.

Complete Table 1: Resources and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.

Table 1 projects revenue for full-time-equivalent students and part-time equivalent students for the initial five-year period. The department estimates that 10-12 new students will be admitted in the first year, 18-20 the second year, increasing to a max of 40 and 50 full-time students in Years Four and Five, respectively. Part-time students are expected to be nominal. Graduates are expected by the fourth year.

TABLE 1: RESOURCES

Resource Categories	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
1.Reallocated Funds[1]	0	0	0	0	0
2. Tuition/Fee Revenue[2] (c+ g x 65%)	59,761	118,040	194,948	248,600	311,468

a. #Full-time Students	10	20	30	40	50
b. Annual Tuition/Fee[4]	8,446	8,699	8,960	9,229	9,506
c. Annual Full-Time Revenue (a x b)	84,460	173,980	268,800	350,702	446,782
d. # Part-Time Students	1	1	2	2	2
e. Credit Hour Rate[5]	374	381	389	397	405
f. Annual Credit Hours	20	20	40	40	40
g. Total Part-Time Revenue (d x e x f)	7,480	7,620	31,120	31,760	32,400
3. Grants, Contracts, & Other External Sources[3]	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 – 4)	59,761	118,040	194,948	248,600	311,468

1- Whenever reallocated funds are included among the resources available to new programs, the following information must be provided in a footnote: origin(s) of reallocated funds, impact of the reallocation on the existing academic program(s), and manner in which the reallocation is consistent with the institution's strategic plan.
2 -This value represents 65% of the projected total Tuition & Fee revenues for Full-Time & Part-Time st
3- Whenever external funds are included among the resources, the following information must be provided in a footnote: source of the funding and alternative methods of funding the program after the cessation of external funding.
4 -Tuition Rate is based on the posted AY 2020.2021 In-state Tuition & Fees schedule with a 3% increase in the subsequent years, rounded up.
5- Credit Hour Rate is based on the posted AY 2020.2021 In-state Tuition & Fees Schedule with a 2% increase in the subsequent years.

Complete Table 2: Program Expenditures and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.

Table 2 describes projected expenditures. Although most of the faculty and support staff, instructional tools, and facilities are already in place in the Department of Computer Science, it is anticipated that the new proposed program will require an additional full-time faculty member, one adjunct faculty, and an assistant systems administrator. Additional costs for advertising and promotional materials are estimated at $2,500/year.

TABLE 2: EXPENDITURES					
Expenditure Categories	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**FY 2025**
1. Total Faculty Expenses (b + c below)	92,249	94,094	95,975	97,895	99,852
a. # FTE	1	1	1	1	1
b. Total Salary[1]	69,360	70,747	72,162	73,605	75,077

c. Total Benefits[2]	22,889	23,347	23,813	24,290	24,775
2. Total Assistant Systems Administrator Expenses (b + c below)	71,559	72,990	74,451	75,940	77,459
a. # FTE	1	1	1	1	1
b. Total Salary[3]	53,804	54,880	55,978	57,098	58,240
c. Total Benefits[4]	17,755	18,110	18,473	18,842	19,219
3. Total Adjunct Expenses (b + c below)	42,120	42,962	43,822	44,698	45,592
a. # FTE	1	1	1	1	1
b. Total Salary[5]	39,000	39,780	40,576	41,387	42,215
c. Total Benefits[6]	3,120	3,182	3,246	3,311	3,377
4. Equipment[7]	10,000	0	0	10,000	0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	5,000	5,000	5,000	5,000	5,000
TOTAL (Add 1 – 7)	**220,928**	**215,046**	**219,248**	**233,533**	**227,903**

1-Average Salary for Assistant Professors in Computer Science for FY 2021 with a 2% increase in subsequent years.
2-Average Benefits for Assistant Professors in Computer Science for FY 2021 is 33% of salary with a 1% increase in subsequent years.
3-Average Salary for Assistant Systems Administrator in FY 2021 with a 2% increase in subsequent years.
4-Average Benefits for Assistant Systems Administrator in FY 2021 is 33% with a 1% increase in subsequent years.
5-Average Salary for Adjunct Faculty ($6,500 per course x 6 courses) in FY 2021 with a 2% increase in subsequent years.
6- Average Benefits for Adjunct Faculty in FY 2021 is 8% with a 1% increase in subsequent years.
7-Equipment is the cost for (2-3) computers on a three-year replacement cycle.

Table 2: Expenditure

Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15)

1. Discuss procedures for evaluating courses, faculty, and student learning outcomes.

Faculty evaluation will follow BSU guidelines for all faculty members, including evaluation

input from students, administrators and departmental personnel, per COMAR 13b.02.03.15. In addition, faculty evaluations will include the following:

- Evaluation of faculty qualifications and how they are adequate to cover all the curricular areas of the Artificial Intelligence program—this will include the size, specialization, credentials, and experience of the faculty;
- Analysis of faculty workload; and
- Professional development opportunities for each faculty member.

Evaluation of student learning outcomes will be based on assessment of the stated ABET outcomes using the continuous improvement processes.

2. **Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.**

The evaluation of the program educational objectives will follow the same process currently used for the BS in Computer Science. Evaluation of the program's educational effectiveness will include

- Ensuring that the program educational objectives are aligned to the BSU mission.
- Ensuring that the program educational objectives align to the needs of the constituencies.
- Following a documented process and timeline to review the program educational objectives.
- Analyzing how the program's requirements and its associated prerequisite structure support the attainment of student outcomes.
- Analysis of program criteria describing how the program meets the specific requirements for the Data Science field as it evolves.
- Analysis of class size on achievement of learning outcomes.

Evaluation of student retention and student achievement will follow established BSU policy used by all departments. The courses, the program' effectiveness, enrollment, retention and graduation rates, students, instructors, and staff satisfaction will be evaluated using student, faculty, and staff surveys and program committee reviews on a regular basis.

Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05)

1. **Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.**

As Maryland's first historically Black institution, Bowie State University is committed to providing high quality higher education to African Americans and other underrepresented minorities. The goals established in the University's Racing to Excellence FY 2019 – FY 2024 Strategic Plan, support student achievement and long-term viability of the institution and align with the goals in the *2017-2021 State Plan for Postsecondary Education: Student Success with Less Debt*. Specifically, Bowie continues to:

- Support educational opportunity for Marylanders (Success, Strategy 4)
- Engage in a continuous improvement process to ensure that institutional policies and practices support student success (Success, Strategy 5)
- Provide alternative modalities, new programs and pedagogies and streamlined student and academic support services to facilitate timely degree completion (Success, Strategy 6) (Innovation, Strategy 9)
- Integrate high impact practices into the student experience, including career advising and planning into internship experiences (Success, Strategy 7)
- Partner with business, government and other institutions to support workforce development and graduate readiness (Innovation, Strategy 8) and
- Expand support for grant participation and research (Innovation, Strategy 10).

Bowie State faculty, staff, students, and administrators are engaging in change management strategies and embracing experimentation so that we can better meet the holistic needs of our students (Innovation, Strategy 11).

Bowie State University has a long-standing core commitment to diversity; it values and celebrates diversity in all its forms. The university community believes that its educational environment is enriched by the diversity of individuals, groups, and cultures that come together in a spirit of learning. As the university aspires to even greater racial diversity, it fully embraces the global definition of diversity that acknowledges and recognizes differences and advances knowledge about race, gender, ethnicity, national origin, political persuasion, culture, sexual orientation, religion, age, and disability. The University creates positive interactions and cultural awareness among students, faculty, and staff through infusing global diversity awareness in the curriculum, expanding co-curricular programming that promotes diversity awareness, and maintaining a campus climate that respects and values diversity.

Relationship to Low Productivity Programs Identified by the Commission

1. **If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.**

   This new program has no relationship with a low productivity program identified by the Commission.

Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. **Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.**

   The university has the resources to offer a quality distance education program. It utilizes the state-of-the-art Blackboard system as well as cloud-based, virtual laboratories. All departmental faculty are trained in offering distance learning education courses.

2. **Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.**

   The institution has met the nine guidelines as required by the Council of Regional Accrediting Commissions (C-RAC)

APPENDIX A – COURSE DESCRIPTIONS & SAMPLE PROGRAM PLAN

Required Artificial Intelligence BS Core Courses

COSC 107 - Introduction to AI Concepts and Applications (4 credits)
This course surveys the latest AI applications across diverse domains, its historical development and the ethical considerations shaping its deployment. Through practical projects and immersive laboratory exercises in robot process automation, machine learning, natural language processing and robotics, this course provides a firsthand experience in harnessing AI to address multifaceted challenges spanning various disciplines.

COSC 112 - Computer Science I (4 credits)
This course is a study of the formal syntax and semantics of a programming language. Topics include expressions, assignments, declarations, control structures, arrays, data abstractions, subprograms, user interfaces, error handling, end of file handling, and string handling. Aspects of Software Engineering include top-down design, structured programming, and style in programming conducted in a block-structured language, such as Pascal, C, or C++. Ethical and social issues include information privacy, data reliability, data security, wiretapping, encryption, and ergonomics. This course may be used to satisfy the General Education Requirement in the Technology category.

COSC 113 - Computer Science II (4 credits)
Prerequisite(s): COSC 112. Prerequisite or taken concurrently: MATH 141 or MATH 150.
This course explores the design and analysis of large-scale systems of programs. Topics include testing, debugging, documentation, recursion, dynamic storage allocation, LIFO stacks, FIFO queues, trees, linked lists, routed I/O to multiple files, protecting software and other intellectual property, computer crimes, and constitutional and related issues. This course may be used to satisfy the General Education Requirement in the Technology category.

COSC 279 - Introduction to Mechatronics (3 credits)
Prerequisite(s): COSC 112 and COSC 107.
This course covers the fundamentals of mechatronics and introduces topics such as sensors, transducers, mechanical and electrical actuation systems, communications systems, closed-loop controllers, digital data representation and software-based manipulation to control electromechanical devices.

COSC 208: Discrete Structures (3 credits)
Prerequisite(s): COSC 113 or COSC 190 and either MATH 141 or MATH 150.
This course explores the definitions and implementations of basic data structures such as stacks, queues, linked lists, binary trees, etc.; internal searching and sorting algorithms; and garbage collection algorithms. Design of sort and search algorithms and introductory analysis associated with the basic data structures, as well as recursive algorithms, are discussed.

COSC 214: Data Structures & Algorithms (3 credits)
Prerequisite(s): COSC 113 or COSC 190

This course explores the definitions and implementations of basic data structures such as stacks, queues, linked lists, binary trees, etc.; internal searching and sorting algorithms; and garbage collection algorithms. Design of sort and search algorithms and introductory analysis associated with the basic data structures, as well as recursive algorithms, are discussed.

COSC 379: Robotic Operating System (4 credits)
Prerequisite: COSC 113 and COSC 279.
This course explores UNIX, Linux, and Robotic operating systems. Topics such as programming in a UNIX environment, shell scripting, and Robotic Operating Systems (ROS) will be covered in this course. This course will provide theoretical knowledge and practical experience to create robotic applications using ROS and APIs and to test those applications by simulating them in a virtual environment.

COSC 328 - Applied Algorithms and Structures (3 credits)
Prerequisite: COSC 214.
This course covers techniques for designing and analyzing algorithms and structures in the context of computer application development. Topics such as running-time analysis, backtracking, greedy search, divide-and-conquer, dynamic programming, computational intractability and gradient descent will be studied.

COSC 381 - Cloud Essentials for Developer (3 credits)
Prerequisite(s): COSC 112.
Cloud Essentials for Developers presents cloud computing concepts and technologies. Topics include cloud fundamentals, infrastructure, architecture, deployment models, security, compute services, storage services, network services, and cost.

COSC 473 - Artificial Intelligence (3 credits)
Prerequisite(s): COSC 214.
This course is an introduction to basic concepts and techniques of artificial intelligence. Topics include: knowledge representation, search strategies, fuzzy and probabilistic reasoning, and theorem proving. Applications of AI languages and the design and construction of Expert Systems are discussed.

COSC 474 - Machine Learning (3 credits)
Prerequisite(s): COSC 214.
Artificial intelligence techniques for knowledge acquisition by computers. Fundamental problems in machine learning and discovery. Systems that learn from examples, analogies, and solved problems. Systems that discover numerical laws and qualitative relationships. Projects centering on implementation and evaluation.

COSC 486 - Parallel and Distributed Computing (3 credits)
Prerequisite(s): COSC 428.
This course covers a broad range of topics related to parallel and distributed computing. The course introduces the foundations of parallel computing, including parallel architectures, parallel and distributed programming paradigms, parallel algorithm designs, cloud computing. Data Centers, Clouds, Edge, and Cluster Computing. Performance analyses and evaluation of parallel

and distributed systems. Shared memory and distributed systems programming with introduction to OpenMP and message passing.

COSC 495 - Senior Seminar In Cosc (3 credits)
Prerequisite(s): ENGL 361 or 362 and a minimum of one 400-level COSC course.
Students research topics of interest including issues on professional ethics and responsibilities (ACM Code of Ethics and Computer Ethics). Written reports and presentations of complete projects are required.

COSC 480 - Senior Capstone (3 credits)
Prerequisite(s): COSC 350, COSC 354, COSC 414.
This is a capstone course that integrates and applies knowledge and skills acquired in earlier course work. The emphasis is on solving problems that require concepts from more than one core computer science area. Selected problems integrating the topics covered in these courses will be formulated, discussed, and solutions developed. Local and global impacts of computing solutions on individuals, organizations and society are also covered. Only SENIORS are allowed to enroll in the course.

COSC 476 - Natural Language Processing (3 credits)
Prerequisite(s): COSC 474.
Natural Language Processing is an advanced course for students familiar with machine learning fundamentals that covers a broad range of topics including finite-state methods; context-free and extended context-free models of syntax; parsing and semantics interpretation; n-gram and Hidden Markov models; part-of speech tagging; coreference resolution; discourse structure; and natural language applications such as machine translation, automatic summarization, sentiment analysis and question answering.

COSC 478 - Deep Learning for Visual Recognition (3 credits)
Prerequisite(s): COSC 474.
This course focuses on the use of deep learning techniques for computer vision problems. Students learn how to apply convolutional neural networks, recurrent neural networks, generative models, deep reinforcement learning and graph neural networks to solve visual recognition problems.

COSC 479 - Robotics (3 credits)
Prerequisite(s): COSC 279 and COSC 379.
This course will cover theoretical and algorithmic principles behind robotic systems. The course will provide hands-on experience through project-based assignments with lightweight rovers and drones. Sample topics include: feedback control; motion planning; state estimation, localization, and mapping; computer vision and learning.

Artificial Intelligence Electives

COSC 274 - Prompt Engineering (3 credits)
Prerequisite(s): COSC 113.
This course provides the theoretical understanding and hands-on experience necessary to utilize state-of-the-art generative AI models and tools effectively. It briefly discusses generative AI models, such as large language and vision models before delving into prompting, different patterns of prompting, logical chaining of prompts, fact-checking, and limitations of generative AI models.

COSC 439: Big Data Systems (3 credits)
Prerequisite(s): COSC 381, MATH 155.
The course details the process for planning big data analysis solutions that include cloud computing and machine learning concepts and terminology relevant to big data analytics, and specific cloud services for collecting, processing, analyzing, and presenting data. Big Data Analytics and Applications further includes the application of machine learning services to resolve problems from different domains and technologies for handling big data such as Hadoop ecosystem, Spark, and SparkML libraries. Big data related concepts such as complexity, distributed systems, parallel computing, and high-performance computing also are covered. A series of data analytics labs complement the taught concepts.

COSC 471: Social Network Analysis (3 credits)
Prerequisite(s): COSC 214.
This course provides the concepts and techniques related to social network analysis including network structure, graph, network measures, network clustering, centrality, network visualization, and topic modeling.

COSC 477: Virtual Reality and its Principles (3 credits)
Prerequisite(s): COSC 113 or concurrent registration ; or consent of Instructor.
This course introduces students to Virtual Reality (VR) hardware and software. it provides an opportunity for them to apply this knowledge to applications for education and games. This course applies cutting-edge virtual reality technology currently available in academia and industry. Students will design, model, and script the VR environment by developing a complete VR application as a group project.

MATH 460: Numerical Analysis I (3 credits)
Prerequisite(s): MATH 228, MATH 232, MATH 252 and MATH 300.
Elements of the theory and application of numerical analysis using computers; solution of linear and nonlinear systems of equations; computation of eigenvalues and eigenvectors; basic approximation theory; interpolation techniques; numerical quadrature; solution of ordinary and partial differential equations. Extensive use of graphing calculator/computer should be expected.

MATH 461: Numerical Analysis II (3 credits)
Prerequisite(s): MATH 228, MATH 232, MATH 252 and MATH 300.
Elements of the theory and application of numerical analysis using computers; solution of linear and nonlinear systems of equations; computation of eigenvalues and eigenvectors; basic approximation theory; interpolation techniques; numerical quadrature; solution of ordinary and

partial differential equations will be discussed. Extensive use of graphing calculator/computer should be expected.

BS in Artificial Intelligence – FOUR-YEAR PROGRAM

First Year

First Semester	Credits	Second Semester	Credits
COSC107 - Introduction to AI Concepts and Applications	4	COSC 112 - Computer Science I	4
ENGL 101 - Expository Writing	3	ENGL 102 - Argument and Research	3
MATH 225 - Calculus I	4	MATH 226 - Calculus II	4
FRSE 101 - Freshman Seminar	3	COMM 101 - Oral Communication	3
Total:	14	*Total* :	14

Second Year

First Semester	Credits	Second Semester	Credits
COSC 113 - Computer Science II	4	COSC 214 - Data Structures and Algorithms	4
COSC 279 – Mechatronics	4	HIST 114 - African American History to 1865 or HIST 115 - African American History Since 1865	3
MATH 155 - Introduction Probability & Statistics	3	COSC 208 - Discrete Structures	3
Science Elective	4	Science Elective	3
		Health and Wellness Elective	3
Total:	15	*Total* :	16

Third Year

First Semester	Credits	Second Semester	Credits
COSC 379 - Robotic Operating System	4	COSC 328 Applied Algorithms and Structures	3
ENGL 362 - Technical Writing for Computer Science and Computer Technology	3	Free Elective	3
MATH 228 - Linear Algebra	3	Free Elective	3
Free Elective	3	COSC 381 - Cloud Essentials for Developers	3
Social/Behavioral Science Elective	3	Arts and Humanities Elective	3
Total:	16	*Total* :	15

Fourth Year

First Semester	Credits	Second Semester	Credits
COSC 495 - Senior Seminar	3	COSC 480 - Senior Capstone	3
COSC 473 - Artificial Intelligence	3	COSC 479 Robotics	3
COSC 474 - Machine Learning and Discovery	3	COSC 478 - Deep Learning for Visual Recognition	3
COSC 486 - Parallel and Distributed Computing	3	COSC 476 - Natural Language Processing	3
CS/AI Elective	3	CS/AI Elective	3
Total:	15	*Total* :	15

References

1. Lightcast Online Platform

   https://lightcast.io/

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Frostburg State University proposal for a new Bachelor of Music

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: Frostburg State University (FSU) proposes a new Bachelor of Music (BM) program. This degree will serve students looking to join the workforce in a wide variety of music-related jobs. According to the Maryland Department of Labor, there are annually: 5,100 openings for music directors and composers; 13,900 openings for producers and directors: 12,900 openings for sound engineering technicians; and 3,500 openings for musicians and singers. Updating the FSU music degree programs as proposed will make FSU's students better trained and thus, more marketable.

Frostburg is pursuing accreditation for its music programs through the National Association for Schools of Music (NASM). Accreditation through NASM will generate significant value and benefits for our students, faculty, and institution, and will advance FSU's mission to "offer students a distinctive and distinguished baccalaureate education." After an initial site visit, the NASM reviewers determined that several of FSU's current music programs' curricula and credit loads more closely align with a Bachelor of Music degree, and they recommended that these BS/BA programs be eliminated and that new BM versions be created. Accordingly in future requests, Frostburg will ask to discontinue the current BS/BA programs. All current students will have a seamless transition to the new degree program due to the similar curriculum.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the Frostburg State University proposal to offer a Bachelor of Music.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

x	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

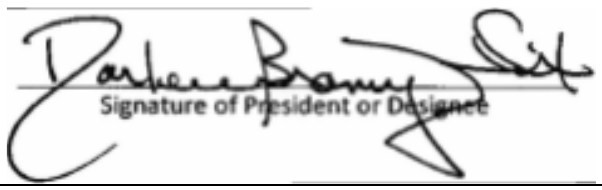
Frostburg State University

Institution Submitting Proposal

Bachelor of Music Major

Title of Proposed Program

Bachelor of Music	Fall 2025
Award to be Offered	Projected Implementation Date
10.05.00	50.0901
Proposed HEGIS Code	Proposed CIP Code
Department of Music	Dr. Brent Weber
Department in which program will be located	Department Contact
301-687-4116	
Contact Phone Number	Contact E-Mail Address



May 2, 2025
Date

Executive Summary

Proposal for a New Program: Bachelor of Music
Institution: Frostburg State University
Department: Department of Music
Proposed HEGIS Code: 10.05-00
Proposed CIP Code: 50.0901
Degree to be Awarded: Bachelor of Music (B.M.)
Proposed Initiation Date: Fall 2025

Overview
Frostburg State University (FSU) proposes a new Bachelor of Music (BM) program. The curriculum will be made up of a core of 32 credits in music theory, music history, private instruction, piano proficiency, sophomore evaluation and recital attendance. Students must choose an Area of Concentration (AoC) in either a) music industry, b) vocal performance, or c) instrumental performance. Degree objectives and core values aim to equip students with academic rigor, experiential experiences in music, technological fluency in a modern society, inclusion of diverse populations, and development of citizenship. This degree will emphasize cultural competency and understanding of the pathway to careers in music performance and industry. Additionally, students will complete between 10-15 credits of electives to complete the 120-credit requirement to graduate. The curriculum in the three new BM concentrations will also be matched with NASM standards to ensure future accreditation and rigor.

Requested Actions
1. **New Major Degree Program:** Establish the Bachelor of Music

Rationale

Frostburg State University (FSU) proposes a new Bachelor of Music (BM) program. This degree will serve students looking to join the workforce in a wide variety of music-related jobs. According to the Maryland Department of Labor, there are annually: 5,100 openings for music directors and composers; 13,900 openings for producers and directors: 12,900 openings for sound engineering technicians; and 3,500 openings for musicians and singers. Updating our music degree programs as proposed will make FSU's students better trained and thus, more marketable.

Frostburg State University currently offers students four options leading to a BS or BA degree. Frostburg is pursuing accreditation for its music programs through the National Association for Schools of Music (NASM). Accreditation through NASM will generate significant value and benefits for our students, faculty, and institution, and advances FSU's mission to 'offer students a distinctive and distinguished baccalaureate education.' After an initial site visit, the NASM reviewers determined that several of FSU's current music curricula and credit loads more closely align with a Bachelor of Music degree, and they recommended that these BS/BA programs be eliminated and that new BM versions be created. Accordingly in future requests to USM, we will discontinue our current BS/BA programs in a) instrumental performance, b) vocal performance,

and c) music industry and offer new BM versions of these programs. All current students will have a seamless transition to the new degree program due to the similar curriculum.

A. Centrality to Institutional Mission and Planning Priorities:

1. Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.

- *The Bachelor of Music at Frostburg State University will contain three concentrations: Instrumental Performance, Vocal Performance and Music Industry. These concentrations will replace the current Bachelor of Science (BS) tracks and concentrations in the same areas. This proposal will be submitted with suspensions for the BS in Music Vocal Performance Concentration, Instrumental Performance Track and Music Industry Concentration.*
- *This new degree will be highly experiential which is the first sentence of FSU's Mission Statement Summary: "Frostburg State University is a student-centered teaching and learning institution featuring experiential opportunities." Music majors will be involved in hands-on activities such as local, regional and national performances, work in recordings applications, and music business opportunities. A proposed recording studio is hoped to be funded by the Appalachian Regional Commission in Spring 2025 with construction completed by Fall 2025.*
- *As a significantly diverse institution – especially with many students affected by socioeconomic factors, this proposed degree will be more affordable to those students.*

2. Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

- *Based on surveys of local and regional high schools, the addition of a Bachelor of Music degree at FSU will increase the enrollment of music majors significantly (FSU Strategic Plan Goal 1 – Strategic Enrollment Management). Included in this strategic goal is the Rebuilding & Enhancing of Departmental Majors. There is a level of prestige with achieving a Bachelor of Music with additional rigor associated with the program. The Department of Music is actively engaged in recruiting students from China which also aligns with this goal. Chinese institutions have indicated that a Bachelor of Music degree would be highly desirable, resulting in higher international student enrollment.*
- *FSU Strategic Goal 2 – Campus Environment and External Messaging will also be supported with this proposed degree. A distinct degree in music will foster a sense of community. At the Spring 2024 and Fall 2024 Department of Music Kick-Off Meetings, a majority of the department were present. The proposed Bachelor of Music degree was discussed and there was a distinct feeling of excitement. Any way that we can provide a way to bring student together, we must strive for.*
- *Following the initial site visit for accreditation by the National Association for Schools of Music (NASM), FSU's Department of Music was flagged for the current degree programs being too similar to Bachelor of Music programs. By updating the curriculum to these degree types, FSU would align with NASM standards. The*

achievement of program accreditation by NASM would be another strong external messaging for the institution.

3. Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.

- *This new program has no additional courses or workload requirements, thus no additional expenses.*

4. Provide a description of the institution's commitment to:
    a) ongoing administrative, financial, and technical support of the proposed program

- *The administrative bodies (President, Provost, Dean of CAHSBS) support the proposed Bachelor of Music degree program. With no additional expense, the financial support will continue as it has with the previous programs. Annual technology requests are consistently approved for technology in the department of music.*

    b) continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

- *FSU is committed to continuing the previous BA/BS programs and concentrations and the proposed BM program in the sufficient amount of time for students to complete their degrees. This is proven by the fact that all courses will remain as part of the academic catalog.*

Documents cited:

University Mission

University Strategic Plan

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan:

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:
    a) The need for the advancement and evolution of knowledge

Founded in 1898 to prepare teachers, Frostburg State University today is a public, comprehensive, co-educational institution offering a wide array of programs at the undergraduate, graduate, and doctoral levels. As the only constituent USM institution west of the Baltimore-Washington corridor, it serves as the premier educational and cultural center for

Western Maryland. Fulfilling a unique role in its service to the public and community, Frostburg has the distinction of offering opportunities for advanced learning for the employees of businesses and professions within the region

b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education

Currently only four other Maryland institutions offer BM programs. Establishing a BM at FSU would allow a wider demographic of students to pursue this type of degree. As one of the most affordable institutions in MD, students with financial challenges have the ability to participate in a Bachelor of Music program. FSU is positioned in an area of the state with the some of the lowest SES (socioeconomic status) scores (RNIP, 26-30).

c) The need to strengthen and expand the capacity of historically Black institutions to provide high quality and unique educational programs

2. Provide evidence that the perceived need is consistent with the **Maryland State Plan for Postsecondary Education**.

Access: Frostburg State University is the only four-year degree granting institution in Western Maryland and is consistently listed as a great value for the education.

Success: The curriculum provides an array of learning opportunities to meet the needs of the student body and promote their timely graduation.

Innovation: The curriculum employs a variety of teaching and learning strategies to best meet students' needs, including experiential learning, practical assessment, traditional delivery approaches, and technology-based delivery approaches.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. Describe potential industry or industries, employment opportunities, and expected level of entry (*ex: mid-level management*) for graduates of the proposed program.

This degree would offer individuals employment opportunities based on the concentration they choose (music industry, instrumental performance, or vocal performance. More detailed descriptions of these industries and careers are found in the separate proposals for each concentration that MHEC will require if the general program change is approved. The market for graduates of the proposed program will be the same as for graduates of the existing program, but the BM is the more valued degree for professional musicians and those seeking further study in music.

2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.

   This degree will serve students looking to join the workforce in a wide variety of music-related jobs. According to the Maryland Department of Labor, there are annually: 5,100 openings for music directors and composers; 13,900 openings for producers and directors: 12,900 openings for sound engineering technicians; and 3,500 openings for musicians and singers. Updating our music degree programs as proposed will make FSU's students better trained and thus, more marketable. State Data:
   https://test.dllr.state.md.us/lmi/iandoproj/maryland.shtml

   The music industry is projected to see modest national growth in employment over the next decade, with a 2% increase for musicians and singers between 2023 and 2033, according to the Bureau of Labor Statistics.

3. Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.

Maryland Department of Labor, Occupational & Industry Projections (https://www.dllr.state.md.us/lmi/iandoproj/ Shows over 300 positions in music openings, excluding music teachers, for the short-term (2023-2025). Long-term growth is around 6%. Music educators account for more than 600 positions in that same time period. The state does not produce that many music graduates.

4. Provide data showing the current and projected supply of prospective graduates.

BLS Data: https://www.bls.gov/emp/tables/employment-by-major-industry-sector.htm

Maryland degree completion data by program is found at https://mhec.maryland.gov/publications/Pages/research/index.aspx. MHEC reported the following baccalaureate programs in music (BA, BM etc.) produced the number of graduates indicated in 2024:

Frostburg 6, Salisbury 10, Towson 23, UMBC 8 (Music Performance), UMCP 35 (professional programs), Morgan State 5 (Music – Fine Arts), St. Mary's 5, JHU 82 (all specialties at Peabody), Washington Adventist University 2, Goucher 1, Hood 1, Washington College 3, McDaniel 1

D. Reasonableness of Program Duplication:

1. Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.

- *There are currently four institutions in Maryland that offer BM programs: UMD College Park, Towson University, Peabody Conservatory, and Washington Adventist University.*
- *The curriculum of FSU's proposed BM will also contain fewer credits than the aforementioned institutions allowing students to have a better chance to be retained. FSU's BM in Music Industry would be the only such program in the state.*
- *The main difference in FSU's proposed BM program is the ability for less financially able students to afford such a program. FSU is one of the most affordable institutions in the state.*
- ***Tuition and Fees for In-State Residents***
    1. *UMD College Park - $14,899.60/year*
    2. *Towson U. - $11,728/year*
    3. *Peabody - $32,365/year*
    4. *Washington Adventist - $24,804*
    5. ***Frostburg State - $7,254***
- *FSU's location in rural Western Maryland needs economic development. The other BM programs are on the East side of the state where there is less economic concern. The opportunity for students to achieve a specific degree in music with more academic distinction would be an exciting opportunity for the community.*

2. Provide justification for the proposed program.

- *FSU's Department of Music has not significantly decreased in number of majors as the university has significantly dropped in enrollment in the past five years. This speaks to the resilience and reputation of the program. Added in a Bachelor of Music Degree is the logical next step to growing and developing the department.*
- *As mentioned above, the approval of the BM with three associated concentrations will satisfy the accreditation by NASM. If accredited, FSU will be able to market this as a distinction among other accredited programs.*

Data source: https://mhec.maryland.gov/publications/Pages/research/archives.aspx

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

- N/A

1. Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.

The continuation of the Music major at Frostburg State University will have no impact on HBIs. There are a few reasons that this program will not significantly impact HBIs. Frostburg State University is in the western part of Maryland making it distant from the state's HBIs which are on the eastern side.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.

   With FSU's location and demographics having a positive impact in rural areas in Western Maryland and surrounding areas, the program indicates a high likelihood that it will not have negative impacts on the uniqueness and institutional identities of HBIs. Of the HBIs in the Maryland, there will be no program duplication or impact on similar programs. Morgan State and Bowie State currently offer BS of BA degrees in music.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10):

1. Describe how the proposed program was established, and also describe the faculty who will oversee the program.

   The program was established by the tenured, tenure-track faculty in music. The Assistant Dean of CAHBS and Associate Vice President of Academic Operations collaborated in the finalization of the curriculum and process to submit to MHEC. Brent Weber, Department Chair, will oversee the program.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.
3. Explain how the institution will:
   a) provide for assessment of student achievement of learning outcomes in the program

   Annual Learning Outcomes Assessment Reports are completed by the Department Chair. Courses assessed include the music theory and music history sequences, private instruction, and recitals. Data and narratives are submitted to Compliance Assist. The college Assessment Committee grade this information.

   b) document student achievement of learning outcomes in the program
4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements

Course #	Title	Credits	Description/Program Requirements
MUSC 102	Tonal & Aural Analysis I	4	Introduction to the vertical and linear dimensions of tonal music. Review of musical fundamentals, in which students will be expected to demonstrate facility and speed in naming and spelling basic tonal materials. Introduces traditional contrapuntal

			exercises, basic diatonic harmony, and the construction of formal phrase units. First in the sequence that emphasizes strategies for accurate and expressive reading, singing, and dictation using elementary rhythms and diatonic pitch materials in treble and bass clefs. Required for music majors and minors. Note: Students are placed in this course based upon results of a Music Theory Placement Exam given by the Department of Music. Fall.
MUSC 103	Tonal & Aural Analysis II	4	Continued study of tonal harmony and voice leading, both through written work and analysis. Continued focus mostly on diatonic harmony; begin to explore techniques of tonicization and modulation. Complete the aural understanding of diatonic harmony, introduces the experience of simple modulations, and facilitates mastery of rhythmic gestures necessary for performance of common-practice European art music. Alto clef will be introduced with emphasis on rapid and accurate reading, along with associated transpositions. Required for music majors and minors. Spring. Prerequisites: MUSC 102 or permission of the instructor. Tech fluency.
MUSC 204	Tonal & Aural Analysis III	4	Completes the study of 18th and early 19th-century tonal procedures. Explores the meaning of chromaticism in tonal music through examination of tonicization and modal mixture, emphasizing composers' use of these chromatic techniques within large-scale movement organization. Two large-scale analysis projects will include: 1) graphic analysis, 2) its role in representing students' deeper understanding of linear and harmonic motions, and 3) how this understanding impacts performance decisions. Continuation of aural analysis with emphasis on tenor clef and its associated transpositions, a systematic introduction to chromatic processes in tonal music, various problems associated with changing meter signatures and polyrhythms, and perception of tonal processes in complete movements composed in larger forms. Required for music majors. Fall. Prerequisites: MUSC 103 or permission of the instructor.
MUSC 205	Tonal & Aural Analysis IV	4	Further application of techniques from MUSC 204 with an emphasis on analysis of musical structure and style in Western civilization. Primary focus on written and analytical applications to large formal structures and their relationship to performance. Continuation study of aural analysis and completes the formal study of common-practice tonal relationships and large formal structures. Introduction to reading and performing music in asymmetrical meters, and music that changes meter asymmetrically. Required for music majors. Spring. Prerequisites: MUSC 204 or permission of the instructor.
MUSC 308	Music History I	2	A survey of musical style from Baroque through the Classical period. Analysis, listening, discussion set in a cultural context. Spring.
MUSC 309	Music History II	2	A survey of musical style from the Romantic through the Contemporary (21st century) periods. Analysis, listening, discussion set in a cultural context. Fall.

MUSC 313	Music History III	2	A survey of musical style from the Gregorian chant through the Renaissance period. Analysis, listening, discussion set in a cultural context. Spring.
MUSA 315-362	Private Instruction	1-2	Individual instruction in voice, piano, organ, strings, guitar, woodwinds, brass, or percussion as a minor performance specialty. 30-minute lesson each week. Repeatable for credit each semester of enrollment. Performance for a faculty jury at the end of each semester in lieu of a final examination. Every semester. Prerequisite: concurrent enrollment in an ensemble (MUSC 315, 319, 327, 329, 330, 331, 335, 336, 337, 339, or 340); permission of instructor; audition required.
MUSA 104	Class Piano I	1	Basics of keyboard technique for students with little or no piano experience. Designed to lead toward successful completion of the piano proficiency examination (MUSA 415). Meets 100 minutes per week. Fall. Prerequisite: permission of instructor; enrollment preference given to music majors/minors.
MUSA 104	Class Piano II	1	Continuation of MUSA 104. Designed to lead toward successful completion of the piano proficiency examination (MUSA 415). Meets 100 minutes per week. Spring. Prerequisite: MUSA 104 or permission of instructor; enrollment preference given to music majors/minors.

4. Discuss how general education requirements will be met, if applicable.

- *FSU's General Education Program (GEP) is not affected by this degree program. All courses within the GEP are separate from the BM.*

6. Identify any specialized accreditation or graduate certification requirements for this program and its students.

    - *Currently there are no accreditation requirements. However, the adoption of the BM is to satisfy the process to become accredited by NASM.*

7. If contracting with another institution or non-collegiate organization, provide a copy of the written contract.

    - *N/A*

8. Provide assurance and any appropriate evidence that the proposed program will provide students with
clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management s ystem,

availability of academic support services and financial aid resources, and costs and payment policies.

The combination of FSU's Catalog, website, admissions and recruiting materials, and student information system provides students with all of this important information.

9. Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.

The department's focus is to provide accurate advertising, recruiting, and admissions/ graduate services materials, which clearly and accurately reflect the proposed modification of our program.

- *Link to FSU Office of Admissions: https://www.frostburg.edu/admissions-and-cost/undergraduate/index.php*
- *Link to FSU Department of Music: https://www.frostburg.edu/academics/colleges-and-departments/music/welcome.php*
- *Link to FSU Department of Marketing and Communications: https://www.frostburg.edu/about-frostburg/Administrative-Offices/marketing-and-communications.php*

H. Adequacy of Articulation

1. If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements.

- *FSU's Department of Music has current articulation agreements with three community colleges in Maryland: College of Southern Maryland, Anne Arundel Community College, and Montgomery College.*
- *The addition of a BM would potentially draw more students from these institutions as it is a program of higher distinction. The agreement documentation would need to be updated accordingly with the new curriculum. Fortunately, it is mostly the same as the previous BS degrees.*

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

1. Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of **faculty with appointment type, terminal degree title and field,**

academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faulty member will teach in the proposed program.

- *FSU's Department of Music contains 18 faculty members. 13 holding terminal degrees from reputable institutions such as Cincinnati Conservatory, Julliard School, Peabody Conservatory, and University of Southern California. These individuals are hired through a rigorous interview process to ensure ability in their area and fit for FSU. They are active performers on the national and international stage with recent performances in Spain, China, and Germany.*
- *The following table provides a list of the current faculty members in the Department of Music AY 2024-2025:*

2. Name	Degrees Held	Time at Institution (in years)	Rank	Tenure Status	Courses
Dr. Donald Albrecht	BM, MM, DMA	2	Lecturer	Adjunct	Private Instruction: Trumpet, Jazz History, Brass Ensemble
Dr. Chun-Ting Chao	BM, MM, DMA	1	Lecturer	Adjunct	Private Instruction: Voice, Opera Theatre
Dr. James DeWire	BA, MA, MM, DMA	12	Associate Professor	Tenured	Private Instruction: Piano, Music History I, II & III
Dr. Mark Gallagher	BM, MM, DMA	22	Associate Professor	Tenured	Private Instruction: Clarinet, Tonal & Aural Analysis I, II, III, & IV, Clarinet Ensemble, Alexander Technique
Dr. Felipe Garibaldi de Almeida Silva	BM, MM, DMA	1	Lecturer	Adjunct	Private Instruction: Guitar, Guitar Ensemble, Music Appreciation
Thomas Harrison	BM	11	Lecturer	Adjunct	Private Instruction: Jazz Piano, Jazz Combo, Jazz Theory & Analysis
Dr. Mackenzie LaMont	BM, MM, DMA	6	Assistant Professor	Tenure-Track	Private Instruction: Percussion & Composition, Computer Music Technology, Percussion Ensemble, Orchestration, Industry Practicum, Music Industry Internship
Ms. Abigail Lannan	BME, MM	1	Lecturer	Adjunct	Private Instruction: Euphonium, Trombone & Tuba
Dr. Karen Lau	BM, MM, DMA	9	Lecturer	Adjunct	Private Instruction: Cello
Mr. Peter Lewis	BM, MM	1	Lecturer	FTNTT	Wind Ensemble, Marching Band, String Ensemble, Conducting II, Internship I & II, Secondary General Music Methods, Elementary General Music Methods, Instrumental Music Methods, Private Instruction: Bass & Jazz Bass
Ms. Anna Lorenzen	BM, MM, DMA	1	Lecturer	Adjunct	Private Instruction: French Horn
Mr. Gary Phillips	BM, MM	22	Senior Lecturer	Adjunct	History of Rock, Music of Africa, Asias, and the Americas
Dr. Scott Rieker	BA, MM, DMA	6	Lecturer	FTNTT	University Choral, Chamber Singers, Intro to Music Education, Music Appreciation, Conducting I, Internship I & II
Dr. Brent Weber	BA, MM, DMA	12	Professor	Tenured	Private Instruction: Saxophone, Jazz Orchestra, Junior & Senior Recital, Saxophone Ensemble, Class Instruments: Woodwinds
Mr. Michael Welch	MM	1	Lecturer	Adjunct	Private instruction: Voice & Musical Theatre voice; Diction I & II

Dr. Joseph Yungen	BA, MM, DMA	8	Staff	Part Time	Collaborative Pianist
Dr. Qian Zhang	BM, MM, DMA	1	Lecturer	Adjunct	Private Instruction: Violin & Viola

3. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:

    a) Pedagogy that meets the needs of the students

- *FSU's Center for Teaching Excellence (CTE) provides regular clinics and workshops for on topics such as pedagogy, classroom management, syllabus creation, etc. They hold an Annual Regional Conference on Teaching, Learning and Scholarship as well.*

    b) The learning management system

- *FSU's Office of Information Technology regularly holds trainings on Canvas and PAWS (FSU's course and student management systems, respectively.) Faculty may also request individual trainings. All new faculty are required to complete modules to ensure their fluency with these softwares.*

    c) Evidenced-based best practices for distance education, if distance education is offered

    Technology support and information is an ongoing theme with tips for online learning and engaging students in a virtual environment. FSU's Center for Teaching Excellence provides regular training in evidence-based best practices and also hosts an annual regional conference on teaching and learning. In addition, FSU offers regular professional development courses and workshops in instruction and assessment, and the office of Instructional Design and Technology provides training and support for the university's learning management system Canvas. red.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12)**.**

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

    The resources at the Lewis J. Ort Library that over the years have adequately supported the various programs at FSU and will adequately support this proposal.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Equipment (as outlined in COMAR

13B.02.03.13)

1. Provide an assurance that physical facilities, infrastructure, and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.

- *The current facilities are adequate for the proposed degree. Again, this is proven due to the similarities to the previous programs.*

2. Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:

    a) An institutional electronic mailing system, and
    b) A learning management system that provides the necessary technological support for distance education

- *FSU has contracts with Microsoft Outlook (email system) and Canvas (student learning management system.*

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

1. Complete **Table 1: Resources and Narrative Rationale**. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.

TABLE 1: RESOURCES **Resource Categories**	FY 2026 **Year 1**	FY 2027 **Year 2**	FY 2028 **Year 3**	FY 2029 **Year 4**	FY 2030 **Year 5**
1. Reallocated Funds	417,878	417,878	417,878	417,878	417,878
2. Tuition/Fee Revenue	170,444	198,946	228,436	258,900	307,634
(c + g below)	-	-	-	-	-
a. Number of F/T Students In-state	17	20	23	26	28

a. Number of F/T Students Out-of-state	1	1	1	1	2
b. Annual Tuition/Fee Rate In-state	7,400	7,548	7,700	7,854	8,012
b. Annual Tuition/Fee Rate Out-of-state	23,306	23,774	24,250	24,736	25,232
c. Total F/T Revenue (a x b)	149,106	174,734	201,350	228,940	274,800
d. Number of P/T Students In-State	1	1	1	1	1
d. Number of P/T Students Out-of-State	-	-	-	-	-
e. Credit Hour Rate In-State	312	320	328	336	344
e. Credit Hour Rate Out-of-State	642	656	670	684	698
f. Annual Credit Hour Rate	12	12	12	12	12
g. Total P/T Revenue In & Out-of-State	3,744	3,840	3,936	4,032	4,128
(d x e x f)	- 0	- 0	- 0	-0	- 0
3. Grants, Contracts & Other External Sources	0 -	- 0	- 0	- 0	0 -
4. Other Sources	0-	0 -	- 0	0 -	- 0
TOTAL (Add 1 – 4)	588,322	616,824	646,314	676,778	725,512

2. Complete **Table 2: Program Expenditures and Narrative Rationale** . Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.

TABLE 2: EXPENDITURES

Expenditure Categories	2026 **Year 1**	2027 **Year 2**	2028 **Year 3**	2029 **Year 4**	2030 **Year 5**
1. Faculty (b + c below)	397,845	397,845	397,845	397,845	397,845
a. # FTE	0.00	0.00	0.00	0.00	0.00

b. Total Salary	304,407	304,407	304,407	304,407	304,407
c. Total Benefits	93,438	93,438	93,438	93,438	93,438
2. Admin. Staff (b + c below)	61,593	61,593	61,593	61,593	61,593
a. # FTE	-	-	-	-	-
b. Total Salary	39,438	39,438	39,438	39,438	39,438
c. Total Benefits	22,155	22,155	22,155	22,155	22,155
3. Support Staff (b + c below)	4,884	4,884	4,884	4,884	4,884
a. # FTE	0.00	0.00	0.00	0.00	0.00
b. Total Salary	4,884	4,884	4,884	4,884	4,884
c. Total Benefits	0 -	0-	0-	-0	0-
4. Equipment	0 -	0-	0-	0 -	0-
5. Library	0 -	0 -	0-	0-	0-
6. New or Renovated Space	0 -	-0	- 0	0 -	0 -
7. Other Expenses	0 -	0-	0 -	0-	0 -
TOTAL (Add 1 – 7)	464,322	464,322	464,322	464,322	464,322
Surplus	124,000	152,502	181,992	212,456	261,190

ASSUMPTIONS:

Tuition: Increase of 2% annually.

Flat salary and other payroll expenses.

Full-time Faculty and Staff salaries expensed at 20% per program. Spread evenly over 5 programs (current and proposed)

	2026	2027	2028	2029	2030
# f/t students	17	20	23	26	28
# f/t students	1	1	1	1	2

	-	-	-	-	-

# p/t ug students	1	1	1	1	1
# p/t ug students	0	0	0	0	0
	-	-	-	-	-

Total Students	19	22	25	28	31
Fee average per student	926	926	926	926	926
Total Minimum Fees	17594	20372	23150	25928	28706

Faculty Salaries

2026 **Year 1**	2027 **Year 2**	2028 **Year 3**	2029 **Year 4**	2030 **Year 5**
191,713	191,713	191,713	191,713	191,713
74,138	74,138	74,138	74,138	74,138
38,556	38,556	38,556	38,556	38,556
304,407	304,407	304,407	304,407	304,407

Faculty Fringes

Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
84,659	84,659	84,659	84,659	84,659
5,775	5,775	5,775	5,775	5,775
3,004	3,004	3,004	3,004	3,004
93,438	93,438	93,438	93,438	93,438

Admin Staff

Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
39,438	39,438	39,438	39,438	39,438

-	-	-	-	-
-	-	-	-	-
39,438	39,438	39,438	39,438	39,438

Admin Fringes

Year 1	Year 2	Year 3	Year 4	Year 5
22,155	22,155	22,155	22,155	22,155
-	-	-	-	-
-	-	-	-	-
22,155	22,155	22,155	22,155	22,155

Support Staff

Year 1	Year 2	Year 3	Year 4	Year 5
4,884	4,884	4,884	4,884	4,884
-	-	-	-	-
-	-	-	-	-
4,884	4,884	4,884	4,884	4,884

Support Staff fringes

Year 1	Year 2	Year 3	Year 4	Year 5
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1. Discuss procedures for evaluating courses, faculty, and student learning outcomes.

<u>Evaluation of Faculty</u>: Student evaluations are collected for each course through the University's learning management system (Canvas) using a standard form that is used across all courses. Student evaluation scores and accompanying narratives are aggregated and presented to the instructor, by course. Frostburg State University has an institutionalized process of assessing student-learning outcomes in the majors which can include disciplinary accrediting bodies at the college level for the Colleges of Business and Education or through a college-defined body, the College of

Liberal Arts and Sciences' Assessment Council. The Student Learning Assessment Advisory Group (SLAAG) and Graduate Learning Assessment Advisory Group (GLAAG) operate at the institutional level and focus of student learning outcomes following the timelines for the Institutional Effectiveness Cycle.

3. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.

The program review schedule serves as the foundation for assessment initiatives through its identification of priorities for the coming cycle. Halfway through the cycle, the Office of Assessment, and Institutional Research (AIR) collects information on the status of assessment activities using a midterm review template. Programs undergoing review in any given year must submit the Program Review Self-Study, External Review Report, and Certificate to AIR.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR

13B.02.03.05).

1. Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

Frostburg State University is a public institution that is committed to a campus environment that values human diversity and represents individuals who represent diversity. It is a multi-cultural campus where diversity is highly valued. The program and university have established goals to recruit and support the minority population. This is reflected in the University's Core Value Statement: "Frostburg State University is committed to developing cultural competence and cultivating understanding and respect for a diversity of experiences and worldviews that encourage each person's ability to "take the perspective of the other."" Frostburg State University has initiatives to increase diversity in faculty and staff. The

university has established a University Council on Diversity, Equity, and Inclusion (UCDEI) that is led by the University President.

- *Department of Music Minority Initiatives*
    - *The hiring process of new faculty member includes contact with HBIs to inquire about recent graduates who may be suitable for the position.*
    - *Ensemble directors regularly program music from minority/ underrepresented composers.*
    - *FSU's National Association for Music Educator's Chapter holds regular conversations regarding the status of minority/underrepresented music educators in the state of Maryland.*
    - *The Department of Music is inclusive of students from all background when auditioning for the program.*
- *ODEI Initiatives (abbreviated list):*
    - *The Brownsville Monument: Tuesday, August 25th, 2020, Frostburg students, faculty, townspeople, and Brownsville descendants gathered to memorialize the Brownsville/ Park Ave monument. Brownsville was a community nested in Frostburg, Md started by Tamar Brown and Elizabeth Jackson. Both were former enslaved persons who purchased and hoisted homes on neighboring lots. Soon the community grew as other previously enslaved people moved onto the land and grew their families. The locality lasted from the 1860's through till 1950's but Frostburg State University now exists where the town once stood.*
    - *Archie Bunker's Neighborhood: A Cross Culture Simulation Exercise:Archie Bunker's Neighborhood allows participants to experience and act out their feelings about the processes involved when people of various cultural identities arbitrarily acquire and utilize community resources; to increase the level of awareness and sensitivity to the kinds of pressures imposed by in-group members on out-group members; to create the opportunity for a "walk a mile in another's shoes" type of experience; to examine the various effects of institutional racism/classism/homophobia on members of different cultural and economic groups; to examine the consequences of entrapment in competitive situations that may lead to win-lose or lose-lose situations; and to develop a safe space in which to dialogue about the dynamics of this experience and to related it to the "real" world.*
    - *Diversity Retreat: Once each academic year The Office for Diversity, Equity, and Inclusion (ODEI) sponsors a Diversity Retreat, now renamed "The FSU Social Justice Summit." Open and free to all FSU students, the retreat is an opportunity to openly discuss our similarities and differences, and learn to appreciate both. The retreat includes workshops and other activities intended to promote student awareness and empowerment in diversity issues and coalition building. The weekend involves moments of great challenge and great fun. You should leave with new friends, new acquaintances and new insights of yourself and others.*

O. Relationship to Low Productivity Programs Identified by the Commission:

1. If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.

N/A

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.

- N/A

2. Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.

FSU is approved to offer distance education as an alternative delivery method included within its scope of accreditation, as evidenced in the university's MSCHE Statement of Accreditation Status. This program supports a face-to-face and online learning environment. FSU is an approved institutional member of the National Council of State Authorization Reciprocity agreement (NC-SARA).

Articulation Agreement
ACADEMIC PROGRAM ARTICULATION AGREEMENT BETWEEN MONTGOMERY COLLEGE AND FROSTBURG STATE UNIVERSITY REGARDING TRANSFER FROM ASSOCIATE OF ARTS IN ARTS AND SCIENCES TRANSFER - MUSIC TO BACHELOR OF MUSIC

This Academic Program Articulation Agreement ("Agreement") is entered into by and between Montgomery College (the "Sending Institution") and Frostburg State University (the "Receiving Institution") (collectively, the "Institutions") to facilitate the transfer of academic credits from Associate of Arts in Arts and Sciences Transfer - Music, HEGIS 491001 and CIP 240101, for the completion of the Bachelor of Music, HEGIS code 100500 and CIP code 500901.

A. Qualifying Students

This Agreement pertains to the transfer of "Qualifying Students", *i.e.*, those students who:
1. Have successfully completed the program at the Sending Institution;
2. Are enrolled in the Sending Institution, in good standing; and
3. Are accepted for admission to the Receiving Institution
4. Have passed required auditions and diagnostics administered by the Music Department

B. Responsibilities of the Institutions

The Institutions agree to implement the transfer of Qualifying Students in accordance with applicable law and the following requirements and protocols:

1. A Qualifying Student may transfer from the Transferring Institution into the Receiving Institution for the completion of the Program.

2. Courses that the Receiving School will accept credits for towards completion of the Program include:

Sending Institution Course			Receiving Institution Comparable Course			
Course Number	**Course Name**	**Credits**	**Course Number**	**Course Name**	**Credits**	**Applied to***
ENGL 101	Introduction to College Writing	3.0	ENGL 195	Lower-level elective	3.0	General elective
ENGL 102	Critical Reading, Writing, and Research	3.0	ENGL 101	First-Year Composition	3.0	GEP Core
COMM 108	Foundations of Human Communication	3.0	STCO 102	Introduction to Strategic Communication	3.0	GEP Group E
COMM 112	Business and Professional Speech Communication	3.0	STCO 195	Lower-level elective	3.0	GEP Group E
MUSC 117	World Music	3.0	MUSC 117	Music of Africa, Asia, and the Americas	3.0	GEP Group A or Group F and Major
MUSC 125	History of Jazz	3.0	MUSC 311	Jazz History	3.0	GEP Group F
MUSC 147	Applied Music	2.0	MUSA 356-363	Private Instruction	2.0	Major
MUSC 141	Class Piano I	2.0	MUSA 104	Class Piano I	1.0	Major
MUSC 142	Class Piano II	2.0	MUSA 105	Class Piano II	1.0	Major
MUSC 148	Applied Music	2.0	MUSA 356-363	Private Instruction	2.0	Major
MUSC 150	Applied Music Laboratory	1.0		Not transferable		
MUSC 163	College Chorus	1.0	MUSC 319	University Chorale	1.0	Major
MUSC 166	College Orchestra	1.0	MUSC 333	String Ensemble	1.0	Major
MUSC 172	College Band – Wind Ensemble	1.0	MUSC 330	Wind Ensemble	1.0	Major
MUSC 184	Introduction to Music Theory	3.0	MUSC 100	Intro. to Music Theory	3.0	General elective
MUSC 190	Music Theory I	3.0	MUSC 102	Tonal Analysis I	4.0	Major
MUSC 191	Music Theory II	3.0	MUSC 103	Tonal Analysis II	4.0	Major
MUSC 194	Ear Training and Sightsinging I	2.0	MUSC 104	Aural Musicianship I	2.0	Major
MUSC 195	Ear Training and Sightsinging II	2.0	MUSC 105	Aural Musicianship II	2.0	Major
MUSC 215	Applied Music	2.0	MUSA 356-363	Private Instruction	2.0	Major
MUSC 216	Applied Music	2.0	MUSA 356-363	Private Instruction	2.0	Major
MUSC 233	Music Theory III	3.0	MUSC 204	Tonal Analysis III	4.0	Major
MUSC 234	Music Theory IV	3.0	MUSC 205	Tonal Analysis IV	4.0	Major
MUSC 237	Ear Training and Sightsinging III	2.0	MUSC 206	Aural Musicianship III	2.0	Major
MUSC 238	Ear Training and Sightsinging IV	2.0	MUSC 207	Aural Musicianship IV	2.0	Major

Only MUSC/MUSA courses in which you earn a grade of C or better will count toward satisfaction of requirements for the major and minor. Concentrations for the major involving minors or coursework in other departments shall abide by the grade requirements for those programs.

3. The Receiving Institution shall designate, and shall provide to the Sending Institution, the contact information for a staff person at the Receiving Institution who is responsible for the oversight of the transfer of Qualifying Students. The Sending Institution shall designate, and shall provide to the Receiving Institution, the contact information for a staff person at the Sending Institution who is responsible for the oversight of the transfer of Qualifying Students.

	Sending Institution	Receiving Institution
Name of staff person responsible for oversight	Justin Edgar	Linda Steele
Title of staff person	Articulation and Transfer Program Manager	Transfer and Articulation Coordinator
Email address	justin.edgar@montgomerycollege.edu	lsteele@frostburg.edu
Telephone Number	240-567-9047	301-687-4137

Should the staff person or position change, the institution will promptly provide new contact information to the partner institution and inform the Maryland Higher Education Commission of the change.

Additional contact information:

[Role & Responsibilities of persons listed here]	Sending Institution	Receiving Institution
Name of person	Alvin Trask	Brent Weber
Title of person	Chair of Performing Arts	Chair of Music
Email address	alvin.trask@montgomerycollege.edu	bmweber@frostburg.edu
Telephone Number	240-567-7551	301-687-4116

4. If the Qualifying Student is using federal Title 38 VA Education Benefits (GI Bill® Education Benefits), the Institutions shall adhere to all applicable U.S. Department of Veterans Affairs' regulations, including the regulations governing the awarding prior credit,

as regulated under Title 38, Code of Federal Regulations, Sections 21.4253(d)(3) and 21.4254(c)(4).

5. Each Institution shall adhere to all applicable transfer requirements set forth in the Annotated Code of Maryland and the Code of Maryland Regulations.

6. Each Institution shall advise students regarding transfer opportunities under this Agreement, and shall advise students of financial aid opportunities and implications associated with the transfer.

7. Should either Institution make changes to program requirements, the institution will inform the partner institution immediately. The articulation agreement should be updated to reflect the changes and forwarded to the Maryland Higher Education Commission.

C. Term and Termination

1. This agreement shall be effective on the date that it is signed by the appropriate and authorized representatives of each Institution.

2. Either Institution may, at its sole discretion, terminate this Agreement upon delivering 60 days written notice to the other Institution and the Maryland Higher Education Commission. The parties agree that termination shall include an agreement that students currently enrolled in the program at the time of termination shall be permitted to complete the program as described herein.

3. Both Institutions agree to meet once every year to review the terms of this agreement.

D. Amendment

1. This Agreement constitutes the entire understanding and agreement of the Institutions with respect to their rights and obligations in carrying out the terms of the Agreement, and supersedes any prior or contemporaneous agreements or understandings.

2. This Agreement may be modified only by written amendment executed by both Institutions.

E. Governing Law

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Maryland.

F. Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

G. Notice of Agreement

1. The Institutions agree to provide a copy of this Agreement, with any amendments, to the Maryland Higher Education Commission.

2. The Institutions agree to provide copies of this Agreement to all relevant individuals and departments of the Institutions, including but not limited to students, academic department chairs participating in the transfer, offices of the president, registrar's offices, and financial aid offices.

H. No Third-Party Beneficiaries

There are no third-party beneficiaries to this Agreement.

I. Representations and Warranties of the Parties

Both Institutions represent and warrant that the following shall be true and correct as of the Effective Date of this Agreement, and shall continue to be true and correct during the term of this Agreement:

1. The Institutions are and shall remain in compliance with all applicable federal, state, and local statutes, laws, ordinances, and regulations relating to this Agreement, as amended from time to time.

2. Each Institution has taken all action necessary for the approval and execution of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

Montgomery College

By: _____
Jermaine Williams
President

_____
Date

_____
Kimberly Kelley
Vice President/Provost for Arts

_____
Date

Frostburg State University

By: _____
Darlene Brannigan Smith, PhD
Interim President

_____
Date

_____
Lawrence Weill
Interim Provost

_____
Date

Frank Trezza Dean of Visual, Performing, and Media Arts	Michael Mathias Dean of Arts, Humanities, Social and Behavioral Sciences
Date	Date

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Salisbury University proposal for a Bachelor of Science in Biochemistry and Molecular Biology

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: Salisbury University (SU) proposes the establishment of a stand-alone Bachelor of Science (BS) degree in Biochemistry and Molecular Biology. Currently, SU offers Biochemistry as a concentration within the Chemistry degree, and Molecular Biology is taught as a set of electives within the Biological Sciences Department. This current structure limits students' ability to explore interests beyond their primary program of study and can lead to extended time to graduation for those who fall behind in the prescribed course sequence. The proposed stand-alone degree, along with an enhanced curriculum, supports SU's strategic goals of "enriching academic success and student development" and "supporting access, affordability, and academic excellence."

The core curriculum will require students to complete 32 credits of fundamental scientific knowledge and skills, 26 credits of advanced scientific knowledge and skills, and 18 credits of advanced biochemical/molecular knowledge and skills. Additionally, students will have the option to choose between two areas of focus: one in biology and the other in chemistry. Graduates will be well-prepared for entry-level positions in the pharmaceutical, biotechnology, and biomedical industries. Furthermore, they will possess the foundational coursework and skills necessary for advanced studies in biochemistry, molecular biology, and health professional programs. Career opportunities are diverse and include, but are not limited to government research, medicine, regulatory affairs, and forensic science.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the Salisbury University proposal to offer a Bachelor of Science in Biochemistry and Molecular Biology.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

OFFICE OF THE PROVOST
1101 Camden Avenue
Salisbury, MD 21801-6860
410-543-6020
1-888-543-0148
TTY 410-543-6083
FAX 410-548-2587
www.salisbury.edu

April 15, 2025

Dr. Jay A. Perman, Chancellor
University System of Maryland
3300 Metzerott Rd.
Adelphi, MD 20783

Dear Chancellor Perman,

Salisbury University (SU) is requesting the approval to add a new academic program – Bachelor of Science in Biochemistry and Molecular Biology.

SU currently offers Biochemistry as a concentration within our Chemistry degree, and we believe that by establishing a stand-alone program will give students greater flexibility to pursue interests outside their primary field of study without comprising the academic rigor expected of a STEM degree.

The complete proposal and supporting documentation for a new academic program is attached for your review.

Thank you for your consideration.

Sincerely,

Laurie Couch, Ph.D.
Provost & Senior VP of Academic Affairs

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
X	Within Existing Resources, or
	Requiring New Resources

Salisbury University
Institution Submitting Proposal

Biochemistry and Molecular Biology
Title of Proposed Program

Bachelor of Science	Fall 2025
Award to be Offered	Projected Implementation Date
41400	26.02010
Proposed HEGIS Code	Proposed CIP Code
Chemistry	Stephen Habay
Department in which program will be located	Department Contact
410-543-6000	sahabay@salisbury.edu
Contact Phone Number	Contact E-Mail Address
Laurie L. Connell	4/15/25

Overview

Salisbury University is proposing a Bachelor of Science in Biochemistry and Molecular Biology program, a joint program between our Departments of Chemistry and Biological Sciences that will support Maryland's thriving life sciences industry by producing graduates who work in pharmaceutical and biotechnology companies, forensic science positions, and research laboratories. Demand for biochemists and molecular biology graduates is strong and fast-growing, with job openings at the bachelor's level outpacing the number of graduates from such programs each year. Maryland and the mid-Atlantic region, in general, are prime locations for graduates of biochemistry/molecular biology programs to work because of our extensive life sciences industry, and starting salaries are high for positions in the field. Students graduating from biochemistry/molecular biology programs often successfully pursue graduate education, as well.

A. Centrality to Institutional Mission and Planning Priorities:

1. **Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.**

   The Richard A. Henson School of Science and Technology at Salisbury University (SU) is excited to submit a proposal for a new **Bachelor of Science in Biochemistry and Molecular Biology (BMB)** to begin in the Fall 2025 semester.

   The Biochemistry and Molecular Biology (BMB) program will prepare students to fill the gap in the biotechnical workforce of Maryland and the greater region after graduation, as well as prepare them to enter graduate programs in biochemistry, molecular biology, and other biomedical research fields.

   The program requires 76 credit hours of STEM courses. The core program is divided into three phases:

   I. Fundamental scientific knowledge and skills (32 credit hours) which introduces the basic concepts and skills of biology, chemistry, mathematics and physics.

   II. Advanced scientific knowledge and skills (26 credit hours) which deepens students' biological, biochemical and chemical knowledge and skills.

   III. Advanced biochemical and molecular knowledge and skills (18 credits) which introduces students to the many facets of biochemistry and molecular biology and the skills used to study them.

   In addition to the core, students will have the opportunity to complete one of two specialized tracks: a focus in biology or a focus in chemistry. Each focus will require students to complete two additional upper-division courses in their chosen field. These unique focus pathways allow students to tailor the BMB program to their particular skills and career interests. Our program also provides students with credit hour flexibility in which they may pursue other interests, including minors in business, communications, or the liberal arts. The flexible options afforded by

this new program ensure that our students can graduate easily within four years, and they will ensure our students more broadly trained and well equipped to advance the future of biotechnology and biomedical research in Maryland and the surrounding region.

The American Society for Biochemistry and Molecular Biology (ASBMB) is the primary scientific society for biochemists and molecular biologists. They have been accrediting undergraduate biochemistry and molecular biology programs since 2013. Our new BMB B.S. program will meet all ASBMB accreditation standards. As such, students majoring in this program are eligible to take the ASBMB degree certification exam to demonstrate their proficiency in the curriculum and skills of the field.

The BMB program directly aligns with Salisbury University's mission in several important ways. For example, the program will "foster an environment where individuals prepare for career and life" and "empower our students with the knowledge, skills, and core values that contribute to active citizenship, gainful employment, and life-long learning in a democratic society and interdependent world." Further, because the program will utilize faculty mentoring and provides numerous opportunities for students to engage in undergraduate research or other high-impact activities, it also fulfills our mission by being student-centered and one in which "students learn from professional educators in small classroom settings, faculty and professional staff serve as academic advisors, and virtually every student has an opportunity to undertake research or experiential learning with a faculty mentor."

2. **Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.**

SU's 2020-2025 Strategic Plan

The proposed Bachelor of Science in Biochemistry and Molecular Biology directly supports two of Salisbury University's strategic goals as outlined in our strategic plan:

Strategic Goal 1: Enrich Academic Success and Student Development
Strategic Goal 3: Support Access, Affordability, and Academic Excellence

The program will be academically rigorous and offer high-impact experiential learning opportunities, a hallmark of academic excellence. Graduates will be eligible to sit for the professional certification exam at the end of the program. Indeed, in alignment with the accreditation standards set by the American Society for Biochemistry and Molecular Biology (ASBMB), the program will equip students with the knowledge and skills needed for successful careers in biochemistry, molecular biology, and related fields such as biotechnology, reinforcing the program's commitment to high academic standards and preparing graduates for success in the global workforce.

With close student mentoring and advisement built in as part of the standard approach to instruction, the BMB program will foster academic success and student development. Additionally, the program will offer a flexible pathway to completing its requirements and ensures that students who encounter academic challenges early in their studies will have the opportunity to catch up, allowing them to complete their degree within four years without

compromising the rigor of the individual courses. This flexibility enhances the student experience by accommodating various learning paces, fostering greater academic success, and promoting retention. It also increases affordability because it lowers the chances that students will need to stay for additional semesters to complete their degree.

3. **Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.)**

   This joint program represents a brand-new major within the Department of Chemistry, which currently offers a B.S. degree in Chemistry, and shares courses with the Department of Biological Sciences. The courses that will comprise this new program are currently part of the existing curriculum across the two departments, thus adding a B.S. in Molecular Biology and Biochemistry will require no new courses or faculty members. Indeed, the combined faculty and course offerings of the Department of Biological Sciences and the Department of Chemistry are sufficient to meet program requirements, and there is capacity enough in courses to add the additional students who will join the BMB program. As enrollment grows, the additional revenue generated through the program will be reflected in additional operating expenses in the departmental budget to cover the cost of supplies and student support. If the program grows significantly within the first five years, the Dean and Provost will evaluate the need for additional faculty resources, with a commitment to staffing the courses necessary to serve additional students. The only other anticipated additional cost is for the ASBMB certification exam, which students will take in their final semester. Currently, the cost of the exam is $45 per student. SU plans to cover these additional expenses through departmental operating budgets, ensuring minimal financial impact while maintaining program quality. This funding is guaranteed.

4. **Provide a description of the institution's a commitment to:**
   a) **ongoing administrative, financial, and technical support of the proposed program**

      Salisbury University is dedicated to providing the necessary administrative, financial, and technical support to meet the growing demand for this program. The university has established robust administrative structures to ensure the successful implementation of the new program. This is evidenced by the comprehensive vetting and approval process, which involved the Chair of both the Departments of Biological Sciences and Chemistry, the Henson School of Science and Technology Curriculum Committee, the Dean of the Henson School, the University Undergraduate Curriculum Committee, and the Provost. These steps demonstrate the university's commitment to supporting the program's development and ongoing success.

   b) **continuation of the program for a period of time sufficient to allow enrolled students to complete the program.**

We are committed to providing the necessary support to ensure that all students enrolled in the program can successfully complete their degree. If the program is discontinued, Salisbury University will implement a comprehensive teach-out plan, ensuring that each student has the opportunity to fulfill degree requirements in a timely manner. This reflects the university's dedication to student success and academic continuity.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan:

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:

a) The need for the advancement and evolution of knowledge

The establishment of a Biochemistry and Molecular Biology degree program at Salisbury University is driven by the dynamic advancements and growing significance of these fields in the modern era. Prior to the 1980s, it was uncommon for undergraduate institutions to offer biochemistry programs. Today, biochemistry and molecular biology are at the forefront of groundbreaking innovations in human health and disease treatment, pharmaceutical development, agricultural improvements, and the creation of sustainable energy solutions. For instance, breakthroughs such as the development of mRNA vaccines, personalized medicine, and targeted therapies like Herceptin are direct products of biochemists and molecular biologists. In agriculture, genetic engineering has led to more resilient and nutritious crops, while in energy, biofuels and artificial photosynthesis are paving the way for sustainable energy solutions. BMB programs are essential to train the next generation of researchers and innovators, poised to make significant contributions to Maryland and greater society as a whole.

b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education

Biochemists and molecular biologists serve a critical need through research, testing, public health policy development, disease prevention, and the development of pharmaceutical products that foster healthy living and longevity. The program will train students to pursue the jobs or graduate-level education that will lead to their successful employment in positions which fulfill these important functions.

c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs

n/a

2. Provide evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education.

The proposed Biochemistry and Molecular Biology (BMB) degree program at Salisbury University directly aligns with the goals and priorities outlined in Maryland's 2022 State Plan for Postsecondary Education, supporting the state's efforts to enhance student access, success, and innovation.

Student Access: The proposed program addresses the goal of ensuring equitable access to affordable, high-quality postsecondary education for all Maryland residents. Maryland is one of the most diverse states in the nation, and there are ongoing challenges in closing equity gaps in degree attainment, persistence, and other indicators of access and success. The new BMB program will provide greater access to an in-demand and high-impact field, especially given the scarcity of BMB degree offerings in the region. Currently, only 4 institutions in Maryland offer an undergraduate BMB program, and only two of those are public institutions. This disparity limits access, particularly for students in the region surrounding Salisbury University. By adding this program, Salisbury University fosters innovation and directly addresses gaps in access to a critical and growing field. Furthermore, the program's flexible curriculum will help to make the major more accessible to a diverse student body, increasing opportunities for students to pursue minors or other academic interests, thus enhancing their overall educational experience.

Student Success: The proposed BMB program also supports the goal of promoting student success by addressing the challenges related to timely completion of academic programs. The current system, where Chemistry majors follow a Biochemistry track within the Chemistry B.S. program requires a strict sequence of courses, leaving little room for electives and/or minors. This has led to situations where students who fall behind extend their time to graduation or abandon the program altogether. By introducing the BMB degree program majors will have increased flexibility, helping students graduate on time, which aligns with the priority of improving systems that prevent timely completion of an academic program. This also directly supports the commitment to high-quality education by offering a program that is both rigorous and adaptable to students' individual needs.

Innovation: The BMB degree program is aligned with the goal of fostering innovation in Maryland higher education. Biochemistry and molecular biology are central to many modern innovations in healthcare, pharmaceuticals, agriculture, and sustainable energy. This program will prepare students to contribute to cutting-edge fields that have broad societal impacts. By offering a flexible, innovative curriculum designed to meet ASBMB accreditation standards, the program will ensure that students are well-prepared for careers in high-demand industries. This contributes to the state's strategic goal of driving innovation and addressing workforce needs, particularly in emerging fields such as biotechnology and molecular research.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. **Describe potential industry or industries, employment opportunities, and expected level of entry (*ex: mid-level management*) for graduates of the proposed program.**

In Maryland, and across the country, the biotechnical workforce must be well-versed in the foundational knowledge and skills demanded by employers. Graduates of the Biochemistry & Molecular Biology (BMB) B.S. degree program will be well-prepared to join industries prevalent in the state and region, including pharmaceuticals, food and agricultural sciences, environmental science and conservation, biomedicine, clinical research, biotechnology, and forensic science. Additionally, Maryland's innovation ecosystem includes leading life science companies such as Astra Zeneca, Glaxo SmithKline, Lonza, United Therapeutics, Sonavi Labs, BD Biosciences, and many more. We are home to the FDA, NIH, and more federal laboratories than any other state. Entry-level positions at these employers include laboratory technician, scientist, research analyst, data analyst, data coordinator, and quality control analyst.

Graduates will also have the foundational coursework and skills necessary for advanced graduate studies in biochemistry, molecular biology, and health professional programs. Such advanced degrees include PhD, Doctor of Medicine (MD), Doctor of Osteopathic Medicine (DO), Doctor of Veterinary Medicine (DVM), Doctor of Dental Medicine (DMD), Doctor of Dental Surgery (DDS), Master of Science in Physician Assistant (PA), and Doctor of Pharmacy (PharmD). BMB majors pursuing advanced degrees are equipped to take on roles such as research associate, clinical researcher, biotechnologist, biomedical scientist, professor, or forensic scientist.

2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.

Graduates of the Biochemistry & Molecular Biology degree program will benefit from a strong national job market for their skills. According to the Eduventures Research's analysis of Lightcast data, there were an estimated 35,198 biochemistry and biophysics jobs in the United States in 2025, with a decadal growth rate of 9%. This growth rate will significantly outpace the 6% projected growth rate for all occupations during the same period. Annually, more than 3,000 biochemists and biophysicists are sought. Many of these opportunities are concentrated in the mid-Atlantic region, where a large portion of our students are from and are likely to return to after graduation. Notably, the Philadelphia and Washington D.C. metropolitan areas rank 3rd and 6th, respectively, in the number of biochemists employed, and there are a growing number of BMB-related jobs locating on the Eastern Shore of Maryland, the region primarily served by Salisbury University.

Maryland is home to one of the nation's strongest life sciences industries, employing more than 54,000 people across a wide range of R&D, manufacturing, and laboratory jobs. Yet our state's public and private colleges and universities do not currently supply enough graduates to meet market demand. For example, the National Center for Education Statistics (NCES) indicates that, in 2022-2023, only 134 B.S. degrees in biochemistry and zero B.S. degrees in molecular biology were conferred in Maryland. Analysis of Lightcast data for 2021-2024 indicates that there were 952 job openings for B.S. biochemists in the region. There are only four institutions in the state with B.S. degree programs in BMB, underscoring the need for additional programs in this area to bridge the gap between conferrals and job opportunities.

3. **Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.**

Employment Projections:

Biochemists and Biophysicists: According to the U.S. Bureau of Labor Statistics (BLS), employment in these roles is expected to grow by 9% from 2023 to 2033, which is much faster than the average for all occupations. This growth translates to approximately 3,200 new jobs over the decade

Molecular Biologists: The molecular biologist job market is anticipated to grow by 6% between 2022 and 2032. While this represents a slower growth rate, it still indicates a steady demand for professionals in this specialization.

Annual Job Openings: The BLS projects about 3,100 openings annually for biochemists and biophysicists and 5,400 annual openings for molecular (and cell) biologists from 2023 to 2033. These openings are expected to arise from the need to replace workers transitioning to other occupations or retiring. In the region (MD, NJ, PA, DE, VA), there are 500 projected openings for biochemists and biophysicists annually and 6,450 annual openings for molecular (and cell) biologists.

Industry Demand: The biotechnology sector in the region is thriving, with significant demand for professionals skilled in genetic engineering, drug development, and related technologies. This growth offers numerous opportunities for biochemistry and molecular biology graduates.

4. **Provide data showing the current and projected supply of prospective graduates.**

   In a market analysis completed on behalf of Salisbury University by Eduventures Research, a steady conferral growth in BMB degrees was noted between 2014 and 2023. Most recently, the analysis found that biochemistry conferrals grew by 0.6% from 2022 to 2023 while overall bachelor's degree conferrals declined by 2.6%. Graduate enrollment in aligned subfields grew 20% from 2019-2024, denoting a steady and growing demand for specific bachelor's degree programs as inputs. While there are four other institutions in the state that offer a BMB degree, only one is on Maryland's Eastern Shore and that is at a private institution (Washington College). There are no other public institution options for potential students who wish to stay on the Eastern Shore.

D. Reasonableness of Program Duplication:

1. **Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.**

   Under the proposed CIP Code: 26.0210 (BioChemistry/BioPhysics and Molecular Biology) the following institutions have been identified as having similar programs: Goucher College, Towson University, University of Maryland, Baltimore County, and Washington College. While the programs may be similar, we believe there are several key differences that make our offering unique namely 1) it serves the Salisbury metro area and the southern Delmarva community, 2)

we are a relatively small university that can offer considerable individualized attention to our students, 3) our Chemistry and Biology faculty are deeply engaged in undergraduate research, 4) our program's curriculum is quite flexible, and 5) our curriculum emphasizes foundational physical science coursework that will serve students particularly well in graduate study. More detail regarding each program offering may be found below.

Perhaps more importantly, our program will foster a variety of post-graduation outcomes. Some programs in Maryland are geared toward a pathway to graduate education, whereas others are geared toward industry work exclusively. Ours will allow for both, and will allow students to emphasize training more toward Chemistry or Biology, depending on their interests.

Below you will find additional comparative information:

	Salisbury University	Goucher College	Towson University	Univ of MD, Baltimore County	Washington College
Serves the Salisbury Metro Area?	X				
Small College?	X	X			X
Significant Research Opportunities?	X			X	X
Flexible Program?	X		X		
Foundational Physical Science Coursework?	X	X		X	

Salisbury University: Targeting students who are interested in a small school environment but with significant research experiences with faculty mentors and a more flexible program. The Biochemistry and Molecular Biology program will provide a strong foundation in the natural and physical sciences while preparing students to enter the biotechnical workforce after graduation in positions such as a research associate or project coordinator. In addition, students will be well prepared to enter graduate programs in Biochemistry, Molecular Biology, Biomedical Research and related fields as well as medicine and pharmacy. The program is flexible enough to allow students to tailor their academic career to their individual career goals through either the two focus programs or through a minor while still finishing in 4 years. This program is designed to meet ASBMB accreditation.

Chemistry majors choose Salisbury University for its small class sizes and the accessibility of the professors for assistance with coursework and for mentoring and participating in research. Students note that the chemistry department encourages and supports a culture of collaboration through dedicated student spaces, a chemistry support center, and SI (supplemental instruction). They note that these and other activities create a close-knit inclusive student community that nurtures strong student-student ties.

Additionally, because of the department's size and collaborative atmosphere, undergraduate students use state of the art research instrumentation not only in research projects, but also in their upper-level laboratory courses.

Washington College: For students wanting a small-college setting. No concentration or focus programs are offered, decreasing flexibility in the curriculum. Emphasis is placed on independent research. Research opportunities and small class sizes are provided. Provides a standard biochemistry foundation, but no courses in introductory general chemistry.

Goucher College: Targets students seeking a broad foundation in biology, chemistry, math and physics. ASBMB accredited. No concentration or focus programs offered. This is a small program with 3 graduates in 2023. The program views itself as student-focused and competency-driven. The program highlights liberal arts integration, emphasizing ethical awareness and communication skills as core competencies. While lab-based skill-building is a strength, lack of flexibility and advanced research opportunities limits appeal to students aiming for highly competitive graduate programs or industries.

Towson University: Designed for career-oriented students, particularly those interested in merging biology and technology, a growing niche in biotechnology and healthcare. ASBMB accredited. Requires students to choose a concentration in either molecular biology, biochemistry or bioinformatics. Graduated 40 students in 2023. The bioinformatics concentration is a programming and data analysis focused program. Despite strong alignment with industry demands, it lacks academic, and research depth compared to other providers. The program at SU differs from Towson in two main ways: our program is at its core, a physical science degree and TU's focus is on bioinformatics. For the SU BMB program, all majors will take calculus and physics courses, while these are only required in the TU program's biochemistry track. TU's program has a greater emphasis towards training professional bioinformaticians while SU's program focuses on future biochemistry and molecular biology professionals gaining competency in basic bioinformatics. As such, it will likely appeal to a different cohort of prospective students. At its heart, the SU BMB degree builds upon a fundamental chemical foundation to explore life on the nanoscale. While the TU MBBB program has its foundation in biology and bioinformatics with an expansion towards the underlying chemical principles in its program of study. There is room and need for both in the world of higher education.

University of Maryland – Baltimore County: Appeals to students seeking hands-on experiences in a research-intensive environment. No concentration or focus programs offered. Graduated 59 students in 2023. Fosters practical lab skills and problem-solving abilities, ensuring graduates are work-ready or prepared for advanced study. The program includes recommended courses for those planning advanced graduate study. Offers a well-rounded curriculum and research opportunities. Prepares students for roles in biotechnology, while also supporting traditional pre-med students.

It is important to note that whereas there is some overlap in program courses across these various institutions, no two programs are the same. Further, the demand for graduates in these programs is greater than the number of students who are finishing the programs, thus any duplication is justified to fill the needs of our region and state.

2. **Provide justification for the proposed program.**

The skills obtained by program graduates are needed to fulfill a societal need for public health, disease prevention, solving crimes, and the development of products that promote longevity and healthy living. The need for workers in this sector is greater than the current supply of graduates, providing justification for the development of an additional BMB program in the state.

The curricular content for the BMB program is already available at Salisbury University but as a concentration within the BS Chemistry and the BS Biology degrees. The program will engender little additional cost, but should produce a significant benefit to its graduates in the form of job opportunities or marketability for graduate education. In addition, the program improves upon the current structure of our offerings, as it will streamline students' ability to complete the requirements for the degree and claim the degree title that they cannot today, despite taking the same or similar coursework. This will increase the students' marketability for jobs and facilitate greater earnings across their lifespans. Finally, for students on Maryland's Eastern Shore who wish to remain close to home and earn their BMB degree, this program will provide an opportunity to do so in a cost-effective way.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

1. **Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.**

There are no HBIs in Maryland that offer an undergraduate degree in Biochemistry and Molecular Biology. As such, while Salisbury University believes this is a high-demand program for the State of Maryland and its workforce needs, it does not believe Biochemistry and Molecular Biology is a high-demand program for HBIs specifically.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1. **Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.**

There are no HBIs in Maryland that offer an undergraduate degree in Biochemistry and Molecular Biology, or use the same CIP Code as this proposal, which suggests there is not a clear, unique relevance of this program to the identity of our state's HBIs. At the HBI closest to Salisbury University, the University of Maryland Eastern Shore, they do have a bachelor's degree program in Biochemistry but so do eight other institutions within the State of Maryland, suggesting that even this different but related program is not particularly relevant to the institutional identify of HBIs.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR13B.02.03.10):

1. **Describe how the proposed program was established, and also describe the faculty who will oversee the program.**

   The B.S. in Biochemistry and Molecular Biology program has been established to replace two current Biochemistry concentrations within the B.S. Chemistry program and add the critical integrated discipline of molecular biology. Transitioning from two concentrations to a single, unified degree program will enhance the curriculum's accessibility, flexibility, and marketability, while providing a more focused and integrated approach to biochemistry and molecular biology. This new program was developed through close collaboration between the Department of Biological Sciences and the Department of Chemistry.

   A comprehensive listing of course titles and descriptions can be found in Appendix A. The courses have been selected to address the identified needs of the chemistry, biology, and broader scientific communities, as outlined by ASBMB accreditors. The program's design incorporates a broad foundation of fundamental courses, complemented by specialized Biochemistry and Molecular Biology courses. By integrating these key scientific disciplines, students will develop a wide range of critical thinking, communication, and leadership skills that are applicable in today's rapidly evolving technological and interconnected world.

   The Biochemistry and Molecular Biology major will be housed within the Chemistry Department of the Henson School of Science and Technology, with overall management by the Chemistry Department's BMB Coordinator. Collaboration will occur with department chairs from related disciplines as needed, including Dr. Stephen Habay (Chemistry), Dr. Matthew Bailey (Physics), Dr. Veera Holdai (Mathematics), and Dr. Arthur Lembo (Geography and Geosciences) and Dr. Elizabeth Emmert (Biological Sciences).

2. **Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.**

   The proposed program will be offered on-campus. The educational objectives and learning outcomes are fully aligned with the ASBMB accreditation standards. Upon completing this program, students will:

   - Gain a broad foundation in the fundamental principles across multiple STEM disciplines.
   - Develop an integrated understanding of how energy is generated, stored, and regulated within biochemical and biological systems.
   - Be able to connect key biochemical structures to their respective functions.
   - Understand how genetic information is stored, read, translated, and manipulated within biological systems.
   - Apply quantitative reasoning, calculations, and mathematical modeling to biochemical and biological systems effectively.
   - Comprehend and articulate molecular-level concepts of evolution.
   - Identify and explain the roles of molecular and biochemical regulation in maintaining homeostasis.
   - Acquire substantial hands-on experimental experience, including designing experiments, conducting research, and interpreting results.

- Recognize and adhere to the professional code of conduct for scientists, with the ability to identify and address ethical issues.
- Demonstrate professional communication skills, including experience in written and oral presentations, as well as in writing personal statements and resumes.

3. **Explain how the institution will:**
   a) provide for assessment of student achievement of learning outcomes in the program
   b) document student achievement of learning outcomes in the program

   SU's University Analysis, Reporting and Assessment (UARA) provides official student data and facilitates the collection and presentation of data for Academic Program Reports (APR) on a seven-year cycle. These APRs formalize the assessment of student learning outcomes to drive programmatic decision-making. At the end of each academic year, the program will assess the extent to which learning outcomes are achieved by each student in the program. Modifications to classes or other adjustments may be made in response to areas where learning outcomes are not consistently achieved. In addition to regular APR, all students completing the program will be required to take the ASBMB certification exam in the senior capstone course (CHEM 419). This exam assesses student mastery of the learning goals from Section G2.

4. **Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.**

   See Appendix A

5. **Discuss how general education requirements will be met, if applicable.**

Salisbury University provides a comprehensive General Education curriculum, which includes the following courses:

- Three SU Signature Outcomes (courses may also meet additional General Education and/or major requirements):
  - **Civic and Community Engagement (**3-4 credits)
  - **Diversity and Inclusion (**3-4 credits)
  - **Environmental Sustainability (**3-4 credits)
- First Year Seminar (4 credits)
- Communicating Through Writing (3-4 credits)
- Quantitative Analysis (3-4 credits)
- Human Expression (3-4 credits)
- Humanity in Context (3-4 credits)
- Social Configurations (3-4 credits)
- Social Issues (3-4 credits)
- Hands-on Science (4 credits)
- Solutions through Science (3-4 credits
- Personal Wellness (4 credits)
- Experiential Learning (3 credits)

Of the required courses, 20 credits are fulfilled through the major requirements.

6. **Identify any specialized accreditation or graduate certification requirements for this program and its students.**

To obtain American Society for Biochemistry and Molecular Biology (ASBMB) accreditation, student must demonstrate proficiency through the ASMBM certificate exam.

7. **If contracting with another institution or non-collegiate organization, provide a copy of the written contract.**

N/A

8. **Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

   Upon approval, the program's academic requirements are clearly articulated on designated program pages that are located with the university's catalog. Each undergraduate program provides students with a suggested 4-year course of study (aka Curriculum Guide) that is easily accessible within the program page. Students will also have access to degree audits that are located in their student portal within Peoplesoft.

   Additionally, students will have access to professional academic advisors who will support the student in academic support. Each course offered within the program will provide the student with a syllabus that outlines the expectations for faculty/student interaction, technical equipment requirements, and the learning management system.

9. **Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.**

   All publications, including marketing, catalog and website admissions pages are vetted by the Marketing and Communications Department at SU, which fac-checks all submissions. In addition, approval of the program will be communicated in a timely manner to the appropriate offices on campus. Information regarding financial aid resources and cost of payments policies are clearly communicated on the Accounts Receivable & Cashiers Office and Office of Financial Aid & Scholarships' webpages.

H. Adequacy of Articulation (as outlined in COMAR 13B.02.03.19)

1. If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements. More information for Articulation Agreements may be found here.

See Appendix B.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

1. **Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faculty member will teach in the proposed program.**

Department	Faculty Name	Terminal Degree	Academic Rank	Full- or Part-Time	Courses Overseen
Chemistry	Alison Dewald	Ph.D. Chemistry (Protein Biochemistry)	Associate Professor	Full time	CHEM 410 CHEM 417 CHEM 418 CHEM 419
Chemistry	Katherine Miller	Ph.D. Biomedical Research (Biochemistry and Molecular Biology)	Professor	Full time	CHEM 410 CHEM 417 CHEM 418 CHEM 419
Chemistry	Joshua Sokoloski	Ph.D. Chemistry (Nucleic Acid Biophysics)	Associate Professor	Full time	CHEM 410 CHEM 417 CHEM 418 CHEM 419
Biological Sciences	Philip Anderson	PhD Genetics	Associate Professor	Full Time	BIOL 302 BIOL 350 BIOL 415 BIOL 441

Biological Sciences	Guney Boso	PhD Molecular, Cellular, Developmental Biology and Genetics	Assistant Professor	Full Time	BIOL 350 BIOL 370 BIOL 415 BIOL 440 BIOL 445
Biological Sciences	Kirsten Guckes	PhD Microbiology and Immunology	Assistant Professor	Full Time	BIOL323 BIOL 415
Biological Sciences	Victor Miriel	PhD Biomedical Science Cardiovascular Physiology	Associate Professor	Full Time	BIOL 354 BIOL 415 BIOL 495
Biological Sciences	Kimberly Hunter	PhD Genetics	Full Professor	Full Time	BIOL 360 BIOL 415
Biological Sciences	Angela Freeman	PhD Physiology	Assistant Professor	Full Time	BIOL 408 BIOL 415
Biological Sciences	Dana Price	PhD Ecology and Evolution	Full Professor	Full Time	BIOL 415 BIOL 424
Biological Sciences	Jennifer Nyland	PhD Microbiology and Immunology	Associate Professor	Full Time	BIOL 415 BIOL 425 BIOL 432
Biological Sciences	Elizabeth Emmert	PhD Bacteriology	Full Professor	Full Time	BIOL 415 BIOL 433

2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:

a) Pedagogy that meets the needs of the students

The Center for the Advancement of Faculty Excellence (CAFE) supports faculty in the areas of teaching, research, professional development and personal wellness and the office of Instructional Design & Delivery (ID&D) provides professional development for

effective pedagogical practices and instructional support for faculty engaged in teaching and learning of online, hybrid and traditional courses. Collaboratively, these offices provide various webinars, workshops, faculty learning communities and initiatives around andragogical and pedagogical best practices (such as Universal Design for Learning; Diversity, Equity & Inclusion; High Impact Practices; Problem-Based Learning; Open Pedagogy, Open Educational Resources, etc.). Additional opportunities are provided through the Faculty Development Committee and our Faculty Learning Communities such as the Distance Education FLC and the Scholarship of Teaching and Learning FLC. Finally, the institution hosts two annual faculty development events – one in August and one in spring.

b) The learning management system

Instructional Design & Delivery provides support for the campus supported learning management system (Canvas) and other instructional software (such as lecture capture, audience response system) through various methods (e.g. workshops, video tips, how-to instructions).

c) Evidenced-based best practices for distance education, if distance education is offered.

While there are no plans to offer the new program through distance education, Salisbury University and the Chemistry Department are dedicated to supporting best practices in online instruction through the Soaring with Online Learning program. All current biochemistry faculty members have successfully completed this training.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12).

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

SU Libraries currently provides access to hundreds of periodicals and ebooks, numerous databases, and a steadily growing number of streaming videos. Students contact library staff via chat, emails, and/or phone. SU librarians and library staff answer chat questions whenever the Service Desk is open. SU Libraries' resources include extensive book, document, and periodical holdings, as well as a wide array of electronic resources and databases. The online catalog provides direct access and borrowing privileges to approximately eleven million items in the libraries of the University System of Maryland and Affiliated Institution libraries (USMAI).

Additionally, the SU Libraries currently subscribe to several large database packages that provide access to journals in biochemistry and molecular biology. These databases include the American Chemical Society Journals, SciFinder, ScienceDirect, and PubMed. These databases and others include many relevant journals such as Chem, Protein Science, Cell Metabolism, Analytical Biochemistry, Biochemistry and Molecular Biology Education, Trends in Biochemical Sciences, the Annual Review of Biochemistry, Biochemical Genetics, and Nature Methods. The Libraries also

own several hundred print books and around 10,000 ebooks in subjects related to biochemistry, many of which are available through our USM-shared Ebsco Ebook Collection database.

The Libraries recently purchased 2024 test preparation books for students interested in graduate school, including study guides for the GRE, MCAT, PCAT, DAT, and OAT.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment

(as outlined in COMAR 13B.02.03.13)

1. **Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.**

   Currently, SU can deliver the program in our existing space and with the current equipment resources. We anticipate approximately five of the current BS Chemistry majors and four of the Biological Sciences majors will transition to BS Biochemistry and Molecular Biology major in Year 1. Approximately six students will enroll in the program in its first year, eight new students in Year 2, and eight new students a year going forward, yielding a total program headcount at maturity of about 39 students, producing eight graduates per year. We anticipate maintaining an 85 % first year retention rate, aligning with our BS Chemistry program. SU is committed to upgrading facilities and equipment when the program has established its intended growth.

2. **Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:**

   a) An institutional electronic mailing system, and

   SU an institutional electronic mailing system. All students and faculty are given an SU email to utilize for all university correspondence. The university's IT HelpDesk provides technical support to students who need assistance accessing e-mail.

   c) A learning management system that provides the necessary technological support for distance education

   SU does not intend to offer this program via distance education at this time. However, SU is committed to supporting the best practices in online learning. Instructional Design & Delivery provides support for the campus supported learning management system (Canvas) and other instructional software (such as lecture capture, audience response system) through various methods (e.g. workshops, video tips, how-to instructions).

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR13B.02.03.14)

1. **Complete Table 1: Resources and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or**

will be reallocated to support the proposed program, briefly discuss the sources of those funds.

Table 1: Resources and Narrative Rationale

Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	$0	$0	$0	$0	$0
2. Tuition/Fee Revenue (c + g below)	$286,416	$338,273	$392,089	$447,923	$505,834
a. Number of F/T Students	24	28	32	36	40
b. Annual Tuition/Fee Rate	$11,306	$11,532	$11,763	$11,998	$12,238
c. Total F/T Revenue (a x b)	$271,344	$322,899	$376,408	$431,929	$489,519
d. Number of P/T Students	2	2	2	2	2
e. Credit Hour Rate	$471	$480	$490	$500	$510
f. Annual Credit Hour Rate	16	16	16	16	16
g. Total P/T Revenue (d x e x f)	$15,072	$15,373	$15,681	$15,995	$16,314
3. Grants, Contracts & Other External Sources	$0	$0	$0	$0	$0
4. Other Sources	$0	$0	$0	$0	$0
TOTAL (Add 1 – 4)	$286,416	$338,273	$392,089	$447,923	$505,834

Complete Table 2: Program Expenditures and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.

Table 2: Program Expenditures

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	$167,281	$199,064	$237,448	$271,784	$307,398
a. Number of FTE	1.08	1.25	1.47	1.65	1.83
b. Total Salary	$125,775	$149,672	$178,533	$204,349	$231,126
c. Total Benefits	$41,506	$49,392	$58,916	$67,435	$76,272
2. Admin. Staff (b + c below)	$21,613	$22,045	$22,486	$22,935	$23,394
a. Number of FTE	0.125	0.125	0.125	0.125	0.125
b. Total Salary	$16,250	$16,575	$16,907	$17,245	$17,590
c. Total Benefits	$5,363	$5,470	$5,579	$5,691	$5,805

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
3. Support Staff (b + c below)	$10,640	$12,662	$14,760	$16,937	$19,195
a. Number of FTE	0.16	0.19	0.21	0.24	0.27
b. Total Salary	$8,000	$9,520	$11,098	$12,734	$14,432
c. Total Benefits	$2,640	$3,142	$3,662	$4,202	$4,763
4. Technical Support and Equipment	$0	$0	$0	$0	$0
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7. Other Expenses	$0	$0	$0	$0	$0
TOTAL (Add 1 – 7)	$199,533	$233,770	$274,694	$311,656	$349,987

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1. **Discuss procedures for evaluating courses, faculty and student learning outcomes.**

Course evaluations are completed by students at the end of each semester, which are used in annual faculty evaluation as well as in the tenure and promotions procedures to assess teaching. In addition, these evaluations are used from promotion of adjunct faculty. Salisbury University faculty are evaluated every year by their department chair/directors using the online management system, Faculty Success.

2. **Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.**

Salisbury University follows an annual schedule for review of existing academic programs set by the University System of Maryland. Each new academic program is fully evaluated 5 years after the first enrollment; after that, programs are evaluated on a 7-year basis by an external reviewer as part of the Academic Program Review process. SU's University Analysis, Reporting & Assessment Office (UARA), provides a mid-point check-in with departments to assess their readiness to complete their Academic Program Review

N. Consistency with the State's Minority Student Achievement Goals

(as outlined in COMAR 13B.02.03.05).

1. **Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.**

Salisbury University (SU) welcomes all students who meet the university's admission requirements to pursue a Bachelor of Science in Biochemistry and Molecular Biology. This rigorous and dynamic program is designed to equip students with the knowledge, skills, and hands-on experience necessary to excel in the workforce and achieve their professional aspirations.

Aligned with the State of Maryland's commitment to advancing minority student achievement, SU prioritizes fostering an inclusive and diverse academic environment that promotes opportunity, equity, and a strong sense of belonging. Through targeted campus initiatives, SU is dedicated to ensuring that all students have access to the resources and support needed to thrive.

Additionally, in alignment with **Priority 6** of the 2022 Maryland State Plan for Higher Education, which emphasizes improving systems that support timely degree completion, this enhanced program structure streamlines academic pathways, significantly increasing students' ability to graduate within four years. By providing a well-structured curriculum and comprehensive academic support, SU is committed to student success and workforce readiness in the field of biochemistry and molecular biology.

O. Relationship to Low Productivity Programs Identified by the Commission:

1. **If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.**

This program is not related to an identified Low Productivity Program.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. **Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.**

Salisbury University meets the COMAR requirements to provide distance education as outlined in 13B.02.03.22 and 13B.02.03.29. SU is approved to offer distance education by Middle States Commission on Higher Education, In addition, SU participates in The National Council for State Authorization Reciprocity Agreements (NC-SARA), which established comparable national standards for interstate distance education program offerings.SU complies with the guidelines set by C-RAC.

2. **Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.**

As an institution, we have committed to ensuring that all distance education offerings are designed and reviewed using the Quality Matters rubric. Quality Matters (QM) is a nationally recognized peer review process that is designed to foster faculty-centered continuous improvement of online education. Instructional Design & Delivery conducts the Soaring with Online Learning program and other professional development opportunities to support faculty in incorporating best practices in distance education.

Appendix A: Course List

I. Fundamental scientific knowledge and skills: (32 credits)

CHEM 121: General Chemistry I 4 credits

Study of fundamental laws of chemistry and atomic structure emphasizing quantitative relationships. Three hours lecture, three hours laboratory per week. Meets General Education: Hands-on-Science (HOS), Solutions Through Science (STS). Prerequisites This course assumes an understanding of high school chemistry and algebra. C or better in CHEM 100 or appropriate score on department placement exam.

CHEM 122: General Chemistry II 4 credits

Continuation of CHEM 121, including chemical equilibrium, electrochemistry and organic chemistry. Three hours lecture, three hours laboratory per week. Prerequisites C or better in CHEM 121

BIOL 201 – Introduction to Biology: Molecular and Cellular Biology 4 credits

Introduction to biological molecules, cellular anatomy and cellular function. Build fundamental understanding of molecular core concepts and skills that serve as a foundation for all more advanced coursework in biology. Emphasizes the chemistry of biology, properties of biological molecules, cellular composition, cellular function and diversity, metabolism, and genetics. One of two introductory courses (along with BIOL 202) required for biology majors. Three hours lecture, three hours laboratory per week Meets General Education: Hands-on Science (HOS), Solutions Through Science (STS). Recommended Prerequisites/Corequisites MATH 140 or equivalent

BIOL 202 - Introduction to Biology: Evolution and Ecology 4 credits

Provides a hands-on introduction to the study of evolution and ecology, including practice with the core concepts and skills that biologists use to study and preserve life. Explore several facets of biodiversity: its evolutionary origin, its ecological and societal importance, threats from human impacts, and solutions to preserve and restore biodiversity and ecosystem function to enable environmental sustainability. Three hours lecture, three hours laboratory per week. Meets General Education: Hands-on-Science (HOS), Solutions Through Science (STS), Environmental Sustainability (ES). Recommended Prerequisites/Corequisites MATH 140 or equivalent

MATH 201: Calculus I 4 credits

Introduction to analytic geometry, limits, continuity, derivatives of elementary functions and applications of the derivative. Four hours per week. Meets General Education: Quantitative Analysis (QA). Prerequisites C or better in MATH 140 or equivalent. May Not Receive Credit for Both MATH 198 and MATH 201

or

MATH 198: Calculus for Biology and Medicine 4 credits

Introduction to analytic geometry, limits, continuity, derivatives of elementary functions, applications of derivatives and antiderivatives in a biological context. Four hours per week. Meets General Education: Quantitative Analysis (QA). Prerequisites C or better in MATH 140 or equivalent. May Not Receive Credit for Both MATH 198 and MATH 201

MATH 202: Calculus II 4 credits

Introduction to integrals, infinite series, applications and techniques of integration. Four hours per week. Prerequisites C or better in MATH 198 or MATH 201 or equivalent

PHYS 121: General Physics I 4 credits

Introduction to Newtonian mechanics and applications. Topics include kinematics, dynamics, gravitation, conservation laws, equilibrium and rotational motion. Not intended for physics majors. Three hours lecture, two hours laboratory per week. Meets General Education: Hands-On Science (HOS), Solutions Through Science (STS). Recommended Prerequisites College algebra

or

PHYS 221: Physics I 4 credits

Introduction to calculus-based Newtonian mechanics for students majoring in physics, engineering and chemistry. Topics include kinematics, Newton's laws, conservation laws and rotational motion. Six hours lecture/activity per week. Meets General Education: Hands-on Science (HOS), Solutions Through Science (STS). Major Pre or Corequisites MATH 201. Non-Major Pre or Corequisites MATH 198 or MATH 201

PHYS 123: General Physics II 4 credits

Continuation of general physics. Topics include basic concepts of electricity and magnetism, wave motion, optics and modern physics. Three hours lecture, two hours laboratory per week. Prerequisites PHYS 121

or

PHYS 223: Physics II 4 credits

Continuation of introductory physics. Topics include: electrostatics, current and resistance, DC and AC circuit analysis, magnetic fields, induction, electromagnetic waves and geometrical and wave optics. Six hours lecture/ activity per week. Prerequisites PHYS 221. Pre or Corequisites MATH 202.

II. Advanced scientific knowledge and skills (26 credits)

CHEM 221: Organic I 4 credits

An introduction to the structure, properties and reactivity of carbon compounds. Analysis of molecular structure, including bonding, conformation and isomerism, is applied to the mechanisms of organic

chemical reactions. Emphasis is placed on problem solving and effective communication of chemical ideas. Three hours lecture, three hours laboratory per week. Prerequisites C or better in CHEM 122.

CHEM 222: Organic II 4 credits

A continued introduction to the structure, properties and reactivity of carbon compounds. A range of chemical reactions are applied to the development of synthetic methods for organic molecule construction, including functional group interconversion and carbon-carbon bond formation. Spectroscopic techniques for molecule identification also are discussed. Emphasis is placed on problem solving, effective communication and integration of chemical concepts. Three hours lecture, three hours laboratory per week. Prerequisites C or better in CHEM 221.

CHEM 207: Laboratory Safety 1 credit

Development of skills and attitudes for working with chemicals in a confident and responsible way. Emphasis on safety precautions and emergency procedures in case of a chemical accident.
One hour per week. Prerequisites CHEM 122.

or

MDTC 101 – Safety in the Biological, Chemical and Clinical Laboratory 1 credit

Review of laboratory safety. Summary of government laws and regulatory bodies and their effect on lab policy. Illustrations of proper procedures for laboratory hazards. Topics include chemicals, infectious microbes, animals, fire, electrical equipment, radiation, glassware and compressed gases. Training in the use of safety equipment, protective clothing and general first aid. One hour per week

CHEM 301: Chemistry Seminar 1 credit

Learn to search the chemical literature, to manage information, to write scientific reports, to create scientific presentations and to present findings. Gain an introduction to scientific ethics as well as professional skills such as resume writing, job searching and networking. One hour per week. Prerequisites ENGL 103 or HONR 111, CHEM 222

CHEM 321: Analytical Chemistry 4 credits

Study of the theory and applications of classical and modern analytical techniques. Includes volumetric, potentiometric, spectrophotometric and chromatographic methods. Three hours lecture, three hours laboratory per week. Prerequisites CHEM 122.

CHEM 341: Physical Chemistry I 4 credits

Comprehensive study of the fundamental concepts of physical chemistry. Four hours per week. Prerequisites CHEM 122, PHYS 121 or PHYS 221. Pre or Corequisites MATH 202.

BIOL 350: Cell Biology 4 credits

Focuses on the structure and function of eukaryotic cells. Topics covered include enzyme kinetics, membrane transport, cell signaling, intercellular protein trafficking, cellular respiration, mitosis and meiosis, the cell cycle, and cancer. Three hours lecture, three hours laboratory per week. Prerequisites BIOL 201 or BIOL 210, and CHEM 122

CHEM 417: Biochemistry I 4 credits

Application of chemical principles to biological systems through study of the properties, analysis, functioning and relationship of proteins, carbohydrates, lipids and nucleic acids. Three hours lecture, three hours laboratory per week. Prerequisites CHEM 222.

III. Advanced biochemical/molecular knowledge and skills (18 credits)

BIOL 302: Bioinformatics I 4 credits

Computer-based course introduces biological databases. Emphasis placed on quantitative approaches to modeling and analyzing biological data. Three hours lecture, three hours laboratory per week. Prerequisites BIOL 201 or BIOL 202 or BIOL 210. Pre or Corequisites MATH 198 or MATH 201

BIOL 370: Molecular Genetics 4 credits

Study of mechanisms of heredity emphasizing organization of the genome, mutation and regulation of gene expression. Three hours lecture, three hours laboratory per week. Prerequisites BIOL 350
Pre or Corequisites CHEM 221

CHEM 418: Biochemistry II 3 credits

Study of the intermediary metabolism of biomolecules and the biochemistry underlying the expression of information contained in DNA in the synthesis of biomolecules. Three hours per week. Prerequisites CHEM 417.

CHEM 419: Biochemical Methods 4 credits

Lecture/laboratory-based exploration of biochemical techniques commonly used in industrial and academic laboratories. Demonstrates the relationships between the structure, interactions and functions of biomolecules and metabolic pathways. Six hours per week. Pre or Corequisites CHEM 418.

CHEM 410: Research 3 credits

Individual undergraduate research on approved subject under supervision of a member of the staff. Written report, seminar presentation required. Nine hours per week, conference with the instructor. Prerequisites Permission of department chair and either CHEM 301. May be taken twice for credit.

or

BIOL 415: Research in Biology 3 credits

Independent student research under the supervision of a faculty member. Schedule to be arranged individually. Forty-five contact hours per credit hour. Prerequisites Permission of instructor. May be repeatable and receive credit within the major for up to six credits combined of BIOL 415, BIOL 416, BIOL 417 and BIOL 420

Biology focus:

BIOL 323: Medical Microbiology 4 credits
Study of the medically important microorganisms, including methodology and techniques of identification. Two hours lecture, four hours laboratory per week. Prerequisites BIOL 211.

BIOL 354 Pathophysiology 4 credits

The study of mechanisms that contribute to altered physiology in human disease. Three hours lecture, two hours laboratory per week. Prerequisites C or better in BIOL 216 and BIOL 350. May Not Receive Credit for Both BIOL 334 and BIOL 354; BIOL 354 and HLSC 301

BIOL 360: Genetic Analysis 4 credits

Introduction to genetic analysis including Mendelian principles, population and quantitative genetics, cytogenetics and contributions to molecular biology. Satisfies Biology Department core requirements for genetics. Three hours lecture, three hours laboratory per week. Prerequisites BIOL 201 or BIOL 202 or BIOL 210. Recommended Prerequisites MATH 155

BIOL 408: Neurobiology 4 credits

Explores the physiological and anatomical underpinnings of the vertebrate nervous system. Three hours lecture, three hours laboratory per week. Prerequisites BIOL 215 or BIOL 350 or CHEM 417 or PSYC 301.

BIOL 425: Toxicology 3 credits

Introduction to basic principles, history and scope of modern environmental toxicology, and to the effects and to the mechanisms of toxicants. Includes applications to risk assessment, regulations and industry. May not be taken for credit if student has credit for ENVH 425. Three hours per week. Prerequisites BIOL 201 or BIOL 210, CHEM 122, junior standing

BIOL 430: Plant Physiology 4 credits

Advanced study of the physiological mechanisms utilized by plants with special reference to the higher phyla. Three hours lecture, three hours laboratory per week. Prerequisites BIOL 212, CHEM 221.

BIOL 432: Immunology 3 credits

Study of the cellular and soluble aspects of immunology, focusing on the human immune response to pathogen and diseases of immune origin. Three hours per week. Prerequisites BIOL 350. May Not Receive Credit for Both BIOL 333 and BIOL 432

BIOL 433: Environmental Microbiology 4 credits

Study of the diversity and interactions of microorganisms in their natural environments. Emphasis on habitat and metabolic diversity, community interactions and industrial applications involving microbes. Three hours lecture, three hours laboratory per week. Meets General Education: Experiential Learning (EL) Prerequisites BIOL 211. Recommended Prerequisites BIOL 350

BIOL 440: Contemporary Genetics 4 credits

Lecture/laboratory-based exploration of biochemical techniques commonly used in industrial and academic laboratories. Six hours per week. Prerequisites BIOL 370 or permission of instructor Pre or Corequisites CHEM 418.

BIOL 441: Bioinformatics II 3 credits

Exploration of viral, prokaryotic and eukaryotic genomes. Emphasis on computational techniques for assessing the genome and manipulating genomic data. Four hours lecture/laboratory per week. Prerequisites BIOL 302

BIOL 445: Virology 3 credits

Study of structure, replication and pathogenesis of viruses with emphasis on animal viruses and the role of viruses in our current understanding of cell and molecular biology. Three hours per week. Prerequisites BIOL 350.

BIOL 460: Biology of Cell Membranes 3 credits

Advanced course exploring the biology of bacterial, plant and animal cell membranes with an emphasis on how these important organelles allow cells and organisms to adapt to severe, inhospitable or constantly changing physical environments. Three hours per week. Prerequisites BIOL 350.

BIOL 465: Advanced Cell Biology 3 credits Advanced course exploring the biology, physiology and biochemistry of plant and animal cells. Topics include detailed examinations of organelle function, cell movement, protein turnover, cell adhesion, apoptosis, cell cycle regulation, and the cellular and molecular basis of cancer. Lectures are drawn principally from the latest primary and secondary literature. Three hours per week. Prerequisites BIOL 350. Recommended Prerequisites CHEM 417

BIOL 470: Biotechnology 3 credits

Study of applied aspects of biology with an emphasis on DNA technology. Recommended as a capstone course for biology majors in the cell and molecular biology/biotechnology track. Three hours per week. Prerequisites BIOL 370.

BIOL 495: Vascular Biology 4 credits

Familiarizes students with a broad spectrum of vascular biology topics. Discuss recent publications employing cutting edge techniques used to study the vascular system. Gain hands-on exposure to

“classical” approaches used in vascular biology research labs. Lecture and lab highlight the application of vascular biology research to present-day clinical approaches used in the treatment of human diseases. Three hours lecture, three hours laboratory per week. Prerequisites BIOL 350 or BIOL 354

Chemistry focus:

CHEM 306: Inorganic Chemistry 4 credits

Study of the fundamental concepts of inorganic chemistry. Primary focus on main group descriptive inorganic chemistry, structure and bonding theory for both main group and transition metal compounds and organometallic chemistry. Three hours per week with Web enhancement. Prerequisites CHEM 222 and PHYS 123 or PHYS 223.

CHEM 333: Instrumental Analysis 3 credits

Study of the theoretical and practical aspects of modern instrumental analysis. Topics include information processing, spectroscopic, chromatographic and electrochemical methods. Three hours per week. Prerequisites CHEM 321.

CHEM 342: Physical Chemistry II 4 credits

Comprehensive study of the fundamental concept of physical chemistry. Four hours per week. Prerequisites: CHEM 122, MATH 202. Pre or Corequisites: PHYS 123 or PHYS 223.

Appendix B

PROGRAM ARTICULATION AGREEMENT

Between

Wor-Wic Community College and Salisbury

University

Associate of Science in STEM Transfer, Chemistry Concentration to

Bachelor of Science in Biochemistry and Molecular Biology

August 2025 through July 2030

This Program Articulation Agreement ("Agreement"), effective this 1st day of August 2025 (“Effective Date”), is by and between Wor-Wic Community College, a community college located in Salisbury, Maryland, and Salisbury University, a constituent institution of the University System of Maryland, an agency of the state of Maryland (hereinafter sometimes referred to individually as a “Party” or

“Institution” and collectively as the "Parties" or "Institutions"). This Agreement sets forth the joint curricula and program requirements for the completion of the Associate of Science in STEM Transfer, Chemistry Concentration from Wor-Wic Community College and the Bachelor of Science in Biochemistry and Molecular Biology at Salisbury University.

RECITALS

Whereas, Wor-Wic Community College and Salisbury University are committed to partnering to expand the educational opportunities and collaborative academic programming of their respective institutions; and

Whereas, the Institutions are committed to providing a smooth transition for students wishing to earn an associate of arts degree and a baccalaureate degree; and

Whereas, the intent of the Institutions is to avoid duplication of curricula, where appropriate, within articulated programs of studies; and

Whereas, the Institutions agree that the educational growth of students and the economic development of the community is better served through cooperative educational planning and optimal utilization of community resources.

Therefore, this Agreement commits the Parties to full support of an articulation process to deliver coursework for students, resulting in the associate of arts degree from Wor-Wic Community College and

credit toward the Bachelor of Science in Biochemistry and Molecular Biology at Salisbury University. The Parties agree to the following:

I. ACADEMIC REQUIREMENTS

A. The Institutions agree to follow the joint program curriculum and course by course articulation delineated in Appendix 1, which is attached hereto and made a part of this Agreement.
B. Both Institutions will cooperate toward developing, disseminating, and presenting the articulated program information to students.
C. Students who have graduated from Wor-Wic Community College program must first apply to Salisbury University. Once a completed application is received, Wor-Wic Community College graduates who have completed the associate's degree program in Associate of Science in STEM Transfer, Chemistry Concentration, with a cumulative grade point average of 2.0 or higher will be granted admission to Salisbury University as an Biochemistry and Molecular Biology major.
D. All articulated course credits applied towards satisfying Bachelor of Science in Biochemistry and Molecular Biology major requirements earned with a C or better will be accepted for transfer according to the articulation matrix in Appendix 1.
E. Salisbury University shall provide a Checklist for students as a planning tool for completing coursework required for the Bachelor of Science in Biochemistry and Molecular Biology major in Appendix 2, attached hereto and made a part of this Agreement.
F. Students intending to transfer are recommended to apply for admission by the priority deadline for the semester for which they intend to enroll.
G. Students are subject to all specific policies pertaining to students admitted to the

Salisbury University baccalaureate degree program in Bachelor of Science in Biochemistry and Molecular Biology and all other Salisbury University admissions policies and procedures.

II. TERM AND TERMINATION

A. The term of this Agreement commences as of the Effective Date listed herein. This Agreement is based on the present curricula contained herein and in all appendices, and is effective for five (5) years from August 2025 to July 2030.
B. Either Party may terminate this Agreement with notice to the other Party, pursuant to Section III.G below. Upon termination or expiration of this Agreement, the Parties shall develop a process that will reasonably allow students already admitted to and enrolled in joint programming to continue their studies. Neither Party will terminate this Agreement at a time that would deter a "cohort-in-progress" from completing graduation within the originally designated

timeframe.

III. GENERAL PROVISIONS

A. Each Institution is responsible for the administration of its respective courses, including content, requirements, faculty, and student services (to include, but not limited to, admissions, financial aid, class registration, etc.).

B. When enrolled in a Salisbury University course, the student is subject to all policies and procedures applicable to Salisbury University students. When enrolled in a Wor-Wic Community College course, a student is subject to all policies and procedures applicable to Wor-Wic Community College students. Additional joint policies and procedures may be adopted and implemented at the discretion of both Parties.

C. The Parties recognize that course scheduling beyond the associate's degree level resides exclusively with Salisbury University and will be coordinated with Wor-Wic Community College by the designated Salisbury University representative. Where academic calendars differ, the Parties will work together to coordinate class offerings and class schedules.

D. The disclosure of information about individual students is limited by the federal Family Educational Rights and Privacy Act (FERPA). The Parties agree that release of student educational records to each other is conditioned upon the submission of a signed agreement by the student authorizing such release.

E. The Parties agree not to release student information to any third-party without the written consent of the other Party and in compliance with FERPA and any other federal or state of Maryland laws, rules, and regulations, and policies of the Parties.

F. The Parties shall publicize any joint offerings in their respective catalogs, website, and other materials as appropriate. Notwithstanding the foregoing, neither Party may use the names or marks of the other without the prior written approval of the other Party.

G. The Parties shall inform students in their respective programs of the complementary program opportunities available at each other's respective institution, support each other's marketing efforts toward the same, and encourage students to apply to programs consistent with an individual student's interests.

H. Notwithstanding anything in this Agreement to the contrary, both Parties retain full authority over their respective courses, programs, and requirements. Both Parties reserve the right to make changes to their respective courses, programs, and requirements. However, each Party shall give to the other reasonable notice and details of changes to this Agreement and other changes in its courses, programs, and requirements that may affect this Agreement. In the event such

changes affect the terms of this Agreement, this Agreement and any of its appendices shall be updated as needed to reflect such changes.

I. The Parties designate the following persons as their respective representatives to coordinate and manage the activities under this Agreement:

Wor-Wic Community College
Kristin Mallory, VP for Academic Affairs 32000 Campus Drive
Salisbury, Maryland 21804 kmallory@worwic.edu
(410) 334-2813
Salisbury University Michael Scott, Dean, Richard A. Henson School of Science and Technology
1101 Camden Avenue
Salisbury, Maryland 21801 msscott@salisbury.edu
(410) 543-6489

J. The designated representatives shall meet as needed, at a mutually agreeable time and location, to discuss various collaborations and other topics of interest to either Institution. A Party may change its representative by giving notice to the other Party.

K. Either Institution may at any time recommend changes to this Agreement. Both Institutions reserve the right to modify the programs as deemed necessary and agree to inform the appropriate representatives of the other Institution of recommended changes. This Agreement may be modified only in writing signed by both Parties.

L. All notices under this Agreement must be in writing; delivered in person, by U.S. mail or by email to the representatives listed above in this Section III.

M. Nothing in this Agreement is intended to form a joint venture between the Parties.

Nothing in this MOU is intended to create rights or benefits for any person or entity other than the Parties.

N. This Agreement integrates the entire agreement of the Parties and supersedes any and all prior and/or contemporaneous agreements between the Parties, written or oral, with respect to the subject matter of this Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives.

Wor-Wic Community College	**Salisbury University**
_____	_____
Deborah Casey, PhD	Laurie L. Couch, PhD

President

Date: _____

Provost and Senior Vice President of Academic Affairs

Date: _____

APPENDIX 1

Articulation Matrix

The following matrix includes course equivalencies, including general education requirements and courses necessary to satisfy major requirements. The matrix also includes a recommended student curricular pathway to complete the Associate of Science degree and the Bachelor of Science degree requirements.

While the student is not required to take all courses in the precise order recommended in the articulation matrix, all course equivalencies described in the matrix and the manner in which they fulfill general education and major requirements at Salisbury University are binding.

Students are strongly advised to seek appropriate advising with regard to the completion of requirements for the associate of science degree, transition to Salisbury University, and completion of all requirements for the Bachelor of Science in Biochemistry and Molecular Biology

WW Course Prefix	WW Course Number	WW Course Title	Credits (at WW)	GenEd at WW
ENG	101	Fundamentals of English I	3	English Composition
MTH	201	Calculus I	4	Mathematics
BIO	105	Principles of Biology I	4	Biological/Physical Science
CHM	105	General Chemistry I	4	Biological/Physical Science
ENG	151	Fundamentals of English II	3	Arts and Humanities
BIO	106	Principles of Biology II	4	
MTH	202	Calculus II	4	
CHM	106	General Chemistry II	4	
CHM	201	Organic Chemistry I	4	
PHY	141	Physics I	4	
CHM	107	Laboratory Safety	1	
GEN	ED	Social/Behavioral Science	3	Social/Behavioral Science
GEN	ED	Arts and Humanities Requirement	3	Arts and Humanities
PHY	142	Physics II	4	
CHM	202	Organic Chemistry II	4	
GEN	ED	Social/Behavioral Science	3	Social/Behavioral Science
ELEC			4	
			60	

	SU Course Prefix	SU Course Number	SU Course Title	Credits (at SU)	GenEd at SU	SU Degree Requirements	Credits Taken by Student	
Semester 1	ENGL	103	Composition and Research	3	CTW (1 of 10)		15	Wor-Wic Community College
	MATH	201	Calculus I	4	QA (2 of 10)	MR (1 of 21)		
	BIOL	201	Introduction to Biology: Molecular and Cellular Biology	4	STS (3 of 10)	MR (2 of 21)		
	CHEM	121	General Chemistry I	4	HoS (4 of 10)	MR (3 of 21)		
Semester 2	ENGL	LIT	English Literature Elective	3	HE (5 of 10)		15	
	BIOL	202	Introduction to Biology: Evolution and Ecology	4		MR (4 of 21)		
	MATH	202	Calculus II	4		MR (5 of 21)		
	CHEM	122	General Chemistry II	4		MR (6 of 21)		
Semester 3	CHEM	221	Organic Chemistry I	4		MR (7 of 21)	15	
	PHYS	221	Physics I	4		MR (8 of 21)		
	CHEM	207	Laboratory Safety	1		MR (9 of 21)		
	GEN	ED		3	SI (6 of 10)			
	GEN	ED		3	HIC (7 of 10)			
Semester 4	PHYS	223	Physics II	4		MR (10 of 21)	15	
	CHEM	222	Organic Chemistry II	4		MR (11 of 21)		
	GEN	ED		3	SC (8 of 10)			
	ELEC			4				
Semester 5	BIOL	302	Bioinformatics I	4		MR (12 of 21)	15	Salisbury University
	CHEM	321	Analytic Chemistry	4		MR (13 of 21)		
	FTWL	106	Personal Wellness	4	PW (9 of 10)			
	CHEM	417	Biochemistry I	3		MR (14 of 21)		
Semester 6	BIOL	350	Cell Biology	4		MR (15 of 21)	16	
	CHEM	418	Biochemistry II	3		MR (16 of 21)		
	CHEM	301	Chemistry Seminar	1		MR (17 of 21)		
	ELEC			4				
	ELEC			4				
Semester 7	BIOL	370	Molecular Genetics	4		MR (18 of 21)	15	
	CHEM	341	Physical Chemistry I	4		MR (19 of 21)		
	CHEM	410	Chemical Research	3		MR (20 of 21)		
	ELEC			4				
Semester 8	CHEM	419	Biochemical Methods	4		MR (21 of 21)	16	
	GEN	ED		4	EL (10 of 10)			
	ELEC			4				
	ELEC			4				
			CC Credits Transferred	60				
			SU Credits	62				

SU General Education Course Requirements (10*):
HoS - Hands-on Science
STS - Solutions Through Science
QA - Quantitative Analysis
CTW - Communicating Through Writing
HE - Human Expression
SC - Social Configurations
SI - Social Issues
FYS - First Year Seminar*
HIC - Humanity in Context
EL - Experiential Learning
PW - Personal Wellness

* FYS not required of transfer students

** Three thematic GenEd requirements must be met: Environmental Sustainability (ES), Diversity & Inclusion (DI), Civic Engagement (CE)

MR - Major requirements (21)

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland, College Park proposal for a Master of Science in Information

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The University of Maryland, College Park proposes a Master of Science (M.S.) in Information as an exit credential for students enrolled in its Information Studies Ph.D. program. This 30-credit, non-thesis degree recognizes the significant graduate-level coursework completed by students who choose not to finish the doctorate or who seek additional credentialing. The curriculum includes foundational courses in information studies, research methods, electives in specialized areas, and a summative integrative paper. Emphasizing justice, access, and interdisciplinary research, the program prepares students for roles in applied information science across sectors.

The program aligns with institutional goals to improve student success and retention, addressing the Maryland State Plan's priority to support "near completers." It also responds to workforce demand for advanced skills in information fields, with projected job growth in roles such as research scientists, data analysts, and digital designers. No new resources are required, as it leverages existing doctoral courses, faculty, and infrastructure.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland College Park proposal for a Master of Science in Information.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

1101 Thomas V. Miller, Jr. Administration Building
College Park, Maryland 20742
301.405.5803 TEL
301.314.9560 FAX

April 25, 2025

Chancellor Jay A. Perman
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:

I am writing to request approval for a new Master of Science program in Information. The proposal for the new program is attached. I am also submitting this proposal to the Maryland Higher Education Commission for approval.

The proposal was endorsed by the appropriate faculty and administrative committees. I also endorse this proposal and am pleased to submit it for your approval.

Sincerely,

Darryll J. Pines
President
Glenn L. Martin Professor of Aerospace Engineering

DJP/mdc

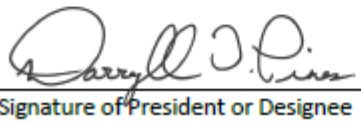
cc: Candace Caraco, Associate Vice Chancellor
Jennifer King Rice, Senior Vice President and Provost
Keith Marzullo, Dean, College of Information

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

x	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

University of Maryland, College Park
Institution Submitting Proposal

Information
Title of Proposed Program

Master of Science	**Fall 2025**
Award to be Offered	Projected Implementation Date
160102	**11.0401**
Proposed HEGIS Code	Proposed CIP Code
College of Information	Jeff Waters
Department in which program will be located	Department Contact
301-405-4915	jwaters4@umd.edu
Contact Phone Number	Contact E-Mail Address
	04-25-2025
Signature of President or Designee	Date

A. Centrality to the University's Mission and Planning Priorities

Description. The University of Maryland, College Park (UMD) proposes a **Master of Science (M.S.) in Information**. This master's program will be a companion degree program to UMD's existing Ph.D. in Information Studies and will only be available to students in the Information Studies Ph.D. program. This master's program will primarily be an exit option for doctoral students who are not able to complete the doctoral program. This degree may also, on a request-only basis, be awarded to doctoral students in good academic standing who desire to receive additional credentialing.

The M.S. curriculum will overlap with the Ph.D. coursework. Like the Ph.D. program, the M.S. in Information is grounded in the core values of information studies, including justice, inclusion, and access. Students gain expertise in research methodology and design, interdisciplinary theory, a comprehensive understanding of prior research in their field, and the ability to synthesize and apply this knowledge effectively. Additionally, they learn to create and disseminate original research. The program offers opportunities to focus on diverse areas of information science research, such as online communities, information systems, information policy, human-computer interaction, and digital cultural heritage.

Relation to Strategic Goals. As written in the University of Maryland's Mission Statement, one of the university's goals for graduate education is to "Expand excellent professional graduate programs that are nationally recognized for their contributions to the practice of the professions, for their pioneering curricula, and for their spirit of innovation and creativity." An aspect of this mission is to provide appropriate exit pathways at various stages of a student's academic journey, equipping them with the training and credentials to move into a variety of careers. The University of Maryland Graduate School and its Graduate Council have advocated that all doctoral programs have an early exit path that will lead to a credential for students who, for any reason, cannot or choose not to complete their doctoral studies, or who wish to have the additional credential as part of their record.

Funding. No additional funding is required for this new degree offering since it is simply an early exit pathway for the existing doctoral program.

Institutional Commitment. The program will be administered by UMD's College of Information. Creation of this exit pathway for doctoral students is in alignment with the priorities of, and thus institutionally supported by, UMD's Graduate School.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

Need. The proposed program is designed to fill a void for those enrolled doctoral students who leave the Information Studies program, which may happen for a variety of reasons. Departing students who complete the master's degree requirements will be eligible for higher-level jobs than those whose studies have terminated at the Bachelor's degree. The M.S. degree signifies that the holder has advanced knowledge in the field of information. Please note that the name "Information," as opposed to "Information Studies" used by the Ph.D. program, will be leveraged

for this M.S. program to convey not just research skill development but also the knowledge of applied and practice-centered endeavors. The *applied* facet of the M.S. program is particularly relevant for the coursework students take in the Ph.D. program pre-candidacy. Over the last decade, the College of Information has offered courses in issues such as technology and policy for digital accessibility, sociotechnical design for providing privacy, co-design of information technology for specific populations including children and older adults, protecting people from mis-and disinformation, and the ethical application of artificial intelligence and machine learning by both the private and public sectors.

State Plan. The proposed program aligns broadly with the 2022 *Maryland State Plan for Postsecondary Education*, goal of student success, specifically Priority 6, "Improve systems that prevent timely completion of an academic program." This program addresses the Action Item to "Identify and support 'Near Completer' students." Students who leave the doctoral program now leave without any credential, even if they have taken 30 or more graduate-level credits—the threshold for a Master's degree. By creating a credentialed "off-ramp" for students who enter into a doctoral program but cannot or choose not to continue through to completion, for whatever reason, UMD will provide a meaningful credential that recognizes advanced training. Their coursework will have prepared them for an array of knowledge occupations, including research positions that require expertise and experience beyond the bachelor's degree. This degree will allow the students to link their hard work with a credential that will lead to a more successful pursuit of career opportunities.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

This program is for Ph.D. students who will not be completing their program. As noted above, the university has been advocating for all UMD doctoral programs to have an ancillary master's program available for students who cannot finish their doctoral program, based on the belief that, all things being equal, a master's program credential is more marketable than a bachelor's program credential. It should also be noted that this program will be for a small number of students and will not be marketed to students as a master's program.

With that said, there are a variety of positions that students will be more qualified for as a result of earning their M.S. in Information. According to the U.S. Bureau of Labor Statistics (BLS), Computer and Information Research Scientists positions are projected to grow much faster than average (please note also that the BLS indicates the typical education level for this field is the master's degree).[1] Database Administrators and Architects positions are projected to grow much faster than average.[2] Web Developers and Digital Designers positions are projected to grow faster than

[1] BLS data on Computer and Information Research Scientists: https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.htm
[2] BLS data on Database Administrators and Architects: https://www.bls.gov/ooh/computer-and-information-technology/database-administrators.htm

average.[3] According to current Maryland Department of Labor projections (projecting increases from 2022 to 2032), these same occupations are also projected to rise in the state: Computer and Information Research Scientists (21.52%), Database Administrators (11.99%), and Web Developers (21.11%).[4]

D. Reasonableness of Program Duplication

There are many master's level programs that exist in the state with Information in the title. There are many with the CIP code 11.0401, including the following areas: Information Systems programs (UMBC, Bowie State, Johns Hopkins); Information Technology design and engineering (Capitol Technology University, UMGC, Johns Hopkins); business innovation and ecommerce (Stevenson University and Capitol Technology University); data analytics (Notre Dame University of Maryland, Loyola); and specialized applications, such as Human Centered Computing (UMBC), Geographic Information Systems (Johns Hopkins University) and Health Information Management and Technology (UMGC).

The proposed M.S. in Information will not focus on any of these particular areas, but more broadly explore information in the context of society. As a research-oriented program, the proposed M.S. in Information will train students in advanced concepts around research, methodology, and scholarship. As is common with Ph.D. programs, students will take coursework in a variety of areas where College of Information faculty have expertise, including technology and policy for digital accessibility, sociotechnical design for providing privacy, co-design of information technology for specific populations including children and older adults, protecting people from mis-and disinformation, and the ethical application of artificial intelligence and machine learning by both the private and public sectors.

In spite of the large number of master's programs that exist in the state under this CIP code or that include Information in the program title, program duplication is ultimately not an issue. This program will not be marketed as a master's program as it only exists as a program for students in UMD's Information Systems doctoral program.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

Again, this proposed program will exist only for students in UMD's Information Studies Ph.D. program. Bowie State University's master's program in Information Systems and Sciences is a professional oriented program geared toward business information systems. The proposed Information Master of Science is not focused in this area but covers a broad range of information studies topics and focuses on training students in research to study these areas.

F. Relevance to the identity of Historically Black Institutions (HBIs)

[3] BLS data on Web Developers and Digital Designers: https://www.bls.gov/ooh/computer-and-information-technology/web-developers.htm
[4] Maryland Occupational Projects – 2022-2032-Workforce Information and Performance: https://labor.maryland.gov/lmi/iandoproj/maryland.shtml

We do not anticipate any negative impacts on the special identities of the HBIs in the state of Maryland. UMD already has an existing Information Studies Ph.D. program, as well as master's levels programs in Information Systems, Information Management, and Human-Computer Interaction. This program is only being created to serve as a credential for students who have completed 30 credits in the Ph.D. program.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

Curricular Development. Pursuing a doctorate is a substantial undertaking, and students leave Ph.D. programs for a variety of reasons, such as financial constraints, major life events, or an inability to conduct quality research at the highest level. We wish to provide an option for students who are unable to complete the Information Studies doctorate to have their work officially recognized by the University through conferral of a Master's degree. While the exit option is the primary goal for this program, we also acknowledge that some doctoral students in good academic standing may benefit from the along-the-way credentialing that this degree would provide.

The curriculum proposed for the M.S. in Information will provide students with crucial and foundational tools to broaden their understanding of the information field. This degree is intended to credential the difficult work that Ph.D. students do as pre-candidates, to master advanced concepts around research, methodology, and scholarship. The coursework accordingly follows the coursework for the Ph.D. program.

Faculty Oversight. As with the Ph.D. program, the M.S. program will be led by the College of Information. Appendix A is a list of faculty who will be teaching in the program.

Educational Objectives and Learning Outcomes. The learning outcomes for the program are as follows:

1. Synthesize concepts, ideas, and literatures foundational to the study of information;
2. Describe the diversity of theoretical and methodological frameworks in information studies;
3. Develop a collection of scholarly workflows, heuristics, and practices to produce high quality research in information studies;
4. Apply best practices in scholarly communication, including clear and succinct synthesis of prior literature, critical commentary, and compelling presentation of your own ideas;
5. Articulate an epistemological stance by recognizing what counts as data, evidence, and knowledge in the student's own work; and
6. Develop a personal philosophy about professional life which includes trajectories in research, teaching, service, and/or public engagement.

Institutional assessment and documentation of learning outcomes. Please see Appendix B for information about assessing the program's learning outcomes.

Course requirements. This is a 30-credit non-thesis master's degree, with no thesis option. Degree requirements are categorized into four distinct sections: Information Studies coursework (9 credits), Research Methods & Design coursework (9 credits), Electives chosen from a Specialized Area Courses (9 credits), and the Integrative Paper/Summative Assessment (3 credits).

Curriculum		
Course Number	Course Title	Credits
Information Studies coursework		
INST800	The Engaged Intellectual: An Introduction to Research and Academic Work	3
INST801	Theoretical and Epistemological Foundations in Information Studies	3
INST802	Pragmatic and Methodological Foundations for Information Studies	3
Research Methods and Design (9 credits from the following)		
INST627	Data Analytics for Information Professionals	3
INST633	Analyzing Social Networks and Social Media	3
INST710	User Experience Research Methods	3
INST725	Legal Research for Information Professionals	3
INST735	Natural Language Processing	3
INST737	Introduction to Data Science	3
INST808	Seminar in Research Methods and Data Analysis	3
Electives chosen from specialty area (9 credits)		
Integrative Paper/Summative Assessment		
INST789	Non-Thesis Research	3

A list of courses, including those that count for the elective category, is included in Appendix C.

General Education. Not applicable for our graduate programs.

Accreditation or Certification Requirements. No accreditation or licensure is required for this program.

Other Institutions or Organizations. The offering unit is not planning to contract with another institution or non-collegiate organization for this program.

Student Support. The college already has the administrative and advising infrastructure to provide student support as it already supports the doctoral program.

Marketing and Admissions Information. The master's program will be listed in the academic calendar and advisors will make students aware of the option, especially if students plan to leave the Ph.D. program.

H. Adequacy of Articulation

Not applicable for this graduate program.

I. Adequacy of Faculty Resources

Program faculty. Appendix A contains a list of faculty members who will teach in the program. As the courses already exist via the doctoral program, no new instructional resources are required.

Faculty training. Faculty teaching in the program will use the university's learning management system along with its extensive electronic resources. They will have access to instructional development opportunities available across the College Park campus, including those offered as part of the Teaching and Learning Transformation Center, many of which are delivered in a virtual environment. Instructors will work with the learning design specialists on campus to incorporate best practices when teaching in the online environment.

J. Adequacy of Library Resources

The University of Maryland Libraries assessment concluded that the Libraries are able to meet, with current resources, the curricular and research needs of the program.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Resources

All physical facilities, infrastructure, and instructional equipment are already in place. No additional resources are needed beyond what is in place for the doctoral program.

L. Adequacy of Financial Resources

Tables 1 and 2 contain the details of resources and expenditures.

Table 1 Resources:
Because the students progress through most of the program as Ph.D. students, the program is essentially supported through the reallocation of resources from the Ph.D. program. The coursework, instruction, facilities and administrative support are already in place in the college as the coursework is already offered through the doctoral program.

1. Line 1 shows the reallocated resources, essentially the tuition derived from Ph.D. courses for this small number of students.
2. Although tuition rates, credit totals, and number of students are provided, tuition revenue is not factored into the resources table as this revenue is derived from the doctoral program.
3. Graduate students will be paying tuition by the credit. The tuition revenue factors in a 60% in-state tuition rate.
4. Tuition rates assume a steady increase (3%) in the per-credit rate projected over five years.
5. No external sources of funding are assumed.
6. No other sources of funding are assumed.

Table 2 Expenditures:

1. Faculty salaries are based on cost per course. We assume an annual increase of 3% in salaries with a corresponding 33% benefits rate.
2. Administrative responsibilities (.1 FTE) will be provided by current departmental administrative staff.
3. Other expenditures include miscellaneous operational expenses.

M. Adequacy of Program Evaluation

Formal program review is carried out according to the University of Maryland's policy for Periodic Review of Academic Units, which includes a review of the academic programs offered by, and the research and administration of, the academic unit (http://www.president.umd.edu/policies/2014-i-600a.html). Program Review is also monitored following the guidelines of the campus-wide cycle of Learning Outcomes Assessment (https://irpa.umd.edu/Assessment/loa_overview.html). Faculty within the department are reviewed according to the University's Policy on Periodic Evaluation of Faculty Performance (http://www.president.umd.edu/policies/2014-ii-120a.html). Since 2005, the University has used an online course feedback survey instrument for students that standardizes course feedback across campus. The course survey has standard, university-wide questions and allows for supplemental, specialized questions from the academic unit offering the course.

N. Consistency with Minority Student Achievement goals

Students enter this program from the doctoral program, for which we strive for a diverse population in order for students to learn from each other's perspectives. The master's program is being proposed primarily so that students are able to earn a credential that they now cannot receive if they leave the doctoral program. As a result, the program will serve to help students achieve a credential should they complete the doctoral coursework.

O. Relationship to Low Productivity Programs Identified by the Commission

N/A

P. Adequacy of Distance Education Programs

While primarily on-campus, the program will offer select online courses, providing flexibility for students balancing professional commitments. The online components will adhere to quality standards, ensuring an engaging and rigorous learning experience for all participants.

Table 1: Resource Table

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1.Reallocated Funds	$40,000	$41,200	$42,436	$43,709	$45,020
2. Tuition/Fee Revenue (c+g below)	$0	$0	$0	$0	$0
a. #FT Students	2	2	3	3	4
b. Annual Tuition/Fee Rate	$24,864	$25,609	$26,378	$27,169	$27,984
c. Annual FT Revenue (a x b)	$49,727	$51,219	$79,133	$81,507	$111,936
d. # PT Students	1	1	1	1	1
e. Credit Hour Rate	$1,243.18	$1,280.47	$1,318.89	$1,358.45	$1,399.21
f. Annual Credit Hours	15	15	15	15	15
g. Total Part Time Revenue (d x e x f)	$18,648	$19,207	$19,783	$20,377	$20,988
3. Grants, Contracts, & Other External Sources	$0	$0	$0	$0	$0
4. Other Sources	$0	$0	$0	$0	$0
TOTAL (Add 1 - 4)	$40,000	$41,200	$42,436	$43,709	$45,020

Table 2: Expenditure Table

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	$26,600	$27,398	$28,220	$29,067	$29,939
a. #FTE	0.2	0.2	0.2	0.2	0.2
b. Total Salary	$20,000	$20,600	$21,218	$21,855	$22,510
c. Total Benefits	$6,600	$6,798	$7,002	$7,212	$7,428
2. Admin. Staff (b+c below)	$10,640	$10,959	$11,288	$11,627	$11,975
a. #FTE	0.1	0.1	0.1	0.1	0.1
b. Total Salary	$8,000	$8,240	$8,487	$8,742	$9,004
c. Total Benefits	$2,640	$2,719	$2,801	$2,885	$2,971
3. Total Support Staff (b+c below)	$0	$0	$0	$0	$0
a. #FTE	0	0	0	0	0
b. Total Salary	$0	$0	$0	$0	$0
c. Total Benefits	$0	$0	$0	$0	$0
4. Graduate Assistants (b+c)	$0	$0	$0	$0	$0
a. #FTE	0	0	0	0	0
b. Stipend	$0	$0	$0	$0	$0
c. Tuition Remission	$0	$0	$0	$0	$0
d. Benefits	$0	$0	$0	$0	$0
5. Equipment	$0	$0	$0	$0	$0
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7. Other Expenses: Operational Expenses	$1,000	$1,000	$1,000	$1,000	$1,000
TOTAL (Add 1 - 8)	**$37,240**	**$38,357**	**$39,508**	**$40,693**	**$41,914**

Appendix A: Faculty Information

The following faculty members are projected to teach in the program. All faculty are full-time unless otherwise indicated.

Name	Highest Degree Earned, Program, and Institution	UMD Title (if part-time indicated)	Courses
Chris Antoun	PhD, Survey Methodology, University of Michigan	Assistant Professor	INST808
Wei Ai	PhD, Information, University of Michigan	Assistant Professor	INST750
Joel Chan	PhD, Cognitive Psychology, University of Pittsburgh	Assistant Professor	INST801, INST802
Eun Kyoung Choe	PhD, Information Science, University of Washington	Associate Professor	INST808
Tamara Clegg	PhD, Computer Science, Georgia Institute of Technology	Associate Professor	INST710
Sheena Erete	PhD, Technology and Social Behavior, Northwestern University	Associate Professor	INST802
Vanessa Frias-Martinez	PhD, Computer Science, Columbia University	Associate Professor	INST800, INST737
Amelia Gibson	PhD, Information, Florida State University	Associate Professor	INST808, INST680
Jen Golbeck	PhD, Computer Science, University of Maryland	Professor	INST808, INST633
Daniel Greene	PhD, American Studies, University of Maryland	Associate Professor	INST800
Naeemul Hassan	PhD, Computer Science, University of Texas-Arlington	Assistant Professor	INST808, INST737
Renee Hill	PhD, Library and Information Science, Florida State University	Principal Lecturer	INST620, INST622
Paul Jaeger	PhD, Information Studies, Florida State University; JD, Florida State University	Professor	INST613
Zubin Jelveh	PhD, Computer Science, New York University	Assistant Professor	INST808

Jonathan Lazar	PhD, Information Systems, UMBC	Professor	INST725
Richard Marciano	PhD, Computer Science, University of Iowa	Professor	INST742
Diana Marsh	PhD, Anthropology, University of British Columbia	Assistant Professor	INST808, INST604
Susannah Paletz	PhD, Social/Personality Psychology, UC Berkeley	Associate Professor	INST808
Beth St. Jean	PhD, Information, University of Michigan	Associate Professor	INST800, INST808
Mega Subramaniam	PhD, Information Studies, Florida State University	Professor	INST800
Stephanie V. Valencia	PhD, Human Computer Interaction, Carnegie-Mellon University	Assistant Professor	INST710
Victoria Van Hyning	PhD, English Literature, University of Sheffield	Assistant Professor	LBSC731
Jessica Vitak	PhD, Media & Information, Michigan State University	Professor	INST808
Ping Wang	PhD, Information Systems, UCLA	Associate Professor	INFM600, INFM612, INFM620
Caro Williams-Pierce	PhD, Curriculum & Instruction, University of Wisconsin	Assistant Professor	INST802, INST730

Appendix B: Plan for Assessing Learning Outcomes

Assessment 1: Satisfactory Completion of Coursework

Students must complete a minimum of 30 graduate credit hours of coursework while matriculated at the University of Maryland. Coursework is taken in three areas:

- Information Studies Core Courses (9 credit hours)
- Research Methods and Design (9 credit hours)
- Specialized Area(s) (9 credit hours)
- Summative Assessment (3 credit hours)

Students should work with their advisors to select quantitative, qualitative, and/or mixed research methods courses, and specialized area(s) courses. Students must meet minimum requirements for "satisfactory progress" each year in the program to be allowed to continue. A 3.0 GPA must be maintained throughout the program (see Graduate School policy on Academic Standing). All graduate students must register for at least 1 credit hour each semester until graduation.

Students must receive at least a "B-" in the Information Studies Core Courses for satisfactory progress. If a student receives a "C+" or lower, the student must repeat the course and receive a B- or higher. Failing to do so results in dismissal from the program.

Appendix C: Course Descriptions

Information Studies Courses (9 credits required)

INST800 The Engaged Intellectual: An Introduction to Research and Academic Work (3 Credits)
An introduction to the academic life with a particular focus on what it means to undertake research, teaching, and service.

INST801 Theoretical and Epistemological Foundations in Information Studies (3 Credits)
Pursuing a doctorate in information studies involves the scholarly examination of the interaction between people, information, technology, and society. There are, however, as many ways to examine the interaction of people, information, technology, and society as there are researchers and ways of understanding what counts as evidence and knowledge in different components of the field. Students will be introduced to the diverse scholarly traditions that comprise information studies. Students will explore why there are so many ways of knowing and methods of discovery within the field, in order to help them identify the social theory and methods that will support their path through information scholarship.

INST802 Pragmatic and Methodological Foundations for Information Studies (3 Credits)
Information Studies' eclectic interdisciplinarity is both its greatest strength and its most significant weakness. As an increasingly multi/inter/trans/non-disciplinary intellectual community, Information Studies embraces a wide variety of conceptual frameworks, theories, methodological approaches, and intellectual traditions. As such, it is necessary to be able to bring many different intellectual perspectives to bear on the complex, nuanced, phenomena that are its focus. The variety in the intellectual toolbox of Information Studies is central to its ability to avoid reduction of its focal topics to trite, simplistic characterizations. However, the field's paradigmatic richness places particular burdens on the individual researcher. The purpose of this seminar is to help students develop a reflective practice that they can rely on to turn their interests into valuable new insights in an interdisciplinary domain like Information Studies.

Research Methods and Design (9 credits from the following)

INST627 Data Analytics for Information Professionals (3 Credits)
Skills and knowledge needed to craft datasets, perform quantitative and qualitative analyses, and develop information resources that bridge the gap between raw data and decision makers' needs.

INST633 Analyzing Social Networks and Social Media (3 Credits)
Introduces students to the science and social science of network analysis. Through real world examples, including analysis of their own social networks, students will develop skills for describing and understanding the patterns and usage of services like Facebook, Twitter, YouTube, and others. Students will read classic and cutting edge articles and books about these topics and discuss their applicability to this new social media. The class will culminate with a capstone project in which students will apply the analysis methods they have learned to understanding a particular question about social networks and social media.

INST710 User Experience Research Methods (3 Credits)
Students will learn to conduct user research in industry and to provide foundational knowledge needed for academic research. It examines the theoretical and epistemological differences between research paradigms and provides an overview of qualitative, quantitative and mixed-method approaches. It overviews user-centered design (UCD) methods, and uses Contextual Inquiry/Contextual Design as the backbone for a research project, incorporating related formative UCD methods and techniques. It is a project-based course, where students conduct a semester-long project to prepare them for the HCIM Capstone as well as other types of formative user research.

INST725 Legal Research for Information Professionals (3 Credits)

An in-depth exploration the methods, resources, and context of conducting advanced legal research. After offering an overview of various types of legal materials, the course will focus on finding and analyzing legal materials through various primary sources, databases, secondary sources, and public records for government and corporate settings. The course will also discuss practical issues of conducting legal research, such as data management and budgeting.

INST735 Natural Language Processing (3 Credits)
Introduce fundamental concepts, techniques, and algorithms for the computational handling of natural language. Statistical and machine learning techniques, models, and algorithms that enable computers to deal with the ambiguity and implicit structure of human language. Approaches that focus on uncovering linguistic structure, such as syntactic or semantic parsing, as well as those that focus on manipulating text in useful ways, such as question answering or machine translation.

INST737 Introduction to Data Science (3 Credits)
An exploration of some of the best and most general approaches to get the most information out of data through clustering, classification, and regression techniques.

INST808 Seminar in Research Methods and Data Analysis (3 Credits)
Topics and issues in information studies research. Design and conduct of research project.

Integrative Paper/Summative Assessment (3 credits required)

INST789 Non-Thesis Research (1-3 credits)
Covers non-thesis research in the field of Information Studies.

Electives from Specialized Areas (9 credits required)

INFM600 Information Environments (3 Credits)
An exploration of various models and methodologies used to capture and deploy internal and external information and knowledge in a number of settings; organizational analysis in terms of information creation, flow, sharing, conservation, and application to problem solving; internal and external influences on the management of information and knowledge; various information flows; information management in a variety of settings.

INFM603 Information Technology and Organizational Context (3 Credits)
Application of communication and information technologies to support work processes, including technology-enhanced communication networks, computer-supported collaborative work, decision-support systems, interactive systems, and systems analysis. Acquisition of information systems and their integration into the organization.

INFM605 Users and Use Context (3 Credits)
Use of information by individuals. Nature of information. Information behavior and mental models. Characteristics of problems, task analysis, problem solving, and decision making. Methods for determining information behavior and user needs. Information access. Information technology as a tool in information use.

INFM612 Management Concepts and Principles for Information Professionals (3 Credits)
Key aspects of management - focusing on planning, organizing, leading and controlling. The evolution of management, innovative management for the changing world, management styles and leadership, managerial planning, goal setting and decision making. Ethical issues, designing adaptive organizations responding to change, global environment, diversity, and utilizing the appropriate technology to provide effective management of information programs and services.

INFM620 Introduction to Strategic Information Management (3 Credits)
Strategic management is the comprehensive collection of tasks, activities, and processes organizations use to coordinate and align resources and actions with its mission, vision, and strategy. Due to changes occurring in our

global landscape, the integration of business and technology is compelling organizations to move beyond traditional, reactive, and silo-based data management approaches to a managed, predictive approach that treats information as a strategic asset and uses it to create business value. To meet challenges of this hyper-competitive environment, this course will provide you with an introduction to the strategic management of information assets for competitive differentiation and sustained business success.

INFM700 Information Architecture (3 Credits)
Principles and techniques of information organization and architecture for the Web environment. Structured description of digital resources, including data modeling techniques, metadata schemes, and user-oriented navigation systems.

INFM711 Financial Management of Information Projects (3 Credits)
Techniques and strategies of planning and executing successful projects. Project budgets, work breakdown structures and scheduling techniques, earned value, tracking and reporting project costs, risk management, best practices, and cost/benefit analysis.

INFM714 Principles of Competitive Intelligence (3 Credits)
Intelligence process and how to build business advantage by the collection and analysis of the capabilities, vulnerabilities, market positioning and strategic planning of competitors using open source information.

INFM718 Selected Topics in Information Management (1-3 Credits)
Selected topics in information management.

INFM732 Information Audits and Environmental Scans (3 Credits)
Methods and techniques to monitor organizational environment to identify opportunities and threats and relate them to the strengths and weaknesses of the organization to fulfill organization information needs and their sustainability. Information audit to determine the existing information environment by assessing the information needs of the organization, determining the information currently available. Application of information audits and environmental scans in strategic information management.

INFM735 Internship in Information Management (3 Credits)
Introduction to information management issues in the workplace, including the knowledge, skills, and experience necessary for success in high-impact information management positions. Securing and facilitating mentor relationships, and the development of actionable professional development plans.

INFM747 Web-Enabled Databases (3 Credits)
Basic methods and tools for developing dynamic, database-driven web sites. Acquiring, installing, and running web servers, database servers, and connectability applications. Developing web interfaces and application-layer components.

INFM757 Organizational and Business Process Modeling (3 Credits)
General principles of modeling, including methods for modeling organizational and business process for information applications and strategy development. Approaches to evaluating models based on their accuracy and usefulness.

INST600 Foundations for Librarians and Information Professionals (3 Credits)
An introduction to the field of library and information science (LIS), its history, and future direction that provides students with an understanding and appreciation of the nature and functions of the profession(s) they have entered. The focus is on core concepts underlying the LIS discipline, with particular emphasis on professional ethics/values, diversity, equity, inclusion and accessibility (DEIA), and the ways in which technology has shaped and continues to shape the field.

INST603 Systems Analysis and Design (3 Credits)

Formal process for planning and designing an information technology system, including identifying users and other stakeholders, analyzing work processes, preparing system specifications, conducting feasibility and usability studies, and preparing for implementation. Approaches to analyzing system components and functions. Measurement and evaluation of system performance.

INST604 Introduction to Archives and Digital Curation (3 Credits)
Overview of the principles, practices, and applications in the archival and digital curation fields.

INST607 Government Information (3 Credits)
An introduction to the nature and scope of government information (federal, state, and local). Tracing the ongoing efforts of government agencies to offer information, services, and resources online, this course also examines the nature and current impact of new technologies on participatory democracy. More specifically, the course explores information and communication technologies designed to make government more open and transparent; the design, implementation, and evaluation of new government and governance mechanisms, including through the use of social media and AI; the role of legal authorities and information institutions such as libraries in supporting access to government information; and the development and implementation of selected public facing online tools (e.g., data visualization, crowd-sourcing, etc.).

INST608 Special Topics in Information Studies (1-3 Credits)
Covers special topics in information studies.

INST610 Information Ethics (3 Credits)
Investigation of the diverse range of ethical challenges facing society in the information age. Ethical theories, including non-Western and feminist theories. Application of theories to information ethics issues.

INST611 Privacy and Security in a Networked World (3 Credits)
Evolving conceptualization of privacy and security issues in light of technological developments in the 21st century. Analysis of legal, ethical, design, and socially constructed challenges that organizations and individuals face when developing privacy and security solutions.

INST612 Information Policy (3 Credits)
Nature, structure, development and application of information policy. Interactions of social objectives, stakeholders, technology and other forces that shape policy decisions.

INST613 Information and Human Rights (3 Credits)
An examination of information as a human right, including topics: social, cultural, economic, legal, and political forces shaping information rights; the impact of information rights on information professions, standards, and cultural institutions; and information rights and disadvantaged populations.

INST614 Literacy and Inclusion (3 Credits)
The educational and psychological dimensions of helping and supporting new users to become information literate and experienced users to remain engaged.

INST615 Information Professionals and the Law (3 Credits)
An exploration of the interrelated issues of the provision of and information literacy about legal information by information organizations and the impacts of legal issues, such as privacy and filtering, on the practice of information organizations that serve the public.

INST616 Open Source Intelligence (3 Credits)
An introduction to Open Source Intelligence (OSINT) for Information Professionals. For the purposes of this course, OSINT is defined as the use of free, publicly available online sources to gather information about people, organizations/groups, places, businesses, activities/events, and capabilities. Collected information is used to conduct

analysis or reach conclusions with estimated level of certainty. Students will learn basic and advanced techniques for using search engines, people directories, social networks, location-based services, images and videos, public records, domain analytics, documents, archives, and other sources. Throughout the modules, data quality and validation procedures will be key topics. Professional applications of the skills taught are extensive and include libraries, law offices, journalism, human resources, competitive intelligence, law enforcement, opposition research, government agencies, ethical hacking, and many more.

INST617 Computational Journalism (3 Credits)
Designed to teach the application of computational methods in journalism and reporting. The methods include natural language processing, visualization, and web data mining. The course will also cover the necessity and impact of journalistic ethics in designing computation solutions.

INST620 Diverse Populations, Inclusion, and Information (3 Credits)
Importance of equality of information access. Social, political, and technological barriers to information. Information needs of diverse and underrepresented populations. Principles of inclusive information services.

INST621 Managing Digital Innovations in Organizations (3 Credits)
Students will learn the main theoretical perspectives on managing digital innovations, become familiar with current best practices of innovating with IT, and develop innovation skills in various organizational settings such as project teams, functional departments, organizations, communities, and society at large.

INST622 Information and Universal Usability (3 Credits)
Information services and technologies to provide equal experiences and outcomes to all users. Laws, standards, approaches, component concepts, access needs, and technologies in relation to physical and online information environments.

INST630 Introduction to Programming for the Information Professional (3 Credits)
An introduction to computer programming intended for students with no previous programming experience. Topics include fundamentals of programming and current trends in user interface implementation that are relevant to information professionals.
Restriction: Permission of INFO-College of Information Studies.

INST632 Human-Computer Interaction Design Methods (3 Credits)
Methods of user-centered design, including task analysis, low-tech prototyping, user interviews, usability testing, participatory design, and focus groups.

INST638 HCI Professional Preparation Seminar (1 Credit)
The human-computer interaction area is huge and diverse, yet all HCI professionals will face a common set of challenges upon embarking into their future careers, including job hunting, interviewing, joining a team, managing group dynamics, and staying abreast of current technology. Students will learn how to tackle these challenges from a series of speakers familiar with current industry practice.

INST639 Practical Skills in HCI (1-3 Credits)
Current industry practice in the HCI and UX field involves being familiar with many practical skills and specialized software. In this repeatable course, HCIM students will be able to acquire some of these vital practical skills in order to be better prepared for joining industry upon graduation. Furthermore, this will also be an opportunity for students to develop their portfolio for future job hunts. Offered in both Fall and Spring semesters, the intention is for these "practical skills" to be taught by professional instructors with expert knowledge. The content of the course will vary from semester to semester, but here is a sample of topics: Graphic and visual design and communication; UX design and research in games; Voice and gestures; UX mockups and wireframing tools; Practical web design and technologies; UX project management software.

INST640 Principles of Digital Curation (3 Credits)

Principles for the design and implementation of long-term curation of digital data and information assets, including born-digital and digitized assets. Frameworks for analysis of technical, practical, economic, legal, social and political factors affecting digital curation decisions. Case studies of specific digital curation scenarios.

INST641 Policy and Ethics in Digital Curation (3 Credits)
Discussion of strategies to address intellectual property, privacy, security and other policy and ethics concerns raised by the curation of digital records and data.

INST643 Curation in Cultural Institutions (3 Credits)
An overview of the principles, practices, and current debates in the management, care and representation of digital artifacts in libraries, archives, and museums.

INST644 Introduction to Digital Humanities (3 Credits)
A survey of the history, methods, and principal topics of the Digital Humanities, examined from theoretical and applied perspectives.

INST645 Personal Digital Curation (3 Credits)
Discussion and workshop in selecting and preserving digital personal data and records.

INST646 Principles of Records and Information Management (3 Credits)
Principles and practices of managing records in the context of information management programs in government, corporate and other institutional settings. Includes access; legal requirements; digital technologies; and creation, administration, appraisal, and retention and disposition of records.

INST647 Management of Electronic Records & Information (3 Credits)
Focuses on the life cycle of records and the impact of technology programs for managing electronic records. Explores the roles of records managers in the management of electronic records.

INST650 Facilitating Youth Learning in Formal and Informal Environments (3 Credits)
The historical, organizational, and contemporary contexts of formal and informal learning spaces; the principles of teaching, learning, and information literacy that underlie the formal and informal learning spaces; and the leadership role that information professionals can play within their schools, libraries and communities.

INST651 Promoting Rich Learning with Technology (3 Credits)
Exploration of how technology can be used to promote rich learning experiences, with a particular focus on youth populations. Assessment of the how, when, and why of infusing technology into the teaching and learning process.

INST652 Design Thinking and Youth (3 Credits)
Methods of design thinking specifically within and for youth contexts, including user-centered design, understanding user needs, ideation, contextual design, participatory design, iterative prototyping, and visual design. These topics will specifically be studied in the context of designing with and for youth.

INST653 Introduction to Museum Scholarship (3 Credits)
Provides students a basic understanding of museums as cultural and intellectual institutions. Topics include the historical development of museums, museums as resources for scholarly study, and the museum exhibition as medium for presentation of scholarship.

INST660 Strategic Leadership (3 Credits)
Students will use research and best practices to act and think like a leader, increase your self-awareness, and learn how to unlock potential in others. From the stories of great leaders and everyday people, you will learn and practice empowerment, accountability, courage, creativity, and humility, which are the key leadership skills. In addition, this course will teach you how to create new opportunities and lasting impact to drive growth and value creation in your organization.

INST661 Introduction to Game, Entertainment, and Media Analytics (3 Credits)
With the continuing global growth in the Game, Entertainment, and virtual/augmented reality and immersive experiences industries, entertainment providers increasingly depend on data analytics to maintain a competitive edge while continuing to improve the customer experience. This course provides an overview of the Game, Entertainment, and Media (GEM) industries, discuss the relationships between the entertainment providers and the entertainment consumers, and explore the analytical techniques used to maximize the overall value to both the providers and consumers. The course will focus on the uses of analytics methods such as personalization, recommendation, clustering and segmentation, behavioral analytics, etc., will discuss core data management and data architecture concerns, and examine how big data infrastructure can support scalability as data volumes grow and as streaming speeds accelerate. In addition we review socio-technical aspects of entertainment, especially in the areas of cyberpsychology, social networks, and information policy concerns such as privacy protection, fraud, equity, and national security concerns.

INST670 Introduction to Javascript Programming (1 Credit)
Introduction to the fundamentals of Javascript programming. Basic components of all programming languages, including variables, types, data structures, and control flow, with a focus on leveraging Javascript libraries for more advanced functionality. No prior experience needed.

INST671 Introduction to Web Programming (1 Credit)
Introduction to the fundamentals of designing and programming web sites. HTML programming extended by work with Cascading Style Sheets. Programming skills are complemented with fundamentals of design and usability. No prior programming experience needed.

INST673 Hands On Machine Learning with Weka (1 Credit)
Students will receive hands on experience with the open-source machine learning tool Weka. Topics covered will be classification, regression, basic algorithm types, how to get data into a format Weka can process, how to interpret results, and basic document classification. The class will meet online.

INST680 Health Informatics (3 Credits)
An introduction to the ways in which medical data, information, and knowledge are created, stored and used. Students will gain an understanding of the current trends in the delivery of medical care and the ways in which these trends influence health information resources and systems.

INST681 Health Information Behavior (3 Credits)
Exploration of information needs of healthcare professionals and the general public, as well as how they seek information to fulfill these information needs, impacts and outcomes of health-related information-seeking by multiple populations. Examination of models and theories and empirical studies of patient and healthcare professional information behavior.

INST682 Personal Health Informatics & Visualization (3 Credits)
Personal Health Informatics cover a broad concept that encompasses an array of approaches to collect, store, share, analyze, and reflect on personal health data. Not only health care providers are relying on Health Technologies to improve patient care, people are increasingly using health devices and apps in their everyday life. Individuals have started using new technologies to collect data, increase awareness, and reflect on and change their behaviors. They also use various tools for curiosity and fun. This course will provide an overview of this exciting field and examine how social and behavioral theories can be applied to create effective health applications.It is difficult to create health technologies that can successfully be integrated into people's daily life due to many obstacles in individuals' data collection, integration, self-reflection, and sharing practices. Understanding these challenges is an important part of designing Health Technologies. Therefore, this course will cover HCI and design thinking methods that you can leverage in understanding the adoption of Health Technologies. Moreover, visualizations facilitate people to gain insights from their data, so we will cover common visualization approaches used in the personal data contexts.

INST701 Introduction to Research Methods (3 Credits)
Techniques and strategies of research as applied to the definition, investigation, and evaluation of information problems. Qualitative, quantitative, and mixed methods of research design methods are considered from the aspects of implementation, analysis, and interpretation.

INST702 Advanced Usability Testing (3 Credits)
Usability test design, implementation and analysis for computer and mobile devices; special attention will be paid to remote testing. Students will learn the complex process of coordinating and facilitating a usability test and how to synthesize test data into reports appropriate for various audiences.

INST703 Visual Design Studio (3 Credits)
This hands-on studio course will help students develop foundational visual skills related to user experience (UX) design. Students will explore methodologies and processes used in many of the industry's top creative environments and study the entire visual design skillset, including concept development, content creation, system design, and tools and process.

INST704 Inclusive Design in HCI (3 Credits)
An introduction to inclusive technology design, that is, the design and evaluation of user interfaces for diverse users and use contexts. Building on basic concepts in human-computer interaction, students will learn about design exclusion and barriers to use, and methods by which these can be overcome. Assistive input and output technologies will also be covered. Populations include older adults, users with visual, cognitive or motor impairments, users who are deaf or hard of hearing, children, users in low resource contexts, and users in mobile contexts. Research trends and practical design considerations (e.g., web accessibility requirements) will be covered. Students will interact with the material through readings, discussion, and individual and group assignments.

INST705 Game Design Studio (3 Credits)
Learn the fundamentals of game design by applying elements and principles of game design, such as goals, rules, and challenges, to create board games, card games, and digital games. Students will be introduced to the basic tools and methods of game design: paper and digital prototyping, design iteration, design critique, and user testing. Students will design several games of different types to add to a growing portfolio of game design concepts. Students will also learn how to use their skills to deconstruct and critique the components of existing games, as well as gain an understanding of the role of the game designer in real-world game development teams.

INST706 Project Management (3 Credits)
Comprehensive overview of project management, focusing on the needs of information resource (IR) projects. Concepts and techniques for planning and execution of projects including developing work breakdown structure, estimating costs, managing risks, scheduling, staff and resource allocation, team building, communication, monitoring, control, and other aspects of successful project completion.

INST711 Interaction Design Studio (3 Credits)
Covers basic interaction design principles and design process from a studio-based design perspective. Focuses on how to design for interactions that will resonate with your audiences: how the features and functions of a project get translated into something people find usable, useful, and desirable. Explores the role of interaction designers. Students design and prototype interactive products, systems, and services.

INST713 Futures of Work (3 Credits)
Are robots taking our jobs? Are there any jobs even worth taking? What other futures of work might we build? This course examines these questions by focusing on the labor process of computer-supported collaborative work (CSCW) in domains ranging from transportation to software development to sex work, drawing on research and theory from sociology, organizational studies, HCI, and more. Design-oriented students will be encouraged to develop interventions to enhance not just productivity but autonomy and democracy. Research-oriented students will learn to study workplaces and situate shopfloor developments in global political economy.

INST714 Information for Decision-Making (3 Credits)

The use of information in organizational and individual decision-making. An examination of managers' behavior in using information; differences between the private and public sectors; and the roles of information professionals and information systems in decision-making.

INST715 Knowledge Management (3 Credits)
Nature, creation, acquisition, and use of knowledge. Strategic role of knowledge in organizations and institutions. Information and knowledge ecology. Structure and functions of knowledge management systems and the role of the Internet and intranets. Knowledge as intellectual capital. Roles of librarians and information professionals in the knowledge economy. Strategic issues and future trends.

INST716 Information, Technology, and Society (3 Credits)
An exploration of the mutually constitutive relationship between information technology (IT) and society, including how IT transforms society and how society transforms IT.

INST726 Information Governance (3 Credits)
Offers a comprehensive introduction to information governance, an emerging discipline concerned with how organizations minimize risk and maximize the value associated with their information assets. Drawing from real-life examples from the private and public sectors, the course will explore important facets of information governance, including how institutions incorporate best practices in records and information management, data storage and archiving, e-discovery, privacy, cybersecurity, analytics, risk management, and compliance. The course will also provide practical lessons in developing a state-of-the-art information governance program.

INST728 Special Topics in Information Studies (1-3 Credits)
Selected topics in information studies.

INST729 International Opportunities in Information Studies (3 Credits)
Short term, experiential course offered in conjuction with the University's Study Abroad Office, to volunteer, complete a project, or conduct research in a library or information organization outside the U.S. Focus and location varies.
Formerly: LBSC708S and LBSC729.

INST730 Games as Emergent Experiences (3 Credits)
Videogames are designed objects that players bring their own history to, resulting each time in a unique emergent experience. If you've ever wondered why you love a certain game but others hate it, why you prefer one genre of game over another, or why the frustration you feel in complicated games is often actually enjoyable, this is the class for you! We will examine design principles instantiated in various games, analyze how failure and feedback support productive gameplay, discuss how mechanics and aesthetics contribute to emergent experiences, and develop an understanding of the field of games scholarship.
Credit Only Granted for: INST608K, INST408K or INST730.
Formerly: INST608K.

INST732 Entertainment Theory (3 Credits)
An entertainment environment is a setting in which audiences interact with content developed to please, charm, cheer, interest, engage, and enthrall distinct individuals and groups. Entertainment environments surround us in all parts of our lives-this course aims to dissect them using a foundation of entertainment theory, including a set of models and theories examining motivations for entertainment consumption; selection of content; processing of content; evaluation of content; and cognitive, attitudinal, and behavioral effects of content.

INST733 Database Design (3 Credits)
Principles of user-oriented database design. Requirements analysis. Data modelling. Data integrity and security and multi-user databases. Implementing an information system using a database management system (DBMS).

INST734 Information Retrieval Systems (3 Credits)

Principles of organizing and providing access to information using automated information storage and retrieval systems. Retrieval systems models, index language selection, data structure, user interfaces, and evaluation for text and multimedia applications.

INST736 Computational Linguistics II (3 Credits)
Natural language processing with a focus on corpus-based statistical techniques. Topics include: stochastic language modeling, smoothing, noisy channel models, probabilistic grammars and parsing; lexical acquisition, similarity-based methods, word sense disambiguation, statistical methods in NLP applications; system evaluation.

INST741 Social Computing Technologies and Applications (3 Credits)
Tools and techniques for developing and configuring social computing applications. Theories and paradigms for social computing. Strengths and limitations of different application styles and types. Evolution of applications as responses to social computing challenges. Information and organizational systems co-development.

INST742 Implementing Digital Curation (3 Credits)
Management of and technology for application of digital curation principles in specific settings. Characteristics, representation, conversion, and preservation of digital objects. Application of standards for digitization, description, and preservation. Planning for sustainability, risk mitigation and disaster recovery.

INST745 Introduction to Digital Arts Curation (3 Credits)
Representation and curation of art artifacts through digital media, with a focus on how to collect and manage born-digital artifacts, digitized artifacts, and their related data and metadata.

INST746 Digitization of Legacy Holdings (3 Credits)
Through hands on exercises and real-world projects, students will learn how to incorporate digitization of analog holdings into an existing archival program and how to link records of different formats and from different collections together.

INST747 Research in Advanced Digital Curation (3 Credits)
Students will build their ability to understand the complexity of research strategies and apply tools involved in the management and use of digital information in the Age of Big Data. The class will contain class lectures, class discussions, assigned readings, and extensive hands-on experience with student experience in digital curation projects. The research projects are focused around six major themes that will engage students in multiple arenas of research in Big Data. These are: community displacement, refugee narratives, movement of people, citizen internment, racial zoning, and cyberinfrastructure for digital curation. Project participants will have the opportunity to work with external stakeholders.

INST750 Advanced Data Science (3 Credits)
Application of data science techniques to unstructured, real-world datasets including social media and geo-referenced sources. Techniques and approaches to extract information relevant for experts and non-experts in areas that include smart cities, public health, and disaster management.

INST751 IoT and Streaming Data Analytics (3 Credits)
An increasing number of sensors, actuators, Internet-connect instruments and apparatuses, smart devices, and systems are generating and broadcasting a wide variety of continuous data streams. Machine-generated structured data sources are joined by a myriad of unstructured data streams from social media, weather, and news sources, among others. Integrated into networks, these continuously-streaming devices (collectively referred to as the Internet of Things, or IoT) provide a fertile array of data sources that can be ingested and analyzed to inform and automate decision processes for numerous purposes including operational intelligence, process monitoring, optimization, risk management, personalization, and prediction in real time. This course looks at architectures and operational modes for streaming data sources and examine methods for descriptive analytics, creation of predictive models, and integrated deployment of these models via centralized and edge computing resources. We will discuss a variety of

uses cases for streaming data analytics and how they are applied in different industries including public utilities, smart cities, manufacturing, telecommunications, and healthcare.

INST752 Location Intelligence (3 Credits)
Provides a comprehensive overview of the principles of geographic information systems and location analytics for a variety of business scenarios. Explores the processes for integrating location information, maps, and demographic information with business information and implementing analytical applications. Reviews business contexts such as government and citizen analysis, zoning and planning, retail site selection, supply chain management and logistics, fieldservice planning and tracking, real estate, insurance, public safety, municipal maintenance, and others. Provides hands-on opportunities to apply location intelligence methods.

INST753 Data Governance and Data Quality (3 Credits)
Surveys the methods and practices for understanding the relationship between organizational performance objectives and their effective oversight, use, and management of information. Examines methods for instituting information governance, data governance, and data quality in the context of information policies for assessing information risk, observing data policies, and enforcing accountability for protection of sensitive information. Explores models of data ownership and accountability, roles and responsibilities for data governance and data stewardship, and processes for soliciting and documenting information and data requirements. Covers techniques for data quality assessment, specification of data quality rules, and applications for validating compliance with data quality expectations, monitoring levels of data quality, and notifications and dashboards for monitoring data compliance.

INST754 Data Integration and Preparation for Analytics (3 Credits)
Provides a comprehensive overview of the end-to-end processes for acquiring, ingesting, managing, cleansing, transforming and integrating data sources for the purposes of reporting andanalytics. Concepts include data acquisition, data streaming, data staging, standardization, data quality, concept and metadata harmonization, transformation, and data modeling. Students will learn how ingested data sets can be transformed, integrated, and prepared for analytical use.

INST755 eGovernment for Smart Cities (3 Credits)
Federal, state, and local government entities are increasingly communicating, interacting, and providing services digitally in an online and networked environment. Concurrently, urban planners and administrators seek to leverage the potential of rapidly evolving technologies to transform service provisioning for the efficient management of assets and resources, with the goal of creating sustainable, livable, innovative, and economically vibrant cities and communities. This course will examine the intersection of these two developments and provide a framework for understanding the technical, policy, and information management issues that are emerging.

INST756 Information Risk Management (3 Credits)
Looks at information system threats, vulnerabilities, risk assessment and management. Explores how regulations scope and define what is considered to be protected information. Considers how data assets are assessed and classified in terms of their levels of sensitivity. Discusses specifying data protection policies and the techniques for enforcing compliance with those policies.

INST760 Data Visualization (3 Credits)
Introduction to the science and technology of data visualization--the graphical representation of data to aid understanding--and includes both theoretical foundations as well as practical applications of integrated visualization techniques on real-world problems. Application of these techniques to state-of-the-art problem domains within research, society, and industry.

INST762 Visual Analytics (3 Credits)
Visual analytics is the use of interactive visual interfaces to facilitate analytical reasoning. In essence, visual analytics is based on the--not uncontroversial--idea that humans and computers working alone are insufficient for the data challenges of today and tomorrow, and that effective synthesis of both humans and computational algorithms are needed to create human-in-the-loop systems. Thus, visual analytics bridges human-centered disciplines such as

visualization and human-computer interaction with computation-centered disciplines such as machine learning, probabilistic methods, and knowledge discovery. The course contents will include both theoretical foundations of this interdisciplinary science as well as practical applications of integrated visual analysis techniques on real-world problems.

INST764 Data Literacy for Arts and Entertainment Management (3 Credits)
This survey course provides an overview of the integral use of data and information to manage, inform the operations, engage customers, patrons, and donors, and influence product/exhibit/program design in arts and entertainment businesses and organizations. The course will introduce core concepts of data literacy such as metadata and data management for collection curation and management, information seeking behaviors and enabling search, data management for business operations, descriptive analytics for reporting, using data for customer relationship management, and more advanced analytics. The course will explore how all these concepts fit together in the context of Arts and Entertainment Management and provide laboratory projects that provide hands-on experience with the different information and data management practices discussed.

INST765 Programming on the Web (3 Credits)
Non-programmers will learn basic programming and how to develop familiarity with web formatting and programming paradigms, including XML, REST, APIs, and authentication schemes. The class begins with an introduction to basic programming and students build on those skills by programming applications that use web-based data and services.

INST767 Big Data Infrastructure (3 Credits)
Principles and techniques of data science and business intelligence. Technologies and architectures for large-scale data warehousing and scale-out data analytics platforms. Supervised and unsupervised data mining.

INST771 Foundations of Cybersecurity (3 Credits)
Explores the foundational concepts of cybersecurity including the Threat Landscape, the evolution and structures of the global telecommunications network, key communication protocols and foundations of networks, the history, culture and emergence of the hacking process, and the core motivations and tactics of threat actors.

INST772 Policy and Practice of Ethical Hacking (3 Credits)
Provides students with an understanding of the ethical frameworks and technical approach in the conduct of penetration testing and ethical hacking. Students will work with real systems in real environments and will leverage real vulnerability analysis and exploitation tools in a live environment. Upon completion, students will understand the overall concepts guiding penetration testing from a practical, hands-on vantage point.

INST773 Cyber Intelligence Fundamentals (3 Credits)
Provides students with an understanding of how to identify, track, and report on malicious activity. Students will learn to identify and work with malware and network data and pair it with a broader set of threat intelligence information to draw conclusions based on the totality of open source information and network intelligence. Students will gain a in depth understanding of the principles of cyber threat intelligence and techniques applied in the cyber threat industry. Students will engage in in-depth discussion and practice in evaluating and interpreting indicators of compromise, command and control, and artifacts left by malicious actors.

INST779 Readings Seminar (1 Credit)
Readings in emerging topics. Through readings and discussion the class will critically assess future directions and highlight intersection points with other disciplines (e.g., medicine) and sub-disciplines of information studies and computer science (e.g., information retrieval, computer vision, machine learning). One or more themes will be covered over the semester (e.g., inclusive design, health informatics, environmental sustainability, social networking) and will be chosen based on instructor and student interest.

INST782 Arrangement, Description, and Access for Archives (3 Credits)

Introduction to the key concepts and practices involved with arrangement and description of archives, and the techniques appropriate to enable users to access archival information in traditional and nontraditional archival contexts.

INST784 Digital Preservation (3 Credits)
Issues and practices regarding digitization of analog materials and preservation of digital materials, both digitized and born digital.
INST785 Documentation, Collection, and Appraisal of Records (3 Credits)
Development of documentation strategies and plans; collecting policies to guide programs in acquiring records; theories and techniques for appraising records to identify those with continuing value.

INST786 Museum Research Seminar (3 Credits)
A research seminar focusing on the practice and presentation of cultural and historical scholarship in museums and historical sites. Students will complete an original research project on the challenges and opportunities of public exhibition and interpretation of cultural and historical research.

INST811 Pedagogy and Curriculum Development (3 Credits)
In this course, doctoral students will gradually and iteratively build a syllabus for an original course related to Information Studies. The course will cover, in sequence: curriculum models and development; learning outcome development; syllabus development; classroom management and dynamics; design of student assessments; design and delivery of classroom lectures; discussion moderation; working with teaching assistants; hybrid and online pedagogy; learning outcomes assessment; course evaluations; and teaching statements. Upon completion of the course, students will have a fully developed teaching portfolio.

INST878 Special Topics in Information Studies (3 Credits)
Seminar topics offered as faculty and student interests warrant. Topic varies.

LBSC611 History of the Book (3 Credits)
Introduction to the history and development of the book from pre-printing and incunabula to the post-modern book. Book illustration; publishing; collecting.

LBSC641 Selecting and Evaluating of Resources for Learning (3 Credits)
Policies and procedures for collection development, including identifying, evaluating, acquiring, providing, and promoting resources in all formats, to support learning and teaching in elementary and secondary schools.

LBSC644 Collection Development (3 Credits)
Activities through which library collections are systematically developed and managed are explored, especially the formulation and implementation of written collection development policies. Other specific topics include identification of user needs; collection evaluation; fund allocation among competing departments, subjects, and/or media; selection methods; intellectual freedom; storage alternatives; and cooperative collection development.

LBSC645 Literature and Materials for Children (3 Credits)
Survey of literature and other materials for children and youth. Criteria for evaluating and using such materials as they relate to the needs, interests, reading abilities, and other capabilities of young readers.
LBSC646 Literature and Materials for Young Adults (3 Credits)
Survey of literature and other materials for older children and adolescents. Criteria for evaluating and using such materials as they relate to the needs, interests, reading abilities, and other capabilities of young readers.

LBSC647 Children's Services in the Public Library (3 Credits)
Public library services for children, birth to 12 years of age. Developmental characteristics and information needs of children. Children as a client group. Programming and collection development. Management of children's services, including planning, staffing, and advocacy.

LBSC702 User Instruction (3 Credits)
Critical analysis of the rationale, content, and processes of user instruction in library and information settings.

LBSC706 Seminar in International and Comparative Librarianship and Information Science (3 Credits)
Comparison and contrast of bibliographic systems, institutions, service arrangements, and professional patterns in developed and developing cultures. Libraries, information organizations, and international information systems viewed against the backdrop of national cultures. Influences of social, political, and economic factors upon these forms.

LBSC708 Special Topics in Library and Information Science (1-3 Credits)
A special topics course with content determined by individual instructors. For questions about the content of the course contact the College of Information Studies.

LBSC709 Independent Study (1-3 Credits)
Intensive individual study, reading, or research in an area of specialized interest under faculty supervision.

LBSC713 Planning and Evaluating Library and Information Services (3 Credits)
An investigation of quantitative and qualitative methods used to plan and evaluate the effectiveness of library and information services. Planning and evaluation methodologies will be analyzed and critiqued. Selected methods will be demonstrated and/or utilized.

LBSC723 Advocacy and Support for Information Services (3 Credits)
Role and influence of government, foundations, associations, and other organizations in supporting and setting the agenda for information services of all types. Role of information professionals in demonstrating advocacy, fund-raising, public relations, lobbying, and seeking external support.

LBSC724 Public Library Seminar (3 Credits)
Organization, support, and service patterns of public libraries. The public library in national, state, and local contexts.

LBSC731 Special Collections (3 Credits)
Management of special collections, whose holdings may include manuscripts (particularly personal papers), non-textual materials, graphical materials, and rare books, with analysis of the custodial and management functions associated with special collections.

LBSC734 Seminar in the Academic Library (3 Credits)
Role of the academic library within the framework of higher education. Planning programs and services, collections, support, fiscal management, physical plant, and cooperation.

LBSC741 Seminar in School Library Administration (3 Credits)
Development, management, and evaluation of school library programs at all levels.

LBSC742 Collaborative Instructional Design and Evaluation (3 Credits)
School librarians' collaborative role in instruction. Systematic design, development, and evaluation of instructional strategies and products for learning.

LBSC745 Storytelling Materials and Techniques (3 Credits)
Literary sources and instruction and practice in oral techniques.

LBSC748 Advanced Seminar in Children's Literature (3 Credits)
Selected topics in literature for children and adolescents, including historical aspects, individual authors, and major themes and trends.

LBSC753 Information Access in the Social Sciences (3 Credits)

Research methods, information needs, information structure, and information sources and services in the social sciences (for example, anthropology, economics, education, geography, history, political science, psychology, sociology).
Prerequisite: LBSC650 or LBSC602; or permission of instructor.
Restriction: Permission of INFO-College of Information Studies.

LBSC770 Metadata and Tools for Information Professionals (3 Credits)
Principles, standards, and practices of information representation to facilitate accessing needed information in digital bibliographic environments. Includes exposure to Metadata, XML, RDA/AACR2R, DTDs, MARC, Dublin Core, MODS, ISBN and ISSN, FRBR, FRAD, Classification systems, and Controlled Vocabularies such as LCSH, SEARS, NLM, Getty and ERIC Thesauri, and others.

LBSC773 Classification Theory (3 Credits)
Survey of classificatory principles from bibliographic, philosophical, biological, psychological, and linguistic perspectives. Challenges to traditional principles from the cognitive sciences and their implementations for bibliographic classification.

LBSC774 Seminar in Linguistic Topics (3 Credits)
Topics in linguistics with applications in information science. Syntax and semantics as they apply to the analysis of communication processes and to natural language processing for information storage and retrieval.

LBSC775 Indexing, Abstracting and Thesaurus Construction (3 Credits)
Fundamentals of indexing, abstracting, and thesaurus construction in theory and practice, including: the formation of vocabularies; construction of a thesaurus; systems of indexing; effects of systems upon information retrieval; style and format of abstracts; evaluation of abstracting services; and requirements of users of abstracts. The design and construction of index languages/thesauri and analysis and evaluation of existing index languages/thesauri. Discussion of currently available indexing software packages.

LBSC786 Library and Archives Preservation (3 Credits)
An introduction to library and archives materials and media, the risks that affect their preservation and strategies used to enhance preservation of library and archives collections. The course reviews preservation knowledge and skills that archival and library staff uses when providing access, managing, processing and working with collections.

LBSC789 Special Topics in Contemporary Archives (3 Credits)
Issues in administering contemporary archives and records management programs. Topics are selected by individual instructors. For course content information please contact the College of Information Studies.

UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

1101 Thomas V. Miller, Jr. Administration Building
College Park, Maryland 20742
301.405.5803 TEL
301.314.9560 FAX

April 25, 2025

Chancellor Jay A. Perman
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:

I am writing to request approval for a new Master of Science program in Artificial Intelligence. The program will be offered both on-campus and through distance education. The proposal for the new program is attached. I am also submitting this proposal to the Maryland Higher Education Commission for approval.

The proposal was endorsed by the appropriate faculty and administrative committees. I also endorse this proposal and am pleased to submit it for your approval.

Sincerely,

Darryll J. Pines
President
Glenn L. Martin Professor of Aerospace Engineering

DJP/mdc

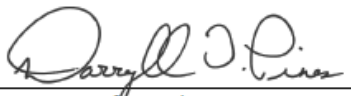
cc: Candace Caraco, Associate Vice Chancellor
Jennifer King Rice, Senior Vice President and Provost
Amitabh Varshney, Dean, College of Computer, Mathematical, and Natural Sciences

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

x	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

University of Maryland, College Park
Institution Submitting Proposal

Artificial Intelligence
Title of Proposed Program

Master of Science	**Fall 2025**
Award to be Offered	Projected Implementation Date
079904	**11.0102**
Proposed HEGIS Code	Proposed CIP Code
College of Comptuer, Mathematics, and Natural Sciences	David Jacobs
Department in which program will be located	Department Contact
301-405-0679	dwj@umd.edu
Contact Phone Number	Contact E-Mail Address
	04-25-2025
Signature of President or Designee	Date

A. Centrality to the University's Mission and Planning Priorities

Description. The University of Maryland, College Park (UMD) proposes a **Master of Science (M.S.) in Artificial Intelligence (AI)**. This program will combine technical courses in the fundamentals of AI and courses that address the interaction between AI and humans and society. During their coursework, students will build solid foundations in mathematics, statistics and computing and also obtain a broader view of human centered AI and its societal implications. Students will gain expertise in machine learning, deep learning, and AI-driven decision-making while exploring areas such as AI ethics, human-computer interaction, explainable AI, and policy considerations. The program prepares graduates to develop AI solutions that enhance human well-being, promote fairness, and integrate seamlessly into social and professional contexts. The program consists of 30-credit course work and is a non-thesis MS program. Students will be prepared for careers across disciplines and they will develop skills to be collaborative, adaptable problem solvers in a rapidly changing field. **Please note: The program will be offered both in-person and through a fully online modality.**

Relation to Strategic Goals. UMD is the state's flagship campus and a national leader in higher education. UMD is ranked in the top 20 public universities in the nation and in the top 50 among all national institutions by US News and World Report.[5] Through our strategic partnership with the University of Maryland, Baltimore, we rank among the top 30 institutions for research funding according to the National Center for Science and Engineering Statistics.[6] UMD ranks in the top 10 for research expenditures in computer and information sciences. As written in our mission statement, "UMD embraces its flagship status and land-grant mission to share its research, educational, cultural, and technological strengths to bolster economic development, sustainability, and quality of life in Maryland and beyond." The proposed program will equip students with advanced technical skills in machine learning, data science, and AI systems, while fostering ethical, human-centered, and socially responsible innovation. Graduates will be prepared for leadership roles in AI across industry, government, and research, with the ability to develop impactful and trustworthy AI solutions.

Funding. This MS program will be self-supporting with tuition revenue. The College of Computer, Mathematical, and Natural Sciences, through its Science Academy, already offers self-support master's programs in Applied Machine Learning, Data Science, Quantum Computing, and Bioinformatics and Computational Biology. The Science Academy already has the administrative and physical infrastructure to offer the program.

Institutional Commitment. UMD is committed to being a higher education leader in AI and will leverage its instructional, research, and administrative capabilities toward this end. On April 9, 2024, the University of Maryland launched the Artificial Intelligence Interdisciplinary Institute at Maryland (AIM) (see https://aim.umd.edu/about), a collaborative hub advancing responsible and ethical AI education, research, and innovation across all disciplines. Building on UMD's existing AI expertise and over 100 faculty engaged in AI scholarship, AIM supports faculty research, experiential learning, and workforce development while coordinating new academic programs, high-performance computing resources, and partnerships with government and industry. Aligned with national and state executive orders on trustworthy AI, AIM prepares students across all majors to apply AI in their fields and drive public good in a technology-rich world.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

Need. AI technologies are rapidly evolving and being more integrated into various aspects of society and industry. AI's evolution will rival the internet itself in terms of its potential to be both extraordinarily beneficial and profoundly detrimental to society. In January 2024, Governor Moore

[5] U.S. News & World Report: https://www.usnews.com/best-colleges/university-of-maryland-2103.
[6] National Center for Science and Engineering Statistics: https://ncses.nsf.gov/surveys/higher-education-research-development/2023.

issued an executive order recognizing that "Artificial intelligence (AI) is transforming society and work in myriad ways, and the pace of that change will continue to accelerate-unlocking new opportunities and risks for Maryland's residents, workers, and economy."[7] AI is rapidly becoming a cornerstone of innovation across both public and private sectors, transforming industries, reshaping workforce demands, and redefining decision-making in everything from national security to consumer services. As AI capabilities expand, Maryland's public institutions, federal agencies, and private enterprises will increasingly depend on a workforce equipped not only with technical AI skills but also with the ethical and contextual understanding required to apply AI responsibly. The proposed program responds directly to this need. The program provides rigorous technical training in machine learning, data science, and computing systems, equipping students with the skills needed to build and deploy advanced AI solutions. At the same time, the program emphasizes the ethical, societal, and policy dimensions of AI through specialized coursework in responsible and human-centered design. Drawing on UMD's world-class AI research enterprise—including over 100 faculty across disciplines and the Artificial Intelligence Interdisciplinary Institute at Maryland—students gain both cutting-edge knowledge and the broader perspective needed to lead AI innovation responsibly.

State Plan. The proposed program aligns with the 2022 *Maryland State Plan for Postsecondary Education,* specifically Priority 5, "Maintain the commitment to high-quality postsecondary education in Maryland," and its Action Item to "Identify innovative fields of study." Artificial intelligence represents one of the most transformative and fast-evolving domains of the 21st-century economy, with sweeping implications for Maryland's public and private sectors. By offering interdisciplinary, ethically grounded, and technically rigorous AI education, the MSAI program prepares students to meet the workforce demands of this innovative field while upholding the state's commitment to academic excellence, equity, and responsiveness to emerging global challenges. Through this program, Maryland is poised to become a national leader in responsible AI talent development.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

There is strong and growing demand for professionals with advanced training in artificial intelligence, both nationally and in the state of Maryland. According to the U.S. Bureau of Labor Statistics, employment of computer and information research scientists—a role closely associated with AI professionals—is projected to grow by 26% nationally between 2021 and 2031,

[7] State of Maryland Executive Order Catalyzing the Responsible and Productive Use of Artificial Intelligence in Maryland State Government: https://governor.maryland.gov/Lists/ExecutiveOrders/Attachments/31/EO%2001.01.2024.02%20Catalyzing%20the%20Responsible%20and%20Productive%20Use%20of%20Artificial%20Intelligence%20in%20Maryland%20State%20Government_Accessible.pdf

significantly faster than the average for all occupations.[8] The Maryland Department of Labor similarly projects a 21% increase in these occupations between 2022 and 2032.[9]

A labor market analysis conducted for the University of Maryland confirms this trend, showing that from January 2020 to January 2025 there were over 30,000 unique job postings nationally listing artificial intelligence as a required skill, with Washington, D.C. among the top ten U.S. cities for such postings. The analysis further reveals that 41% of these job postings required or preferred a master's degree, reinforcing the need for graduate-level training in AI.

AI will be particularly critical for Maryland and the surrounding region due to the high concentration of federal agencies, national laboratories, and private-sector firms engaged in AI research and application. The current downsizing of the federal workforce makes this need even more urgent, as agencies increasingly turn to AI to fulfill their missions and require personnel with advanced technical and analytical skills. The proposed program addresses this gap by producing graduates trained in both the technical foundations of AI and in its human-centered, ethical application. In doing so, it supports workforce development across key sectors—including healthcare, defense, finance, cybersecurity, and public policy—where AI is rapidly becoming integral to operations and strategic decision-making.

D. Reasonableness of Program Duplication

Demand for AI expertise is rapidly outpacing the supply of graduate-level programs—especially those that combine rigorous technical training with critical attention to ethical, social, and policy considerations. As AI becomes increasingly foundational to sectors such as defense, healthcare, finance, and education, Maryland must expand its capacity to educate professionals who are prepared to lead in this space.

National labor market data underscore this mismatch. From 2020 to 2025, over 30,000 unique job postings listed artificial intelligence as a required skill, yet in 2022, only 554 master's degrees were awarded in AI nationwide—yielding approximately 54 job postings per graduate. This highlights a clear shortage in the graduate talent pipeline, particularly for programs that equip students with both technical and ethical competencies. Rather than representing duplication, the proposed program addresses a quantifiable and urgent workforce need.

Only two master's programs in Artificial Intelligence are currently approved in Maryland: those at Capitol Technology University and Johns Hopkins University. Given the scale and urgency of AI's transformation across the public and private sectors, the demand for high-quality graduate programs is not only unmet—it is growing. Maryland should encourage multiple, complementary offerings to meet distinct student and workforce needs. UMD's program will help ensure the state remains at the forefront of responsible AI development while expanding access to education in a field central to its economic and civic future.

UMD's program is uniquely positioned due to its integration with the newly launched Artificial Intelligence Interdisciplinary Institute at Maryland (AIM), which unites over 100 faculty across disciplines to support innovative AI research, education, and policy development. The program also benefits from UMD's strategic location near the federal government and major employers driving AI adoption, making it an ideal hub for training the next generation of AI leaders.

[8] USBLS Occupational Outlook Handbook: Computer and Information Research Scientists: https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.htm
[9] Maryland Department of Labor: Maryland Occupational Projections 2022-2032: https://labor.maryland.gov/lmi/iandoproj/maryland.shtml

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

No HBI's currently offer a master's program in Artificial Intelligence.

F. Relevance to the identity of Historically Black Institutions (HBIs)

We do not anticipate any negative impacts on the unique identities of Maryland's HBIs. UMD already offers a master's program in Computer Science with an Artificial Intelligence concentration, as well as graduate programs in Data Science and Applied Machine Learning. The proposed MS in Artificial Intelligence builds on this foundation to meet rapidly growing demand in a field that is critical to the state. As global investment in artificial intelligence continues to increase each year, we believe the state should actively encourage the development of more highly specialized, technical graduate programs—particularly in diverse geographic areas—to promote inclusive economic growth and workforce development in this vital sector.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

Curricular Development. When developing the proposed curriculum, several factors were considered to ensure the program's success. An advisory group was formed to identify necessary skills, capacities, and capabilities in job postings in the market. These in demand skills led the curriculum development to ensure that students will be qualified to satisfy the workforce gap at the time of graduation.

Faculty Oversight. The College of Computer, Mathematical, and Natural Sciences' Science Academy will work with the Mathematics and Computer Science department chairs, as well as the Artificial Intelligence Interdisciplinary Institute at Maryland (AIM) for oversight. A Computer Science faculty member will serve as the faculty director. This faculty director will provide the curriculum oversight, course evaluation, and advise students. In addition, the academic faculty director, in collaboration with the Assistant Dean for Professional Graduate Education, is responsible for all instructor selections and appointments. Appendix A is a list of faculty who will be teaching in the program.

Educational Objectives and Learning Outcomes. The main objective of the program is to blend highly technical, applied, experiential learning in AI with courses on AI's societal impact, human-AI collaboration, and responsible AI development. Graduates will be prepared to enter into industry at the completion of the program. Courses will combine a theoretical foundation from tenured professors and researchers on campus with applied learning from lecturers and industry practitioners. Students will build a solid foundation in mathematics, statistics, and computing, and pair this foundation with hands-on application to real world problems. They will learn different methods and approaches to solve complex problems using artificial intelligence, data analysis techniques, modern tools, and state-of-the-art technologies while also recognizing potential ethical implications of AI. The learning outcomes for the program are as follows:

1. Understand the theoretical foundations of artificial intelligence, including mathematics and statistics, machine learning, deep learning, and optimization techniques.
2. Develop advanced problem-solving and analytical skills in AI by gaining proficiency in scripting and programming, leveraging machine learning frameworks, and employing high-performance computing platforms to optimize AI solutions.
3. Apply AI technologies to address critical societal challenges and to solve complex problems in disciplines such as healthcare, finance, climate change, and public policy.
4. Design AI systems to work effectively alongside people in healthcare, education, business, and creative industries.
5. Analyze the impact of AI-driven automation in real-world settings by evaluating its effectiveness and efficiency.
6. Describe the societal implications of AI, including issues of safe and trustworthy AI.
7. Evaluate the ethical and legal implications of AI by analyzing issues such as bias, privacy, accountability, and transparency, and developing strategies for responsible AI design, governance, and policy compliance.
8. Explain practical strategies for implementing and scaling AI solutions within enterprise and societal contexts.
9. Communicate AI technologies and applications in a variety of fields to technical and non-technical audiences.

Institutional assessment and documentation of learning outcomes. Assessments will be projects based using publicly available data when possible, to create innovative solutions to societal challenges. Please see Appendix B for information about assessing the program's learning outcomes.

Course requirements. This is a 30-credit non-thesis master's degree, with no thesis option. Students complete 21 credits of required core coursework and select 9 credits of electives from a list of specialized AI courses.

Curriculum		
Course Number	**Course Title**	**Credits**
Core		
MSAI601	Probability and Statistics	3
MSAI602	Principles of Data Science	3
MSAI603	Principles of Machine Learning	3
MSAI605	Computing Systems for AI	3
MSAI606	Human-Centered and Participatory Approaches to AI	3
MSAI630	Safe and Trustworthy AI	3
MSAI631	AI and Society	3
Elective Courses – Select 3 Courses (9 Credits Total)		
MSAI604	Introduction to Optimization for AI	3

MSAI612	Deep Learning for AI	3
MSAI632	Generative AI	3
MSAI633	AI Policy	3
MSAI634	AI in Engineering	3
MSAI635	Reinforcement Learning	3
MSAI636	Explainable and Interpretable AI	3
MSAI640	Computer Vision for AI	3
MSAI641	Natural Language Processing for AI	3
MSAI642	Robotics for AI	3
MSAI650	Cloud Computing for AI	3
MSAI651	Big Data Analytics for AI	3
MSAI660	Probabilistic Graphical Models and Bayesian Learning	3
MSAI661	Causal Inference and AI Decision Making	3
MSAI662	Adversarial Machine Learning and Robustness	3
MSAI663	Graph Neural Networks and Structured Data Learning	3
MSAI664	Meta-Learning and Few-Shot Learning	3
MSAI665	AI for Healthcare and Biomedical Applications	3
MSAI666	AI for Cybersecurity and Threat Detection	3
MSAI667	AI for Finance and Algorithmic Trading	3
MSAI670	Applied Ethics of AI	3

A list of courses, including those that count for the elective category, is included in Appendix C.

General Education. Not applicable for our graduate programs.

Accreditation or Certification Requirements. No accreditation or licensure is required for this program.

Other Institutions or Organizations. The offering unit is not planning to contract with another institution or non-collegiate organization for this program.

Student Support. The Science Academy in the College of Computer, Mathematics and Natural Science will provide administrative coordination for the program, in collaboration with the Office of Extended Studies. Students will be supported through the Science Academy for academic guidance and advising. They will also have access to the Graduate School Counseling and the Counseling Center resources. The Science Academy Program Manager will be the first point of contact for students, while the Office of Extended Studies, which provides administrative services for a host of professional programs, provides student and program services, such as admission support, scheduling, registration, billing and payment, graduation, and appeals. Students will see admission criteria, financial aid resources, costs, and complaint procedures on both the Science Academy website and the Extended Studies program page. For technical aspects of both the in-person and online versions of the program, specific technological competence and equipment will be included in the admission criteria. Learning management information will also be included in these materials.

Marketing and Admissions Information. Students will see admission criteria, financial aid resources, and costs on both the Science Academy website and the Extended Studies program page.

H. Adequacy of Articulation

Not applicable for this graduate program.

I. Adequacy of Faculty Resources

Program faculty. Appendix A contains a list of faculty members who will teach in the program. Instructional resources for the program will comprise current tenure track faculty, professional track faculty, and adjunct instructors. These instructional personnel will come from the Computer Science Department and the Mathematics Department, UMD's Artificial Intelligence Interdisciplinary Institute, and outside the university (e.g., ARLIS, NASA, federal agencies, and industry). Instructors may come from adjacent federal agencies, which will increase the exposure of students to real-world problems as part of the program curriculum.

Faculty training. Faculty teaching in the program will use the university's learning management system along with its extensive electronic resources. They will have access to instructional development opportunities available across the College Park campus, including those offered as part of the Teaching and Learning Transformation Center, many of which are delivered in a virtual environment. Instructors will work with the learning design specialists on campus to incorporate best practices when teaching in the online environment.

J. Adequacy of Library Resources

The University of Maryland Libraries assessment concluded that the Libraries are able to meet, with current resources, the curricular and research needs of the program.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Resources

No additional physical facilities, infrastructure and instructional equipment is required for this program. Existing facilities (e.g., general purpose classrooms) and resources (e.g., instructional equipment) will be used, and these are demonstrably adequate for the proposed program. For the online components of the coursework, UMD maintains an Enterprise Learning Management System (ELMS). ELMS is a Web-based platform for sharing course content, tracking assignments and grades, and enabling virtual collaboration and interaction. All students and faculty have access to UMD's electronic mailing system.

L. Adequacy of Financial Resources

Tables 1 and 2 contain the details of resources and expenditures.

Table 1 Resources:

The program will be self-supported through tuition revenue.

7. Line 1 shows no reallocated funds since the program is supported by tuition from existing students.
8. Graduate students pay tuition by the credit.
9. Students will complete 24 credits in the first year, and are shown in this chart as full-time students. Part-time students reflect those finishing the program in the second year.
10. No external sources of funding are assumed.
11. No other sources of funding are assumed.

Table 2 Expenditures:

4. Faculty salaries are based on cost per course. We assume an annual increase of 3% in salaries with a corresponding 35.6% benefits rate.
5. Administrative staff represents the program director salary and benefits (.2 FTE).
6. Support staff represents program manager salary and benefits (.33 FTE).
7. Other expenditures include campus administrative fees, travel and recruitment, marketing, hourly grader wages, and director stipend.

M. Adequacy of Program Evaluation

Formal program review is carried out according to the University of Maryland's policy for Periodic Review of Academic Units, which includes a review of the academic programs offered by, and the research and administration of, the academic unit (http://www.president.umd.edu/policies/2014-i-600a.html). Program Review is also monitored following the guidelines of the campus-wide cycle of Learning Outcomes Assessment (https://irpa.umd.edu/Assessment/loa_overview.html). Faculty within the department are reviewed according to the University's Policy on Periodic Evaluation of Faculty Performance (http://www.president.umd.edu/policies/2014-ii-120a.html). Since 2005, the University has used an online course feedback survey instrument for students that standardizes course feedback across campus. The course survey has standard, university-wide questions and allows for supplemental, specialized questions from the academic unit offering the course.

N. Consistency with Minority Student Achievement goals

Recruitment for the Master of Science in Artificial Intelligence will be led by the college's Science Academy, which employs a targeted, inclusive digital strategy focused on UMD alumni, graduating seniors, and working professionals in the Washington, D.C. metropolitan area. The admissions process evaluates not only academic readiness but also diversity in experience, background, and professional goals to ensure a well-rounded and inclusive student body.

To attract a diverse applicant pool, the program will be represented at educational fairs and conferences such as the National Society of Black Engineers Leadership Conference and GEM Grad Labs. Outreach efforts will include advertising through organizations like NSBE, SWE, AWM, and AWC; targeted email campaigns to partner institutions; engagement with UMD student organizations and military veterans; and robust digital marketing including virtual open houses and career panels.

Once enrolled, students benefit from a supportive, inclusive environment fostered by Science Academy staff and faculty. Students are encouraged to participate in diversity and inclusion programs such as TerrapinSTRONG, Cultivating Community Conversations, and the Graduate School's Spring Speaker Series. Faculty bring a variety of academic backgrounds and career experiences, offering students multiple mentorship and career development pathways. The Academy provides academic advising, access to counseling and funding resources, and ongoing student support to promote persistence and timely degree completion.

Retention strategies include hosting seminars like "Women in Engineering, Computing, and STEM," requiring regular academic advising sessions, and implementing an early warning system to identify and assist students facing academic challenges. These initiatives are designed to ensure that all students—particularly those from underrepresented groups—are supported, empowered, and well-prepared to succeed in the program and beyond.

O. Relationship to Low Productivity Programs Identified by the Commission

N/A

P. Adequacy of Distance Education Programs

The distance-education version of the program will be entirely online. This will allow the program to reach a wider audience, including those in the Washington, DC area whose professional commitments may not allow for regular travel to College Park. The online curriculum will be the same as the in-person curriculum. Learning outcomes, academic rigor and program curricula will be exactly the same for the online program as it is for the on-campus program. The program will go through periodic evaluations, at least every three years, by the Science Academy leadership and academic department chairs. Students will have access to the same services that online students and will be advised by both the Science Academy and the Office of Extended Studies.

Table 1: Resource Table

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1.Reallocated Funds					
2. Tuition/Fee Revenue (c+g below)	298512	418362	439800	489240	550470
a. #FT Students	9	10	10	11	12
b. Annual Tuition/Fee Rate (based on 24 credits)	33168	34152	35184	36240	37320
c. Annual FT Revenue (a x b)	298512	341520	351840	398640	447840
d. # PT Students	0	9	10	10	11
e. Credit Hour Rate	1382	1423	1466	1510	1555
f. Annual Credit Hours	6	6	6	6	6
g. Total Part Time Revenue (d x e x f)	0	76842	87960	90600	102630
3. Grants, Contracts, & Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 - 4)	298512	418362	439800	489240	550470

Table 2: Expenditure Table					
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	155685	200696	206716	212918	219305
a. #FTE	2	2	2	2	2
b. Total Salary	119850	154500	159135	163909	168826
c. Total Benefits	35835	46196	47581	49009	50479
2. Admin. Staff (b+c below)	35047	36098	37182	38298	39446
a. #FTE	0.2	0.2	0.2	0.2	0.2
b. Total Salary	25846	26621	27420	28243	29090
c. Total Benefits	9201	9477	9762	10055	10356
3. Total Support Staff (b+c below)	22374	23045	23737	24449	25182
a. #FTE	0.33	0.33	0.33	0.33	0.33
b. Total Salary	16500	16995	17505	18030	18571
c. Total Benefits	5874	6050	6232	6419	6611
4. Graduate Assistants (b+c)	0	0	0	0	0
a. #FTE	0	0	0	0	0
b. Stipend	0	0	0	0	0
c. Tuition Remission	0	0	0	0	0
d. Benefits	0	0	0	0	0
5. Equipment	1500	1545	1591	1639	1688
6. Library	0	0	0	0	0
7. New or Renovated Space	0	0	0	0	0
8. Other Expenses: Operational Expenses	55307	113068	116694	123164	130862
TOTAL (Add 1 - 8)	269913	374452	385920	400468	416483

Appendix A: Faculty Information

The following faculty members are projected to teach in the program. All faculty are full-time unless otherwise indicated.

Name	Highest Degree Earned, Program, and Institution	UMD Title (indicate if part-time)	Courses
Bahar Asgari	PhD, Electrical and Computer Engineering, Georgia Tech	Assistant Professor, Computer Science Affiliate Professor, UMIACS	MSAI 605: Computing Systems for AI
Neda Atanasoski	PhD, Literature and Cultural Studies, University of California San Diego	Professor and Chair, Harriet Tubman Department of Women, Gender and Sexuality Studies Associate Director of Education, AIM	MSAI631: AI and Society
Behtash Babadi	PhD, Engineering Sciences, Harvard	Associate Professor and Associate Chair for Grad Studies, Electrical and Computer Engineering	MSAI 630: Safe and Trustworthy AI
Abhinav Bhatele	PhD, Computer Science, University of Illinois Urbana-Champaign	Associate Professor, Computer Science and UMAICS Affiliate Professor, AIM and AMSC Director, PSSG	MSAI 605: Computing Systems for AI
Margrét Bjarnadóttir	PhD, Operations Research, MIT	Associate Professor of Management Science and Statistics, DO&IT group, Smith School	MSAI631: AI and Society
Jordan Boyd-Graber	PhD, Computer Science, Princeton University	Associate Profession, Computer Science, UMIACS, and iSchool	MSAI 632: Generative AI MSAI 641: Natural Language Processing for AI
Holly Brewer	PhD, American History, UCLA	Burke Chair of American Cultural and Intellectual History, History Director of Undergraduate Studies, History Associate Professor, History	MSAI631: AI and Society
Maria Cameron	Ph.D., Mathematics, UC Berkeley	Prof & Associate Chair, Mathematics. Affiliate Professor with Computer Science.	MSAI 612: Deep Learning for AI
Sandra Cerrai	Ph.D., Mathematics, Scuola Normale Superiore of Pisa	Prof & Assoc Chair, Mathematics	MSAI 601: Probability and Statistics
Yizheng Chen	Ph.D., Computer Science, Georgia Institute of Technology	Assistant Professor, Computer Science	MSAI 630: Safe and Trustworthy AI

Sanghamitra Dutta	PhD, Electrical and Computer Engineering, Carnegie Mellon University	Assistant Professor, Electrical and Computer Engineering	MSAI 630: Safe and Trustworthy AI
Sue Dwyer	Ph.D., Philosophy, MIT	Associate Professor, Philosophy	MSAI 670: Applied Ethics of AI
Sheena Erete	PhD, Technology and Social Behavior, Northwestern (joint degree in computer science and communication)	Associate Professor, College of Information Founder and Director, Community Research and Design Collective	MSAI 606: Human-centered and Participatory Approaches to AI
Soheil Feizi	PhD, EECS, MIT	Associate Professor, Computer Science Director, Reliable AI Lab	MSAI 612: Deep Learning for AI MSAI 660: Probabilistic Graphical Models and Bayesian Learning MSAI 663: Graph Neural Networks and Structured Data Learning
Naomi Feldman	Ph.D., Cognitive Science, Brown University	Professor, Linguistics and UMIACS	MSAI 632: Generative AI
Jonathan Fernandes	Ph.D., Mathematics, University of Maryland	Senior Lecturer, Mathematics	MSAI 601: Probability and Statistics
Nancy Gallagher	Ph.D., International Relations and National Security Studies, University of Illinois Urbana-Champaign	Research Professor, Public Policy Director, CISSM	MSAI 633: AI Policy
Tom Goldstein	PhD, Applied Mathematics, UCLA	Associate Professor, Computer Science Director, Maryland Center for Machine Learning	MSAI 662: Adversarial Machine Learning and Robustness
Elias Gonzales	M.Ed, Curriculum and Instruction, UMD	Lecturer and Curriculum Innovation Lead, Computer Science	MSAI631: AI and Society
Charles Harry	Ph.D., Public Policy, UMD	Director, GoTech Associate Research Professor, Public Policy Operations Director, MaGIC Senior Research Associate, CISSM	MSAI 633: AI Policy; MSAI 633: AI Policy
John Horty	Ph.D., Philosophy, University of Pittsburgh	Distinguished University Professor, Philosophy Affiliate Professor, UMIACS	MSAI 670: Applied Ethics of AI
Furong Huang	PhD, Electrical and Computer Engineering, University of California Irvine	Associate Professor, Computer Science	MSAI 630: Safe and Trustworthy AI MSAI 635: Reinforcement Learning MSAI 664: Meta-Learning and Few-Shot Learning

Heng Huang	PhD, Computer Science, Dartmouth College	Brendan Iribe Endowed Professor, Computer Science, UMIACS, ECE, and CBCB	MSAI 665: AI for Healthcare and Biomedical Applications
Jia-Bin Huang	Ph.D., Electrical and Computer Engineering, University of Illinois Urbana Champaign	Capital One Endowed Associate Professor, Computer Science	MSAI 632: Generative AI
Hal Daume III	Ph.D, Computer Science, University of Southern California	Professor, Computer Science, UMIACS; Director, AIM	MSAI 600: Human-centered and Participatory Approaches to AI MSAI 630: Safe and Trustworthy AI;
Mohit Iyyer	PhD, Computer Science, UMD	Associate Professor, Computer Science	MSAI 641: Natural Language Processing for AI
David Jacobs	PhD, Computer Science, MIT	Professor, Computer Science and UMIACS	MSAI 640: Computer Vision for AI MSAI 632: Generative AI
Leonid Koralov	Ph.D., Mathematics, SUNY at Stony Brook	Prof & Assoc Chair, Mathematics	MSAI 601: Probability and Statistics
Frauke Kreuter	Ph.D., Social Science Research Methods; Survey Methodology, University of Konstanz	Co-Director of the Social Data Science Center Professor, Joint Program in Survey Methodology	MSAI631: AI and Society
Vince Lyzinski	Ph.D., Applied Mathematics & Statistics, Johns Hopkins	Associate Professor	MSAI 651: Big Data Analytics for AI
Kevin McGarry	MA, Political Science and Government, University of California Berkeley	Clinical Professor, Smith School	MSAI 633: AI Policy
Abdirisak Abdullahi Mohamed	PhD, Mathematics, University of Karlsruhe (KIT), Germany	Adjunct Faculty, College of Information Development Expert and AI Ambassador, SAP	MSAI 661: Causal Inference and AI Decision Making
Louiqa Raschid	PhD, Electrical Engineering, University of Florida Gainesville	Deanâ€™s Professor of Information Systems, Smith School Professor, UMIACS and Computer Science	MSAI 667: AI for Finance and Algorithmic Trading
Philip Resnik	PhD, Computer and Information Science, University of Pennsylvania	Professor, Linguistics and UMIACS Affiliate Professor, Computer Science	MSAI 641: Natural Language Processing for AI
Paul Rodrigues	Ph.D., Linguistics, Indiana University Bloomington	Chief Artificial Intelligence Officer, Microsoft: National Security Group	MSAI 651: Big Data Analytics

Rachel Rudinger	PhD, Computer Science, Johns Hopkins University	Assistant Professor, Computer Science, UMIACS, and Linguistics	MSAI 641: Natural Language Processing for AI
Zoltan Safar	Ph.D., ECE, University of Maryland	Director, Telecommunications	DATA/MSML 650: Cloud Computing
Craig Schlenoff	Ph.D. Computer Science, UniversitÃ© de Burgundy	Deputy Associate Director of Laboratory Programs (acting) at NIST Lecturer, MATH (Part-time)	MSAI 631: AI and Society
Katie Shilton	PhD, Information Studies, UCLA	Professor, College of Information	MSAI 606: Human-centered and Participatory Approaches to AI
Abhinav Shrivastava	PhD, Artificial Intelligence, Carnegie Mellon University	Associate Professor, Computer Science and UMIACS	MSAI 640: Computer Vision for AI
Ido Sivan-Sevilla	PhD, Public Policy and Governance, The Hebrew University of Jerusalem	Assistant Professor, College of Information Affiliate Professor, Public Policy Founder, UMD Tech Policy Hub	MSAI 633: AI Policy
Shabnam Tafreshi	Ph.D., Computer Science, George Washington University	Machine Learning Senior Advisor - NLP Researcher at EviCore by Evernorth	MSAI 641- Natural Language Processing
Mohammad Teli	PhD, Computer Science, Colorado State University	Senior Lecturer, Computer Science	MSAI 605: Computing Systems for Machine Learning
Pratap Tokekar	PhD, Computer Science, University of Minnesota	Assistant Professor, Computer Science and UMIACS	MSAI642: Robotics for AI
Mumu Xu	PhD, Mechanical Engineering, California Institute of Technology	Associate Professor, Aerospace Engineering	MSAI642: Robotics for AI
Yun Yang	Ph.D., Statistics, Duke University	Associate Professor, Mathematics	MSAI 603: Principles of Machine Learning for AI
Haizhao Yang	PhD, Mathematics, Stanford University	Associate Professor, Mathematics, Affiliated Associate Professor (UMIACS & CS)	MSAI 603: Principles of Machine Learning for AI
Tianyi Zhou	PhD, Computer Science, University of Washington	Assistant Professor, Computer Science, UMIACS, and AIM	MSAI 632: Generative AI MSAI 612: Deep Learning for AI

Appendix B: Plan for Assessing Learning Outcomes

To maintain the credibility of the MS in Artificial Intelligence, the student learning outcomes will be assessed using a combination of formative and summative assessments throughout the semester and at the completion of each course. These assessments will focus on the direct application of AI technologies to ensure that students can enter the workforce with the skills necessary for success in their future career. For example, many of the elective courses will include final projects, presentations, and assignments where students have to work with real data sets. Students will be expected to process the data, perform tasks and analysis, and make recommendations as if they are entry-level AI professionals. The projects may include hands-on coding assignments, performance evaluations on AI solutions, and other assignments that utilize various machine learning frameworks. These projects may also allow students to explore different applications or areas of AI and can serve as a portfolio for future job searches. Through these assessments, students will demonstrate their problem-solving capabilities, their proficiency in scripting and programming, and their ability to leverage machine learning and computational frameworks and high-performance computing platforms by solving real-world problems in artificial intelligence.

Additionally, each course in the program will have homework assignments, quizzes, and/or other assessments that will be graded with constructive feedback to help assess the student's learning. These smaller, more formative assessments will strengthen students' understanding of the theoretical foundations of AI within each specific course. The formative assessments will be evaluated for their accuracy of the foundational knowledge and reasoning students need for more advanced applications of the materials. Summative and cumulative assessments, such as midterms and final exams or projects, will be used to determine if and to what level the student mastered the core AI concepts and specific learning outcomes for each course.

Many of the program courses will also address concerns of emerging AI, including the ethical, legal, and societal implications of AI. Assessments in these courses may include projects and presentations where students will be expected to effectively communicate AI technologies and applications to both technical and non-technical audiences. Students will also be expected to review case studies and articles in the field and to synthesize the information therein.

Lastly, students will be challenged to complete reflective assessments to apply knowledge and skills in their future professional work. This work will provide students with the skills that will assist them in the job search process and enable them to identify, apply to, and earn positions in artificial intelligence. The assessments will all follow best practices for adult and professional students. By the end of the program, students will have gained the knowledge and experience illustrated through the program-level outcomes, and their performance on the assessments will reflect how well they have achieved these goals.

Appendix C: Course Descriptions

Please note that the MSAI is not yet an existing course prefix and so there are no MSAI courses listed in our Graduate Catalog: https://academiccatalog.umd.edu/.

Core Courses

MSAI601 Probability and Statistics for AI (3 Credits)
The course provides a foundational understanding of concepts in probability theory and statistics tailored for artificial intelligence. The course covers the basic probabilistic concepts such as probability spaces, random variables and vectors, expectation, covariance, correlation, probability distribution functions, and hypothesis testing. etc. Conditional probabilities, the Bayes formula, limit theorems, and properties of jointly distributed random variables are also covered. Students will explore practical applications of probabilistic and statistical methods within the field of artificial intelligence through hands-on exercises and real-world problems.

MSAI602 Principles of Data Science for AI (3 Credits)
This course provides an introduction to the data science pipeline, including the processes of data collection, cleaning unstructured and messy data, data visualization, and statistical analysis. Students will also explore ethical considerations such as fairness, transparency, and bias mitigation. The course will offer students a broad overview of data science and the common tools and systems used in data science problems. Through case studies, students will consider different AI systems through the lens of data science.

MSAI603 Principles of Machine Learning for AI (3 Credits)
This course offers an introduction to the core concepts of machine learning. Students will learn fundamental ML techniques, including supervised and unsupervised learning, neural networks, decision trees, clustering, and PCA. The course will also discuss recent applications of machine learning in AI solutions, such as computer vision, data mining, autonomous navigation, and speech recognition. Students will also gain a basic understanding of ethical AI development and AI for social good.

MSAI605 Computing Systems for AI (3 Credits)
This course will focus on the programming, software and hardware design, and implementation issues of computing systems for machine learning and artificial intelligence applications. Students will explore a variety of topics, including basic Python program structure, functions and modules, basic I/O, object-oriented programming, database access, computer architecture, CPUs and GPUs, memory and I/O systems, virtual memory, and different processing architectures. The course will also cover AI model deployment, edge computing, and scalability challenges in large-scale AI systems.

MSAI606 Human-centered and Participatory Approaches to AI (3 Credits)
This course will cover a broad range of issues in developing human-centered AI with a focus on participatory approaches. We will look at approaches to building AI systems that expand human capabilities, and the interplay between human and AI skills. We will explore how to make use of expertise in those communities impacted by AI systems to design them better. Topics include the fundamentals of HCI and AI, interpretability and explainability in machine learning, human-centered design for AI, adaptive user interfaces, and conversational agents. The course will teach students to design machine learning systems that are well integrated with human capabilities and concerns.

MSAI630 Safe and Trustworthy AI (3 Credits)
Recent advances in AI have created powerful new models, but these models are not easily understood, and it is difficult to guarantee that they will behave in safe and predictable ways. In this course we will examine several key aspects of these models ranging from data privacy, secure code generation, bias and fairness, memorization and copyright infringement, poisoning and adversarial attacks on machine learning systems, reliability, robustness and safety.

MSAI631 AI and Society (3 Credits)

This course is an interdisciplinary exploration of the social impacts and ethical implications of AI. It examines the histories, social values and power dynamics shaping AI technologies, as well as how AI is reshaping culture, politics, and society. Students will develop a sociotechnical understanding of AI related to policy, education, labor, economic systems, and culture. Using approaches from the humanities and social sciences, students will develop frameworks to address ongoing challenges including digital inequality, bias, and surveillance. Students will also learn how AI has and can be used to foster positive social change.

Electives

MSAI604 Introduction to Optimization for AI (3 Credits)
This course introduces fundamental optimization techniques essential for artificial intelligence and machine learning. Students will start with an overview of linear algebra techniques, including vector spaces, linear ransformations, and eigen-decomposition, before moving to techniques in unconstrained and constrained optimization. The course will also explore global search methods, such as simulated annealing, with a focus on AI applications. Students will develop the skills to formulate and solve optimization problems, improving the efficiency and performance of AI models.

MSAI612 Deep Learning for AI (3 Credits)
This course provides a comprehensive introduction to deep learning, a key driver of modern artificial intelligence, with a focus on the main features in deep neural nets and their applications in AI. Students will explore a variety of topics, including backpropagation and its importance, coding tools and their use of parallelization, autoencoders, convolutional neural networks, recurrent and recursive neural networks, and attention-based models. Students will also apply deep learning techniques to real-world problems in computer vision, natural language processing, and classification/clustering questions, gaining practical experience in building AI models.

MSAI632 Generative AI (3 Credits)
The course will explain the fundamental principles and important techniques in building large language models (LLMs), multi-modal LLMs, and image and video generation models. The class will study Transformer architectures and their use in pretraining, and discuss methods of fine-tuning models including the use of reinforcement learning. The class will study methods of data cleaning, including efficient methods of duplicate detection. And the class will examine computing methods for large scale models that are efficient and that can run in parallel. We will also discuss image and video generation methods, such as the use of stable diffusion.

MSAI633 AI Policy (3 Credits)
How can regulatory strategies promote innovation while safeguarding public interest? This course provides an examination of national and international regulatory and legal frameworks governing artificial intelligence. Students will learn about topics in policy considerations, including copyright, data privacy, bias and discrimination, and the explainability and accountability of AI systems in sectors finance, healthcare, and national security. Students will also learn about contemporary developments in AI governance, including through international AI regulations, national policies, and the advocacy of standards organizations.

MSAI634 AI in Engineering (3 Credits)
This course explores the role of artificial intelligence in engineering disciplines. Students will examine how AI technologies, including machine learning and neural networks, can help solve complex engineering problems and optimize processes. The course will cover a variety of topics and applications such as predictive modeling, automation, intelligent systems design, computer-aided design optimization, and environmental engineering. Students will learn how AI tools can be integrated into engineering workflows across various fields.

MSAI635 Reinforcement Learning (3 Credits)
This course covers both model-free and model-based reinforcement learning (RL), and it explores Markov decision processes, dynamic programming, Q-learning, policy gradient methods, and deep RL. Applications include robotics, game AI, and real-world decision-making systems.

MSAI636 Explainable and Interpretable AI (3 Credits)

As AI becomes more ubiquitous, interpretability is critical. This course explores techniques for understanding deep learning models, such as feature attribution, model distillation, LIME, SHAP, and counterfactual explanations, with an emphasis on ethical and regulatory considerations.

MSAI640 Computer Vision for AI (3 Credits)
This course provides an in-depth introduction to computer vision, a key field in artificial intelligence that enables machines to interpret and analyze visual data. Students will explore fundamental concepts such as image filtering, correlation, object detection, image segmentation, and scene reconstruction. This course will also include discussion on facial recognition, motion tracking, and ethical considerations in vision-based AI. Students will apply computer vision techniques to real-world AI problems.

MSAI641 Natural Language Processing for AI (3 Credits)
This course provides students with the fundamental concepts related to computers generating and processing natural language, including morphological analysis, phrase structure, word sense disambiguation, word embedding models, and advanced deep learning architectures used in NLP. With a focus on the applications of NLP, students will explore topics related to question answering, sentiment analysis, machine translation, text summarization, and chatbot creation.

MSAI642 Robotics for AI (3 Credits)
This course introduces the design and programming of robotic systems with a focus on AI-driven applications. Students will explore core concepts such as kinematics, differential motion, velocity, dynamics, and forces, along with the integration of sensors, actuators, and drive systems. The course covers trajectory planning, motion control, and the implementation of open-loop and closed-loop controllers. Key AI techniques, including state estimation and Kalman filters, will be examined in the context of robotics. Additionally, students will study recent advancements in machine learning for motion planning, grasping, manipulation, and other AI-powered robotic applications.

MSAI650 Cloud Computing for AI (3 Credits)
This course provides an in-depth exploration of state-of-the-art cloud computing technologies and their applications in artificial intelligence. Studenst will explore topics, including telecommunication needs, architectural models, cloud computing platforms and services, and network and storage virtualization technologies. The course will also include a discussion of key concerns in cloud computing such as security, privacy, and trust management. Students will gain practical experience in utilizing cloud-based tools and services to enhance AI workflows, ensuring robust and scalable AI applications.

MSAI651 Big Data Analytics for AI (3 Credits)
This course explores the challenges, tools, and techniques for designing and implementing machine learning algorithms at scale, with a focus on AI applications. Students will learn how to configure and operate distributed computing platforms to efficiently process massive datasets. Key topics include scalable learning techniques, data streaming, data flow analytics, and machine learning on large graphs. The course covers massively parallel computing models such as MapReduce, along with methods to optimize memory, storage, and communication in parallel machine learning algorithms. Additionally, students will gain hands-on experience with SQL and NoSQL databases, distributed file systems, key-value stores, document databases, graph databases, and large-scale data visualization.

MSAI660 Probabilistic Graphical Models and Bayesian Learning (3 Credits)
This course focuses on the representation and inference of uncertainty in AI using probabilistic graphical models, such as Bayesian networks and Markov random fields. It also covers variational inference, sampling methods, and applications in decision-making and reasoning.

MSAI661 Causal Inference and AI Decision Making (3 Credits)
Unlike traditional correlation-based learning, causal AI seeks to understand cause-and-effect relationships. This course explores Pearl's causal inference framework, causal discovery, and interventions for AI decision systems.

MSAI662 Adversarial Machine Learning and Robustness (3 Credits)

This course explores vulnerabilities in AI models, covering adversarial attacks, defenses, and the study of robustness in deep learning models against perturbations.

MSAI663 Graph Neural Networks and Structured Data Learning (3 Credits)
Graph neural networks (GNNs) enable AI models to work with non-Euclidean structured data. This course covers graph representation learning, message passing, and applications in social networks, bioinformatics, and knowledge graphs.

MSAI664 Meta-Learning and Few-Shot Learning (3 Credits)
This course explores learning-to-learn approaches, including model-agnostic meta-learning (MAML), few-shot classification, and applications in fast model adaptation.

MSAI665 AI for Healthcare and Biomedical Applications (3 Credits)
Applications of AI in medicine, including medical imaging, genomics, drug discovery, and personalized healthcare solutions.

MSAI666 AI for Cybersecurity and Threat Detection (3 Credits)
Examines AI-driven cybersecurity measures, including anomaly detection, malware analysis, adversarial robustness, and security threats in machine learning systems.

MSAI667 AI for Finance and Algorithmic Trading (3 Credits)
Covers AI applications in finance, including reinforcement learning for trading strategies, risk modeling, fraud detection, and AI-driven market forecasting.

MSAI670 Applied Ethics of AI (3 Credits)
As artificial intelligence tools are increasingly used in high stakes scenarios throughout our lives, it is increasingly important to understand the ethical considerations behind their use. This course will introduce students to applied ethics, a major subfield of contemporary Philosophy, as a way of making sense of how AI tools can be built and used ethically. The course will consider a broad range of topics, ranging from human-robot interaction to algorithmic bias, from autonomous weapon systems to algorithmic accountability and opacity. The tools students learn in this course will be broadly applicable to all forms of artificial intelligence, both present and future.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland, College Park proposal for a Master of Science in Artificial Intelligence

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The College of Computer, Mathematical, and Natural Sciences proposes to establish a Master of Science in Artificial Intelligence (AI). This 30-credit, non-thesis program is designed for professionals seeking advanced training in AI technologies. The curriculum emphasizes technical proficiency in machine learning, deep learning, and AI decision-making, while also addressing human-centered design, ethics, and the societal impact of AI. The program prepares graduates to develop AI solutions that are fair, safe, and impactful across industries such as healthcare, finance, public policy, and engineering.

This program includes 21 credits of core courses and 9 elective credits. Core coursework includes subjects such as probability and statistics, data science, machine learning, computing systems for AI, human-centered approaches, AI and society, and safe and trustworthy AI. Electives allow students to explore specialized topics such as natural language processing, robotics, AI for cybersecurity, AI for healthcare, generative AI, and AI policy. There will be both an in-person and online version of the program.

The program is designed to meet the growing demand for professionals trained in both the technical and social dimensions of AI. According to labor market data and projections from the U.S. Bureau of Labor Statistics, the job market for AI-related roles is expected to grow significantly, both nationally (26% growth) and in Maryland (21% growth).

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland College Park proposal for a Master of Science in Artificial Intelligence.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

1101 Thomas V. Miller, Jr. Administration Building
College Park, Maryland 20742
301.405.5803 TEL
301.314.9560 FAX

April 25, 2025

Chancellor Jay A. Perman
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:

I am writing to request approval for a new Master of Science program in Artificial Intelligence. The program will be offered both on-campus and through distance education. The proposal for the new program is attached. I am also submitting this proposal to the Maryland Higher Education Commission for approval.

The proposal was endorsed by the appropriate faculty and administrative committees. I also endorse this proposal and am pleased to submit it for your approval.

Sincerely,

Darryll J. Pines
President
Glenn L. Martin Professor of Aerospace Engineering

DJP/mdc

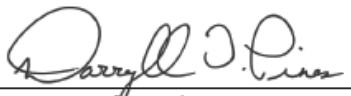
cc: Candace Caraco, Associate Vice Chancellor
Jennifer King Rice, Senior Vice President and Provost
Amitabh Varshney, Dean, College of Computer, Mathematical, and Natural Sciences

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

x	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

University of Maryland, College Park
Institution Submitting Proposal

Artificial Intelligence
Title of Proposed Program

Master of Science	**Fall 2025**
Award to be Offered	Projected Implementation Date
079904	**11.0102**
Proposed HEGIS Code	Proposed CIP Code
College of Comptuer, Mathematics, and Natural Sciences	David Jacobs
Department in which program will be located	Department Contact
301-405-0679	dwj@umd.edu
Contact Phone Number	Contact E-Mail Address
	04-25-2025
Signature of President or Designee	Date

A. Centrality to the University's Mission and Planning Priorities

Description. The University of Maryland, College Park (UMD) proposes a **Master of Science (M.S.) in Artificial Intelligence (AI)**. This program will combine technical courses in the fundamentals of AI and courses that address the interaction between AI and humans and society. During their coursework, students will build solid foundations in mathematics, statistics and computing and also obtain a broader view of human centered AI and its societal implications. Students will gain expertise in machine learning, deep learning, and AI-driven decision-making while exploring areas such as AI ethics, human-computer interaction, explainable AI, and policy considerations. The program prepares graduates to develop AI solutions that enhance human well-being, promote fairness, and integrate seamlessly into social and professional contexts. The program consists of 30-credit course work and is a non-thesis MS program. Students will be prepared for careers across disciplines and they will develop skills to be collaborative, adaptable problem solvers in a rapidly changing field. **Please note: The program will be offered both in-person and through a fully online modality.**

Relation to Strategic Goals. UMD is the state's flagship campus and a national leader in higher education. UMD is ranked in the top 20 public universities in the nation and in the top 50 among all national institutions by US News and World Report.[1] Through our strategic partnership with the University of Maryland, Baltimore, we rank among the top 30 institutions for research funding according to the National Center for Science and Engineering Statistics.[2] UMD ranks in the top 10 for research expenditures in computer and information sciences. As written in our mission statement, "UMD embraces its flagship status and land-grant mission to share its research, educational, cultural, and technological strengths to bolster economic development, sustainability, and quality of life in Maryland and beyond." The proposed program will equip students with advanced technical skills in machine learning, data science, and AI systems, while fostering ethical, human-centered, and socially responsible innovation. Graduates will be prepared for leadership roles in AI across industry, government, and research, with the ability to develop impactful and trustworthy AI solutions.

Funding. This MS program will be self-supporting with tuition revenue. The College of Computer, Mathematical, and Natural Sciences, through its Science Academy, already offers self-support master's programs in Applied Machine Learning, Data Science, Quantum Computing, and Bioinformatics and Computational Biology. The Science Academy already has the administrative and physical infrastructure to offer the program.

Institutional Commitment. UMD is committed to being a higher education leader in AI and will leverage its instructional, research, and administrative capabilities toward this end. On April 9, 2024, the University of Maryland launched the Artificial Intelligence Interdisciplinary Institute at Maryland (AIM) (see https://aim.umd.edu/about), a collaborative hub advancing responsible and

[1] U.S. News & World Report: https://www.usnews.com/best-colleges/university-of-maryland-2103.
[2] National Center for Science and Engineering Statistics: https://ncses.nsf.gov/surveys/higher-education-research-development/2023.

ethical AI education, research, and innovation across all disciplines. Building on UMD's existing AI expertise and over 100 faculty engaged in AI scholarship, AIM supports faculty research, experiential learning, and workforce development while coordinating new academic programs, high-performance computing resources, and partnerships with government and industry. Aligned with national and state executive orders on trustworthy AI, AIM prepares students across all majors to apply AI in their fields and drive public good in a technology-rich world.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

Need. AI technologies are rapidly evolving and being more integrated into various aspects of society and industry. AI's evolution will rival the internet itself in terms of its potential to be both extraordinarily beneficial and profoundly detrimental to society. In January 2024, Governor Moore issued an executive order recognizing that "Artificial intelligence (AI) is transforming society and work in myriad ways, and the pace of that change will continue to accelerate-unlocking new opportunities and risks for Maryland's residents, workers, and economy."[3] AI is rapidly becoming a cornerstone of innovation across both public and private sectors, transforming industries, reshaping workforce demands, and redefining decision-making in everything from national security to consumer services. As AI capabilities expand, Maryland's public institutions, federal agencies, and private enterprises will increasingly depend on a workforce equipped not only with technical AI skills but also with the ethical and contextual understanding required to apply AI responsibly. The proposed program responds directly to this need. The program provides rigorous technical training in machine learning, data science, and computing systems, equipping students with the skills needed to build and deploy advanced AI solutions. At the same time, the program emphasizes the ethical, societal, and policy dimensions of AI through specialized coursework in responsible and human-centered design. Drawing on UMD's world-class AI research enterprise—including over 100 faculty across disciplines and the Artificial Intelligence Interdisciplinary Institute at Maryland—students gain both cutting-edge knowledge and the broader perspective needed to lead AI innovation responsibly.

State Plan. The proposed program aligns with the 2022 *Maryland State Plan for Postsecondary Education,* specifically Priority 5, "Maintain the commitment to high-quality postsecondary education in Maryland," and its Action Item to "Identify innovative fields of study." Artificial intelligence represents one of the most transformative and fast-evolving domains of the 21st-century economy, with sweeping implications for Maryland's public and private sectors. By offering interdisciplinary, ethically grounded, and technically rigorous AI education, the MSAI program prepares students to meet the workforce demands of this innovative field while upholding the state's commitment to academic excellence, equity, and responsiveness to

[3] State of Maryland Executive Order Catalyzing the Responsible and Productive Use of Artificial Intelligence in Maryland State Government: https://governor.maryland.gov/Lists/ExecutiveOrders/Attachments/31/EO%2001.01.2024.02%20Catalyzing%20the%20Responsible%20and%20Productive%20Use%20of%20Artificial%20Intelligence%20in%20Maryland%20State%20Government_Accessible.pdf

emerging global challenges. Through this program, Maryland is poised to become a national leader in responsible AI talent development.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

There is strong and growing demand for professionals with advanced training in artificial intelligence, both nationally and in the state of Maryland. According to the U.S. Bureau of Labor Statistics, employment of computer and information research scientists—a role closely associated with AI professionals—is projected to grow by 26% nationally between 2021 and 2031, significantly faster than the average for all occupations.[4] The Maryland Department of Labor similarly projects a 21% increase in these occupations between 2022 and 2032.[5]

A labor market analysis conducted for the University of Maryland confirms this trend, showing that from January 2020 to January 2025 there were over 30,000 unique job postings nationally listing artificial intelligence as a required skill, with Washington, D.C. among the top ten U.S. cities for such postings. The analysis further reveals that 41% of these job postings required or preferred a master's degree, reinforcing the need for graduate-level training in AI.

AI will be particularly critical for Maryland and the surrounding region due to the high concentration of federal agencies, national laboratories, and private-sector firms engaged in AI research and application. The current downsizing of the federal workforce makes this need even more urgent, as agencies increasingly turn to AI to fulfill their missions and require personnel with advanced technical and analytical skills. The proposed program addresses this gap by producing graduates trained in both the technical foundations of AI and in its human-centered, ethical application. In doing so, it supports workforce development across key sectors—including healthcare, defense, finance, cybersecurity, and public policy—where AI is rapidly becoming integral to operations and strategic decision-making.

D. Reasonableness of Program Duplication

Demand for AI expertise is rapidly outpacing the supply of graduate-level programs—especially those that combine rigorous technical training with critical attention to ethical, social, and policy considerations. As AI becomes increasingly foundational to sectors such as defense, healthcare, finance, and education, Maryland must expand its capacity to educate professionals who are prepared to lead in this space.

National labor market data underscore this mismatch. From 2020 to 2025, over 30,000 unique job postings listed artificial intelligence as a required skill, yet in 2022, only 554 master's degrees were awarded in AI nationwide—yielding approximately 54 job postings per graduate. This highlights a

[4] USBLS Occupational Outlook Handbook: Computer and Information Research Scientists: https://www.bls.gov/ooh/computer-and-information-technology/computer-and-information-research-scientists.htm
[5] Maryland Department of Labor: Maryland Occupational Projections 2022-2032: https://labor.maryland.gov/lmi/iandoproj/maryland.shtml

clear shortage in the graduate talent pipeline, particularly for programs that equip students with both technical and ethical competencies. Rather than representing duplication, the proposed program addresses a quantifiable and urgent workforce need.

Only two master's programs in Artificial Intelligence are currently approved in Maryland: those at Capitol Technology University and Johns Hopkins University. Given the scale and urgency of AI's transformation across the public and private sectors, the demand for high-quality graduate programs is not only unmet—it is growing. Maryland should encourage multiple, complementary offerings to meet distinct student and workforce needs. UMD's program will help ensure the state remains at the forefront of responsible AI development while expanding access to education in a field central to its economic and civic future.

UMD's program is uniquely positioned due to its integration with the newly launched Artificial Intelligence Interdisciplinary Institute at Maryland (AIM), which unites over 100 faculty across disciplines to support innovative AI research, education, and policy development. The program also benefits from UMD's strategic location near the federal government and major employers driving AI adoption, making it an ideal hub for training the next generation of AI leaders.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

No HBI's currently offer a master's program in Artificial Intelligence.

F. Relevance to the identity of Historically Black Institutions (HBIs)

We do not anticipate any negative impacts on the unique identities of Maryland's HBIs. UMD already offers a master's program in Computer Science with an Artificial Intelligence concentration, as well as graduate programs in Data Science and Applied Machine Learning. The proposed MS in Artificial Intelligence builds on this foundation to meet rapidly growing demand in a field that is critical to the state. As global investment in artificial intelligence continues to increase each year, we believe the state should actively encourage the development of more highly specialized, technical graduate programs—particularly in diverse geographic areas—to promote inclusive economic growth and workforce development in this vital sector.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

Curricular Development. When developing the proposed curriculum, several factors were considered to ensure the program's success. An advisory group was formed to identify necessary skills, capacities, and capabilities in job postings in the market. These in demand skills led the curriculum development to ensure that students will be qualified to satisfy the workforce gap at the time of graduation.

Faculty Oversight. The College of Computer, Mathematical, and Natural Sciences' Science Academy will work with the Mathematics and Computer Science department chairs, as well as the Artificial Intelligence Interdisciplinary Institute at Maryland (AIM) for oversight. A Computer

Science faculty member will serve as the faculty director. This faculty director will provide the curriculum oversight, course evaluation, and advise students. In addition, the academic faculty director, in collaboration with the Assistant Dean for Professional Graduate Education, is responsible for all instructor selections and appointments. Appendix A is a list of faculty who will be teaching in the program.

Educational Objectives and Learning Outcomes. The main objective of the program is to blend highly technical, applied, experiential learning in AI with courses on AI's societal impact, human-AI collaboration, and responsible AI development. Graduates will be prepared to enter into industry at the completion of the program. Courses will combine a theoretical foundation from tenured professors and researchers on campus with applied learning from lecturers and industry practitioners. Students will build a solid foundation in mathematics, statistics, and computing, and pair this foundation with hands-on application to real world problems. They will learn different methods and approaches to solve complex problems using artificial intelligence, data analysis techniques, modern tools, and state-of-the-art technologies while also recognizing potential ethical implications of AI. The learning outcomes for the program are as follows:

1. Understand the theoretical foundations of artificial intelligence, including mathematics and statistics, machine learning, deep learning, and optimization techniques.
2. Develop advanced problem-solving and analytical skills in AI by gaining proficiency in scripting and programming, leveraging machine learning frameworks, and employing high-performance computing platforms to optimize AI solutions.
3. Apply AI technologies to address critical societal challenges and to solve complex problems in disciplines such as healthcare, finance, climate change, and public policy.
4. Design AI systems to work effectively alongside people in healthcare, education, business, and creative industries.
5. Analyze the impact of AI-driven automation in real-world settings by evaluating its effectiveness and efficiency.
6. Describe the societal implications of AI, including issues of safe and trustworthy AI.
7. Evaluate the ethical and legal implications of AI by analyzing issues such as bias, privacy, accountability, and transparency, and developing strategies for responsible AI design, governance, and policy compliance.
8. Explain practical strategies for implementing and scaling AI solutions within enterprise and societal contexts.
9. Communicate AI technologies and applications in a variety of fields to technical and non-technical audiences.

Institutional assessment and documentation of learning outcomes. Assessments will be projects based using publicly available data when possible, to create innovative solutions to societal challenges. Please see Appendix B for information about assessing the program's learning outcomes.

Course requirements. This is a 30-credit non-thesis master's degree, with no thesis option. Students complete 21 credits of required core coursework and select 9 credits of electives from a list of specialized AI courses.

Curriculum		
Course Number	**Course Title**	**Credits**
Core		
MSAI601	Probability and Statistics	3
MSAI602	Principles of Data Science	3
MSAI603	Principles of Machine Learning	3
MSAI605	Computing Systems for AI	3
MSAI606	Human-Centered and Participatory Approaches to AI	3
MSAI630	Safe and Trustworthy AI	3
MSAI631	AI and Society	3
Elective Courses – Select 3 Courses (9 Credits Total)		
MSAI604	Introduction to Optimization for AI	3
MSAI612	Deep Learning for AI	3
MSAI632	Generative AI	3
MSAI633	AI Policy	3
MSAI634	AI in Engineering	3
MSAI635	Reinforcement Learning	3
MSAI636	Explainable and Interpretable AI	3
MSAI640	Computer Vision for AI	3
MSAI641	Natural Language Processing for AI	3
MSAI642	Robotics for AI	3
MSAI650	Cloud Computing for AI	3
MSAI651	Big Data Analytics for AI	3
MSAI660	Probabilistic Graphical Models and Bayesian Learning	3
MSAI661	Causal Inference and AI Decision Making	3
MSAI662	Adversarial Machine Learning and Robustness	3
MSAI663	Graph Neural Networks and Structured Data Learning	3
MSAI664	Meta-Learning and Few-Shot Learning	3
MSAI665	AI for Healthcare and Biomedical Applications	3
MSAI666	AI for Cybersecurity and Threat Detection	3
MSAI667	AI for Finance and Algorithmic Trading	3
MSAI670	Applied Ethics of AI	3

A list of courses, including those that count for the elective category, is included in Appendix C.

General Education. Not applicable for our graduate programs.

Accreditation or Certification Requirements. No accreditation or licensure is required for this program.

Other Institutions or Organizations. The offering unit is not planning to contract with another institution or non-collegiate organization for this program.

Student Support. The Science Academy in the College of Computer, Mathematics and Natural Science will provide administrative coordination for the program, in collaboration with the Office of Extended Studies. Students will be supported through the Science Academy for academic guidance and advising. They will also have access to the Graduate School Counseling and the Counseling Center resources. The Science Academy Program Manager will be the first point of contact for students, while the Office of Extended Studies, which provides administrative services for a host of professional programs, provides student and program services, such as admission support, scheduling, registration, billing and payment, graduation, and appeals. Students will see admission criteria, financial aid resources, costs, and complaint procedures on both the Science Academy website and the Extended Studies program page. For technical aspects of both the in-person and online versions of the program, specific technological competence and equipment will be included in the admission criteria. Learning management information will also be included in these materials.

Marketing and Admissions Information. Students will see admission criteria, financial aid resources, and costs on both the Science Academy website and the Extended Studies program page.

H. Adequacy of Articulation

Not applicable for this graduate program.

I. Adequacy of Faculty Resources

Program faculty. Appendix A contains a list of faculty members who will teach in the program. Instructional resources for the program will comprise current tenure track faculty, professional track faculty, and adjunct instructors. These instructional personnel will come from the Computer Science Department and the Mathematics Department, UMD's Artificial Intelligence Interdisciplinary Institute, and outside the university (e.g., ARLIS, NASA, federal agencies, and industry). Instructors may come from adjacent federal agencies, which will increase the exposure of students to real-world problems as part of the program curriculum.

Faculty training. Faculty teaching in the program will use the university's learning management system along with its extensive electronic resources. They will have access to instructional development opportunities available across the College Park campus, including those offered as part of the Teaching and Learning Transformation Center, many of which are delivered in a virtual environment. Instructors will work with the learning design specialists on campus to incorporate best practices when teaching in the online environment.

J. Adequacy of Library Resources

The University of Maryland Libraries assessment concluded that the Libraries are able to meet, with current resources, the curricular and research needs of the program.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Resources

No additional physical facilities, infrastructure and instructional equipment is required for this program. Existing facilities (e.g., general purpose classrooms) and resources (e.g., instructional equipment) will be used, and these are demonstrably adequate for the proposed program. For the online components of the coursework, UMD maintains an Enterprise Learning Management System (ELMS). ELMS is a Web-based platform for sharing course content, tracking assignments and grades, and enabling virtual collaboration and interaction. All students and faculty have access to UMD's electronic mailing system.

L. Adequacy of Financial Resources

Tables 1 and 2 contain the details of resources and expenditures.

Table 1 Resources:
The program will be self-supported through tuition revenue.

1. Line 1 shows no reallocated funds since the program is supported by tuition from existing students.
2. Graduate students pay tuition by the credit.
3. Students will complete 24 credits in the first year, and are shown in this chart as full-time students. Part-time students reflect those finishing the program in the second year.
4. No external sources of funding are assumed.
5. No other sources of funding are assumed.

Table 2 Expenditures:

1. Faculty salaries are based on cost per course. We assume an annual increase of 3% in salaries with a corresponding 35.6% benefits rate.
2. Administrative staff represents the program director salary and benefits (.2 FTE).
3. Support staff represents program manager salary and benefits (.33 FTE).
4. Other expenditures include campus administrative fees, travel and recruitment, marketing, hourly grader wages, and director stipend.

M. Adequacy of Program Evaluation

Formal program review is carried out according to the University of Maryland's policy for Periodic Review of Academic Units, which includes a review of the academic programs offered by, and the research and administration of, the academic unit (http://www.president.umd.edu/policies/2014-i-600a.html). Program Review is also monitored following the guidelines of the campus-wide cycle of Learning Outcomes Assessment (https://irpa.umd.edu/Assessment/loa_overview.html). Faculty

within the department are reviewed according to the University's Policy on Periodic Evaluation of Faculty Performance (http://www.president.umd.edu/policies/2014-ii-120a.html). Since 2005, the University has used an online course feedback survey instrument for students that standardizes course feedback across campus. The course survey has standard, university-wide questions and allows for supplemental, specialized questions from the academic unit offering the course.

N. Consistency with Minority Student Achievement goals

Recruitment for the Master of Science in Artificial Intelligence will be led by the college's Science Academy, which employs a targeted, inclusive digital strategy focused on UMD alumni, graduating seniors, and working professionals in the Washington, D.C. metropolitan area. The admissions process evaluates not only academic readiness but also diversity in experience, background, and professional goals to ensure a well-rounded and inclusive student body.

To attract a diverse applicant pool, the program will be represented at educational fairs and conferences such as the National Society of Black Engineers Leadership Conference and GEM Grad Labs. Outreach efforts will include advertising through organizations like NSBE, SWE, AWM, and AWC; targeted email campaigns to partner institutions; engagement with UMD student organizations and military veterans; and robust digital marketing including virtual open houses and career panels.

Once enrolled, students benefit from a supportive, inclusive environment fostered by Science Academy staff and faculty. Students are encouraged to participate in diversity and inclusion programs such as TerrapinSTRONG, Cultivating Community Conversations, and the Graduate School's Spring Speaker Series. Faculty bring a variety of academic backgrounds and career experiences, offering students multiple mentorship and career development pathways. The Academy provides academic advising, access to counseling and funding resources, and ongoing student support to promote persistence and timely degree completion.

Retention strategies include hosting seminars like "Women in Engineering, Computing, and STEM," requiring regular academic advising sessions, and implementing an early warning system to identify and assist students facing academic challenges. These initiatives are designed to ensure that all students—particularly those from underrepresented groups—are supported, empowered, and well-prepared to succeed in the program and beyond.

O. Relationship to Low Productivity Programs Identified by the Commission

N/A

P. Adequacy of Distance Education Programs

The distance-education version of the program will be entirely online. This will allow the program to reach a wider audience, including those in the Washington, DC area whose professional commitments may not allow for regular travel to College Park. The online curriculum will be the same as the in-person curriculum. Learning outcomes, academic rigor and program curricula will

be exactly the same for the online program as it is for the on-campus program. The program will go through periodic evaluations, at least every three years, by the Science Academy leadership and academic department chairs. Students will have access to the same services that online students and will be advised by both the Science Academy and the Office of Extended Studies.

Table 1: Resource Table

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1.Reallocated Funds					
2. Tuition/Fee Revenue (c+g below)	298512	418362	439800	489240	550470
a. #FT Students	9	10	10	11	12
b. Annual Tuition/Fee Rate (based on 24 credits)	33168	34152	35184	36240	37320
c. Annual FT Revenue (a x b)	298512	341520	351840	398640	447840
d. # PT Students	0	9	10	10	11
e. Credit Hour Rate	1382	1423	1466	1510	1555
f. Annual Credit Hours	6	6	6	6	6
g. Total Part Time Revenue (d x e x f)	0	76842	87960	90600	102630
3. Grants, Contracts, & Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 - 4)	298512	418362	439800	489240	550470

Table 2: Expenditure Table					
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	155685	200696	206716	212918	219305
a. #FTE	2	2	2	2	2
b. Total Salary	119850	154500	159135	163909	168826
c. Total Benefits	35835	46196	47581	49009	50479
2. Admin. Staff (b+c below)	35047	36098	37182	38298	39446
a. #FTE	0.2	0.2	0.2	0.2	0.2
b. Total Salary	25846	26621	27420	28243	29090
c. Total Benefits	9201	9477	9762	10055	10356
3. Total Support Staff (b+c below)	22374	23045	23737	24449	25182
a. #FTE	0.33	0.33	0.33	0.33	0.33
b. Total Salary	16500	16995	17505	18030	18571
c. Total Benefits	5874	6050	6232	6419	6611
4. Graduate Assistants (b+c)	0	0	0	0	0
a. #FTE	0	0	0	0	0
b. Stipend	0	0	0	0	0
c. Tuition Remission	0	0	0	0	0
d. Benefits	0	0	0	0	0
5. Equipment	1500	1545	1591	1639	1688
6. Library	0	0	0	0	0
7. New or Renovated Space	0	0	0	0	0
8. Other Expenses: Operational Expenses	55307	113068	116694	123164	130862
TOTAL (Add 1 - 8)	269913	374452	385920	400468	416483

Appendix A: Faculty Information

The following faculty members are projected to teach in the program. All faculty are full-time unless otherwise indicated.

Name	Highest Degree Earned, Program, and Institution	UMD Title (indicate if part-time)	Courses
Bahar Asgari	PhD, Electrical and Computer Engineering, Georgia Tech	Assistant Professor, Computer Science Affiliate Professor, UMIACS	MSAI 605: Computing Systems for AI
Neda Atanasoski	PhD, Literature and Cultural Studies, University of California San Diego	Professor and Chair, Harriet Tubman Department of Women, Gender and Sexuality Studies Associate Director of Education, AIM	MSAI631: AI and Society
Behtash Babadi	PhD, Engineering Sciences, Harvard	Associate Professor and Associate Chair for Grad Studies, Electrical and Computer Engineering	MSAI 630: Safe and Trustworthy AI
Abhinav Bhatele	PhD, Computer Science, University of Illinois Urbana-Champaign	Associate Professor, Computer Science and UMAICS Affiliate Professor, AIM and AMSC Director, PSSG	MSAI 605: Computing Systems for AI
Margrét Bjarnadóttir	PhD, Operations Research, MIT	Associate Professor of Management Science and Statistics, DO&IT group, Smith School	MSAI631: AI and Society
Jordan Boyd-Graber	PhD, Computer Science, Princeton University	Associate Profession, Computer Science, UMIACS, and iSchool	MSAI 632: Generative AI MSAI 641: Natural Language Processing for AI
Holly Brewer	PhD, American History, UCLA	Burke Chair of American Cultural and Intellectual History, History Director of Undergraduate Studies, History Associate Professor, History	MSAI631: AI and Society
Maria Cameron	Ph.D., Mathematics, UC Berkeley	Prof & Associate Chair, Mathematics. Affiliate Professor with Computer Science.	MSAI 612: Deep Learning for AI
Sandra Cerrai	Ph.D., Mathematics, Scuola Normale Superiore of Pisa	Prof & Assoc Chair, Mathematics	MSAI 601: Probability and Statistics
Yizheng Chen	Ph.D., Computer Science, Georgia Institute of Technology	Assistant Professor, Computer Science	MSAI 630: Safe and Trustworthy AI

Sanghamitra Dutta	PhD, Electrical and Computer Engineering, Carnegie Mellon University	Assistant Professor, Electrical and Computer Engineering	MSAI 630: Safe and Trustworthy AI
Sue Dwyer	Ph.D., Philosophy, MIT	Associate Professor, Philosophy	MSAI 670: Applied Ethics of AI
Sheena Erete	PhD, Technology and Social Behavior, Northwestern (joint degree in computer science and communication)	Associate Professor, College of Information Founder and Director, Community Research and Design Collective	MSAI 606: Human-centered and Participatory Approaches to AI
Soheil Feizi	PhD, EECS, MIT	Associate Professor, Computer Science Director, Reliable AI Lab	MSAI 612: Deep Learning for AI MSAI 660: Probabilistic Graphical Models and Bayesian Learning MSAI 663: Graph Neural Networks and Structured Data Learning
Naomi Feldman	Ph.D., Cognitive Science, Brown University	Professor, Linguistics and UMIACS	MSAI 632: Generative AI
Jonathan Fernandes	Ph.D., Mathematics, University of Maryland	Senior Lecturer, Mathematics	MSAI 601: Probability and Statistics
Nancy Gallagher	Ph.D., International Relations and National Security Studies, University of Illinois Urbana-Champaign	Research Professor, Public Policy Director, CISSM	MSAI 633: AI Policy
Tom Goldstein	PhD, Applied Mathematics, UCLA	Associate Professor, Computer Science Director, Maryland Center for Machine Learning	MSAI 662: Adversarial Machine Learning and Robustness
Elias Gonzales	M.Ed, Curriculum and Instruction, UMD	Lecturer and Curriculum Innovation Lead, Computer Science	MSAI631: AI and Society
Charles Harry	Ph.D., Public Policy, UMD	Director, GoTech Associate Research Professor, Public Policy Operations Director, MaGIC Senior Research Associate, CISSM	MSAI 633: AI Policy; MSAI 633: AI Policy
John Horty	Ph.D., Philosophy, University of Pittsburgh	Distinguished University Professor, Philosophy Affiliate Professor, UMIACS	MSAI 670: Applied Ethics of AI
Furong Huang	PhD, Electrical and Computer Engineering, University of California Irvine	Associate Professor, Computer Science	MSAI 630: Safe and Trustworthy AI MSAI 635: Reinforcement Learning MSAI 664: Meta-Learning and Few-Shot Learning

Heng Huang	PhD, Computer Science, Dartmouth College	Brendan Iribe Endowed Professor, Computer Science, UMIACS, ECE, and CBCB	MSAI 665: AI for Healthcare and Biomedical Applications
Jia-Bin Huang	Ph.D., Electrical and Computer Engineering, University of Illinois Urbana Champaign	Capital One Endowed Associate Professor, Computer Science	MSAI 632: Generative AI
Hal Daume III	Ph.D, Computer Science, University of Southern California	Professor, Computer Science, UMIACS; Director, AIM	MSAI 600: Human-centered and Participatory Approaches to AI MSAI 630: Safe and Trustworthy AI;
Mohit Iyyer	PhD, Computer Science, UMD	Associate Professor, Computer Science	MSAI 641: Natural Language Processing for AI
David Jacobs	PhD, Computer Science, MIT	Professor, Computer Science and UMIACS	MSAI 640: Computer Vision for AI MSAI 632: Generative AI
Leonid Koralov	Ph.D., Mathematics, SUNY at Stony Brook	Prof & Assoc Chair, Mathematics	MSAI 601: Probability and Statistics
Frauke Kreuter	Ph.D., Social Science Research Methods; Survey Methodology, University of Konstanz	Co-Director of the Social Data Science Center Professor, Joint Program in Survey Methodology	MSAI631: AI and Society
Vince Lyzinski	Ph.D., Applied Mathematics & Statistics, Johns Hopkins	Associate Professor	MSAI 651: Big Data Analytics for AI
Kevin McGarry	MA, Political Science and Government, University of California Berkeley	Clinical Professor, Smith School	MSAI 633: AI Policy
Abdirisak Abdullahi Mohamed	PhD, Mathematics, University of Karlsruhe (KIT), Germany	Adjunct Faculty, College of Information Development Expert and AI Ambassador, SAP	MSAI 661: Causal Inference and AI Decision Making
Louiqa Raschid	PhD, Electrical Engineering, University of Florida Gainesville	Deanâ€™s Professor of Information Systems, Smith School Professor, UMIACS and Computer Science	MSAI 667: AI for Finance and Algorithmic Trading
Philip Resnik	PhD, Computer and Information Science, University of Pennsylvania	Professor, Linguistics and UMIACS Affiliate Professor, Computer Science	MSAI 641: Natural Language Processing for AI
Paul Rodrigues	Ph.D., Linguistics, Indiana University Bloomington	Chief Artificial Intelligence Officer, Microsoft: National Security Group	MSAI 651: Big Data Analytics

Rachel Rudinger	PhD, Computer Science, Johns Hopkins University	Assistant Professor, Computer Science, UMIACS, and Linguistics	MSAI 641: Natural Language Processing for AI
Zoltan Safar	Ph.D., ECE, University of Maryland	Director, Telecommunications	DATA/MSML 650: Cloud Computing
Craig Schlenoff	Ph.D. Computer Science, UniversitÃ© de Burgundy	Deputy Associate Director of Laboratory Programs (acting) at NIST Lecturer, MATH (Part-time)	MSAI 631: AI and Society
Katie Shilton	PhD, Information Studies, UCLA	Professor, College of Information	MSAI 606: Human-centered and Participatory Approaches to AI
Abhinav Shrivastava	PhD, Artificial Intelligence, Carnegie Mellon University	Associate Professor, Computer Science and UMIACS	MSAI 640: Computer Vision for AI
Ido Sivan-Sevilla	PhD, Public Policy and Governance, The Hebrew University of Jerusalem	Assistant Professor, College of Information Affiliate Professor, Public Policy Founder, UMD Tech Policy Hub	MSAI 633: AI Policy
Shabnam Tafreshi	Ph.D., Computer Science, George Washington University	Machine Learning Senior Advisor - NLP Researcher at EviCore by Evernorth	MSAI 641- Natural Language Processing
Mohammad Teli	PhD, Computer Science, Colorado State University	Senior Lecturer, Computer Science	MSAI 605: Computing Systems for Machine Learning
Pratap Tokekar	PhD, Computer Science, University of Minnesota	Assistant Professor, Computer Science and UMIACS	MSAI642: Robotics for AI
Mumu Xu	PhD, Mechanical Engineering, California Institute of Technology	Associate Professor, Aerospace Engineering	MSAI642: Robotics for AI
Yun Yang	Ph.D., Statistics, Duke University	Associate Professor, Mathematics	MSAI 603: Principles of Machine Learning for AI
Haizhao Yang	PhD, Mathematics, Stanford University	Associate Professor, Mathematics, Affiliated Associate Professor (UMIACS & CS)	MSAI 603: Principles of Machine Learning for AI
Tianyi Zhou	PhD, Computer Science, University of Washington	Assistant Professor, Computer Science, UMIACS, and AIM	MSAI 632: Generative AI MSAI 612: Deep Learning for AI

Appendix B: Plan for Assessing Learning Outcomes

To maintain the credibility of the MS in Artificial Intelligence, the student learning outcomes will be assessed using a combination of formative and summative assessments throughout the semester and at the completion of each course. These assessments will focus on the direct application of AI technologies to ensure that students can enter the workforce with the skills necessary for success in their future career. For example, many of the elective courses will include final projects, presentations, and assignments where students have to work with real data sets. Students will be expected to process the data, perform tasks and analysis, and make recommendations as if they are entry-level AI professionals. The projects may include hands-on coding assignments, performance evaluations on AI solutions, and other assignments that utilize various machine learning frameworks. These projects may also allow students to explore different applications or areas of AI and can serve as a portfolio for future job searches. Through these assessments, students will demonstrate their problem-solving capabilities, their proficiency in scripting and programming, and their ability to leverage machine learning and computational frameworks and high-performance computing platforms by solving real-world problems in artificial intelligence.

Additionally, each course in the program will have homework assignments, quizzes, and/or other assessments that will be graded with constructive feedback to help assess the student's learning. These smaller, more formative assessments will strengthen students' understanding of the theoretical foundations of AI within each specific course. The formative assessments will be evaluated for their accuracy of the foundational knowledge and reasoning students need for more advanced applications of the materials. Summative and cumulative assessments, such as midterms and final exams or projects, will be used to determine if and to what level the student mastered the core AI concepts and specific learning outcomes for each course.

Many of the program courses will also address concerns of emerging AI, including the ethical, legal, and societal implications of AI. Assessments in these courses may include projects and presentations where students will be expected to effectively communicate AI technologies and applications to both technical and non-technical audiences. Students will also be expected to review case studies and articles in the field and to synthesize the information therein.

Lastly, students will be challenged to complete reflective assessments to apply knowledge and skills in their future professional work. This work will provide students with the skills that will assist them in the job search process and enable them to identify, apply to, and earn positions in artificial intelligence. The assessments will all follow best practices for adult and professional students. By the end of the program, students will have gained the knowledge and experience illustrated through the program-level outcomes, and their performance on the assessments will reflect how well they have achieved these goals.

Appendix C: Course Descriptions

Please note that the MSAI is not yet an existing course prefix and so there are no MSAI courses listed in our Graduate Catalog: https://academiccatalog.umd.edu/.

Core Courses

MSAI601 Probability and Statistics for AI (3 Credits)
The course provides a foundational understanding of concepts in probability theory and statistics tailored for artificial intelligence. The course covers the basic probabilistic concepts such as probability spaces, random variables and vectors, expectation, covariance, correlation, probability distribution functions, and hypothesis testing. etc. Conditional probabilities, the Bayes formula, limit theorems, and properties of jointly distributed random variables are also covered. Students will explore practical applications of probabilistic and statistical methods within the field of artificial intelligence through hands-on exercises and real-world problems.

MSAI602 Principles of Data Science for AI (3 Credits)
This course provides an introduction to the data science pipeline, including the processes of data collection, cleaning unstructured and messy data, data visualization, and statistical analysis. Students will also explore ethical considerations such as fairness, transparency, and bias mitigation. The course will offer students a broad overview of data science and the common tools and systems used in data science problems. Through case studies, students will consider different AI systems through the lens of data science.

MSAI603 Principles of Machine Learning for AI (3 Credits)
This course offers an introduction to the core concepts of machine learning. Students will learn fundamental ML techniques, including supervised and unsupervised learning, neural networks, decision trees, clustering, and PCA. The course will also discuss recent applications of machine learning in AI solutions, such as computer vision, data mining, autonomous navigation, and speech recognition. Students will also gain a basic understanding of ethical AI development and AI for social good.

MSAI605 Computing Systems for AI (3 Credits)
This course will focus on the programming, software and hardware design, and implementation issues of computing systems for machine learning and artificial intelligence applications. Students will explore a variety of topics, including basic Python program structure, functions and modules, basic I/O, object-oriented programming, database access, computer architecture, CPUs and GPUs, memory and I/O systems, virtual memory, and different processing architectures. The course will also cover AI model deployment, edge computing, and scalability challenges in large-scale AI systems.

MSAI606 Human-centered and Participatory Approaches to AI (3 Credits)
This course will cover a broad range of issues in developing human-centered AI with a focus on participatory approaches. We will look at approaches to building AI systems that expand human capabilities, and the interplay between human and AI skills. We will explore how to make use of expertise in those communities impacted by AI systems to design them better. Topics include the fundamentals of HCI and AI, interpretability and explainability in machine learning, human-centered design for AI, adaptive user interfaces, and conversational agents. The course will teach students to design machine learning systems that are well integrated with human capabilities and concerns.

MSAI630 Safe and Trustworthy AI (3 Credits)
Recent advances in AI have created powerful new models, but these models are not easily understood, and it is difficult to guarantee that they will behave in safe and predictable ways. In this course we will examine several key aspects of these models ranging from data privacy, secure code generation, bias and fairness, memorization and copyright infringement, poisoning and adversarial attacks on machine learning systems, reliability, robustness and safety.

MSAI631 AI and Society (3 Credits)

This course is an interdisciplinary exploration of the social impacts and ethical implications of AI. It examines the histories, social values and power dynamics shaping AI technologies, as well as how AI is reshaping culture, politics, and society. Students will develop a sociotechnical understanding of AI related to policy, education, labor, economic systems, and culture. Using approaches from the humanities and social sciences, students will develop frameworks to address ongoing challenges including digital inequality, bias, and surveillance. Students will also learn how AI has and can be used to foster positive social change.

Electives

MSAI604 Introduction to Optimization for AI (3 Credits)
This course introduces fundamental optimization techniques essential for artificial intelligence and machine learning. Students will start with an overview of linear algebra techniques, including vector spaces, linear ransformations, and eigen-decomposition, before moving to techniques in unconstrained and constrained optimization. The course will also explore global search methods, such as simulated annealing, with a focus on AI applications. Students will develop the skills to formulate and solve optimization problems, improving the efficiency and performance of AI models.

MSAI612 Deep Learning for AI (3 Credits)
This course provides a comprehensive introduction to deep learning, a key driver of modern artificial intelligence, with a focus on the main features in deep neural nets and their applications in AI. Students will explore a variety of topics, including backpropagation and its importance, coding tools and their use of parallelization, autoencoders, convolutional neural networks, recurrent and recursive neural networks, and attention-based models. Students will also apply deep learning techniques to real-world problems in computer vision, natural language processing, and classification/clustering questions, gaining practical experience in building AI models.

MSAI632 Generative AI (3 Credits)
The course will explain the fundamental principles and important techniques in building large language models (LLMs), multi-modal LLMs, and image and video generation models. The class will study Transformer architectures and their use in pretraining, and discuss methods of fine-tuning models including the use of reinforcement learning. The class will study methods of data cleaning, including efficient methods of duplicate detection. And the class will examine computing methods for large scale models that are efficient and that can run in parallel. We will also discuss image and video generation methods, such as the use of stable diffusion.

MSAI633 AI Policy (3 Credits)
How can regulatory strategies promote innovation while safeguarding public interest? This course provides an examination of national and international regulatory and legal frameworks governing artificial intelligence. Students will learn about topics in policy considerations, including copyright, data privacy, bias and discrimination, and the explainability and accountability of AI systems in sectors finance, healthcare, and national security. Students will also learn about contemporary developments in AI governance, including through international AI regulations, national policies, and the advocacy of standards organizations.

MSAI634 AI in Engineering (3 Credits)
This course explores the role of artificial intelligence in engineering disciplines. Students will examine how AI technologies, including machine learning and neural networks, can help solve complex engineering problems and optimize processes. The course will cover a variety of topics and applications such as predictive modeling, automation, intelligent systems design, computer-aided design optimization, and environmental engineering. Students will learn how AI tools can be integrated into engineering workflows across various fields.

MSAI635 Reinforcement Learning (3 Credits)
This course covers both model-free and model-based reinforcement learning (RL), and it explores Markov decision processes, dynamic programming, Q-learning, policy gradient methods, and deep RL. Applications include robotics, game AI, and real-world decision-making systems.

MSAI636 Explainable and Interpretable AI (3 Credits)

As AI becomes more ubiquitous, interpretability is critical. This course explores techniques for understanding deep learning models, such as feature attribution, model distillation, LIME, SHAP, and counterfactual explanations, with an emphasis on ethical and regulatory considerations.

MSAI640 Computer Vision for AI (3 Credits)
This course provides an in-depth introduction to computer vision, a key field in artificial intelligence that enables machines to interpret and analyze visual data. Students will explore fundamental concepts such as image filtering, correlation, object detection, image segmentation, and scene reconstruction. This course will also include discussion on facial recognition, motion tracking, and ethical considerations in vision-based AI. Students will apply computer vision techniques to real-world AI problems.

MSAI641 Natural Language Processing for AI (3 Credits)
This course provides students with the fundamental concepts related to computers generating and processing natural language, including morphological analysis, phrase structure, word sense disambiguation, word embedding models, and advanced deep learning architectures used in NLP. With a focus on the applications of NLP, students will explore topics related to question answering, sentiment analysis, machine translation, text summarization, and chatbot creation.

MSAI642 Robotics for AI (3 Credits)
This course introduces the design and programming of robotic systems with a focus on AI-driven applications. Students will explore core concepts such as kinematics, differential motion, velocity, dynamics, and forces, along with the integration of sensors, actuators, and drive systems. The course covers trajectory planning, motion control, and the implementation of open-loop and closed-loop controllers. Key AI techniques, including state estimation and Kalman filters, will be examined in the context of robotics. Additionally, students will study recent advancements in machine learning for motion planning, grasping, manipulation, and other AI-powered robotic applications.

MSAI650 Cloud Computing for AI (3 Credits)
This course provides an in-depth exploration of state-of-the-art cloud computing technologies and their applications in artificial intelligence. Studenst will explore topics, including telecommunication needs, architectural models, cloud computing platforms and services, and network and storage virtualization technologies. The course will also include a discussion of key concerns in cloud computing such as security, privacy, and trust management. Students will gain practical experience in utilizing cloud-based tools and services to enhance AI workflows, ensuring robust and scalable AI applications.

MSAI651 Big Data Analytics for AI (3 Credits)
This course explores the challenges, tools, and techniques for designing and implementing machine learning algorithms at scale, with a focus on AI applications. Students will learn how to configure and operate distributed computing platforms to efficiently process massive datasets. Key topics include scalable learning techniques, data streaming, data flow analytics, and machine learning on large graphs. The course covers massively parallel computing models such as MapReduce, along with methods to optimize memory, storage, and communication in parallel machine learning algorithms. Additionally, students will gain hands-on experience with SQL and NoSQL databases, distributed file systems, key-value stores, document databases, graph databases, and large-scale data visualization.

MSAI660 Probabilistic Graphical Models and Bayesian Learning (3 Credits)
This course focuses on the representation and inference of uncertainty in AI using probabilistic graphical models, such as Bayesian networks and Markov random fields. It also covers variational inference, sampling methods, and applications in decision-making and reasoning.

MSAI661 Causal Inference and AI Decision Making (3 Credits)
Unlike traditional correlation-based learning, causal AI seeks to understand cause-and-effect relationships. This course explores Pearl's causal inference framework, causal discovery, and interventions for AI decision systems.

MSAI662 Adversarial Machine Learning and Robustness (3 Credits)

This course explores vulnerabilities in AI models, covering adversarial attacks, defenses, and the study of robustness in deep learning models against perturbations.

MSAI663 Graph Neural Networks and Structured Data Learning (3 Credits)
Graph neural networks (GNNs) enable AI models to work with non-Euclidean structured data. This course covers graph representation learning, message passing, and applications in social networks, bioinformatics, and knowledge graphs.

MSAI664 Meta-Learning and Few-Shot Learning (3 Credits)
This course explores learning-to-learn approaches, including model-agnostic meta-learning (MAML), few-shot classification, and applications in fast model adaptation.

MSAI665 AI for Healthcare and Biomedical Applications (3 Credits)
Applications of AI in medicine, including medical imaging, genomics, drug discovery, and personalized healthcare solutions.

MSAI666 AI for Cybersecurity and Threat Detection (3 Credits)
Examines AI-driven cybersecurity measures, including anomaly detection, malware analysis, adversarial robustness, and security threats in machine learning systems.

MSAI667 AI for Finance and Algorithmic Trading (3 Credits)
Covers AI applications in finance, including reinforcement learning for trading strategies, risk modeling, fraud detection, and AI-driven market forecasting.

MSAI670 Applied Ethics of AI (3 Credits)
As artificial intelligence tools are increasingly used in high stakes scenarios throughout our lives, it is increasingly important to understand the ethical considerations behind their use. This course will introduce students to applied ethics, a major subfield of contemporary Philosophy, as a way of making sense of how AI tools can be built and used ethically. The course will consider a broad range of topics, ranging from human-robot interaction to algorithmic bias, from autonomous weapon systems to algorithmic accountability and opacity. The tools students learn in this course will be broadly applicable to all forms of artificial intelligence, both present and future.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland, College Park proposal for a Bachelor of Arts in Global Culture and Thought

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The University of Maryland, College Park proposes a new Bachelor of Arts in Global Culture and Thought, housed in the School of Languages, Literatures, and Cultures. This interdisciplinary program integrates language learning with cultural, literary, and media analysis to prepare students for global citizenship and careers requiring intercultural competence. Students may pursue one or two languages and engage in experiential learning such as study abroad, internships, or language immersion programs. The program will enable students to explore and interpret the histories, institutions, values, practices, varieties, and intersections of global cultures as they are produced and received across national and regional boundaries.

The 39-credit major includes two core courses—Global Movements and Cultural Theory in a Global Age—as well as 12 credits of language study at the 200 level or above, 6 credits of experiential learning, and 15 upper-division elective credits. Students may take all upper-level electives in one language or split them between two, with the option to include interdisciplinary courses like Translation in a Global Context.

Unlike traditional language bachelor's programs, which separate language acquisition from cultural study, this BA program allows students to explore culture alongside or prior to language study, engage in the advanced study of more than one language—including heritage and third-language options—and connect with faculty around their interests early in their academic careers.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland College Park proposal for a Bachelor of Arts in Global Culture and Thought.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

1101 Thomas V. Miller, Jr. Administration Building
College Park, Maryland 20742
301.405.5803 TEL
301.314.9560 FAX

May 8, 2025

Chancellor Jay A. Perman
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:

I am writing to request approval for a new Bachelor of Arts program in Global Culture and Thought. The proposal for the new program is attached. I am also submitting this proposal to the Maryland Higher Education Commission for approval.

The proposal was endorsed by the appropriate faculty and administrative committees. I also endorse this proposal and am pleased to submit it for your approval.

Sincerely,

Darryll J. Pines
President
Glenn L. Martin Professor of Aerospace Engineering

DJP/mdc

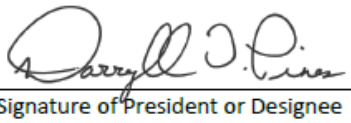
cc: Candace Caraco, Associate Vice Chancellor
Jennifer King Rice, Senior Vice President and Provost
Stephanie Shonekan, Dean, College of Arts and Humanities

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

x	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

University of Maryland, College Park
Institution Submitting Proposal

Global Culture and Thought
Title of Proposed Program

Bachelor of Arts	**Fall 2025**
Award to be Offered	Projected Implementation Date
119900	**09.0907**
Proposed HEGIS Code	Proposed CIP Code
School of Languages, Literatures, and Cultures	Hester Baer
Department in which program will be located	Department Contact
301-405-4101	hbaer@umd.edu
Contact Phone Number	Contact E-Mail Address
	05-08-2025
Signature of President or Designee	Date

A. Centrality to the University's Mission and Planning Priorities

Description. The University of Maryland, College Park (UMD) proposes to establish a **Bachelor of Arts in Global Culture and Thought**. This program will be housed within the College of Arts and Humanities' School of Languages, Literatures, and Cultures. The Global Culture and Thought program will foster the multilingual study of the cultures of the globalized world through classroom and experiential learning. The program will enable students to explore and interpret the histories, institutions, values, practices, varieties, and intersections of global cultures as they are produced and received across national and regional boundaries. Unlike traditional language bachelor's programs, which separate language acquisition from cultural study, this BA program allows students to explore culture alongside or prior to language study, engage in the advanced study of more than one language—including heritage and third-language options—and connect with faculty around their interests early in their academic careers.

Relation to Strategic Goals. As Maryland's flagship campus and a national leader in higher education, UMD strives to provide exceptional and affordable instruction for the state's most promising students, regardless of income. As one of the country's first land-grant institutions, UMD uses its research, educational, cultural, and technological strengths in partnership with state, federal, private, and non-profit sectors to promote economic development and improve the quality of life in the state and the region. One of the commitments listed in UMD's 2022 Strategic Plan, "Fearlessly Forward in Pursuit of the Public Good," is to "accelerate solutions to humanity's grand challenges—within our communities and around the globe." The BA program in Global Culture and Thought is designed to prepare students for the opportunities and challenges of citizenship, employment, and intellectual life in the globalized world. Cultivating multilingualism and critical awareness of humanity's grand challenges—including climate change, migration, transformations in media culture, medicine and health, and social justice issues—the curriculum develops students' knowledge of the interpretive methods of the liberal arts and humanities, while also offering the chance to apply this knowledge through internships, practicums, service-learning, and approved education abroad.

Funding. The program will draw on the physical facilities, administrative infrastructure and instructional resources already available within the School of Languages, Literatures, and Cultures and the College of Arts and Humanities.

Institutional Commitment. The program will be administered by the School of Languages, Literatures, and Cultures, which has the administrative infrastructure and faculty resources to shift some of its resources for this new program. As designed, the program will be a good fit for students who want to double-major with other programs across campus and world language programs in particular.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

Need. The Global Culture and Thought program addresses a compelling statewide societal need for globally competent, culturally literate, and multilingual graduates prepared to navigate an increasingly interconnected world. As Maryland's population diversifies and its economic and civic sectors deepen their engagement with global communities, the demand for professionals with strong intercultural understanding and communication skills grows more urgent. This program responds to that need by preparing students to think critically about global movements, cultural intersections, and social justice across national and regional boundaries.

The Global Culture and Thought BA integrates core interpretive methods of the humanities—such as textual analysis, historical contextualization, critical theory, and cross-cultural comparison—to help students analyze global texts, media, and cultural practices. These methods not only cultivate ethical reflection and critical thinking, but also develop the skills necessary for effective intercultural communication by teaching students to understand diverse worldviews, navigate cultural difference, and articulate ideas with sensitivity and clarity across linguistic and cultural boundaries. In doing so, the program equips students to engage thoughtfully and responsibly in a globally connected world.

State Plan. The proposed program aligns with Priority 5 in the 2022 *Maryland State Plan for Postsecondary Education*: "Maintain the commitment to high-quality postsecondary education in Maryland." The Action Item to "Identify innovative fields of study" fits with this program. Grounded in the humanities, the program reimagines cultural and language education through a flexible, interdisciplinary curriculum that emphasizes experiential learning, multilingualism, and critical engagement with global challenges. Rather than creating a new program with an entirely new set of courses, the program builds on the School of Languages, Literatures, and Cultures' extensive language offerings to allow students to integrate their interests in language and communication with specialized courses in global cultural studies. The program also follows action items listed under the State Plan's Priority 8: "Promote culture of risk-taking." It breaks from traditional disciplinary models by allowing students to study culture alongside or even before intensive language study, incorporates flexible curriculum designed to accommodate double majors, and embeds experiential learning directly into the degree requirements. This adaptive, student-centered design exemplifies the kind of thoughtful innovation the State Plan calls for—offering new academic pathways that reflect how students learn best and how they will engage the world beyond graduation.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

Market demand data does not lend itself to liberal arts programs such as this in a straightforward way. We expect many students to double major with other academic programs. The program will provide added value to any career where strong intercultural communication skills, global awareness, and the ability to analyze complex cultural and social issues are an asset. According to the Maryland Department of Labor, several relevant occupational categories were projected to grow significantly between 2022-2032, including community health (17%), public relations specialists (9%) and postsecondary teaching in area and cultural

studies (14%).[1] These are just a few of the fields that would benefit from the linguistic proficiency, cultural literacy, and analytical capabilities that the Global Culture and Thought BA develops.

Employer surveys conducted by the American Council on the Teaching of Foreign Languages (ACTFL) have identified an urgent and growing demand for multilingual employees, with 90% of U.S. employers relying on workers who speak languages other than English and 32% reporting high dependency. Many employers report difficulty finding candidates with sufficient language skills—an issue this program is designed to address. As Maryland continues to diversify, the Global Culture and Thought BA directly responds to the regional workforce need for graduates who can navigate cross-cultural contexts and contribute meaningfully to multilingual, globalized work environments. The program expects to graduate approximately 15–20 students annually at steady state, a modest number that will help meet this demand without duplicating existing programs in the state.

D. Reasonableness of Program Duplication

The BA in Global Culture and Thought is distinct from other programs in Maryland and does not present an unreasonable duplication of existing offerings. While a small number of institutions in the state offer degrees in global or international studies, these programs are typically situated within political science or social science departments and emphasize international relations, economics, or policy. In contrast, the Global Culture and Thought BA is firmly grounded in the humanities, with a curriculum centered on language study, literary and cultural analysis, and interpretive methods drawn from fields such as history, media studies, and cultural theory. The curriculum draws entirely from within the School of Languages, Literatures, and Cultures, ensuring coherence and depth while enabling cross-cultural engagement across a wide array of languages and regional perspectives. Thus, intercultural communication is really the focus of the program.

Given the program's distinctive structure, emphasis on the humanities, and modest projected enrollment (15–20 graduates per year), the Global Culture and Thought BA complements rather than competes with existing programs in the state and contributes meaningfully to the diversity of Maryland's higher education landscape.

E. Relevance to Historically Black Institutions (HBIs)

The Global Culture and Thought BA is not anticipated to negatively impact programs at Maryland's Historically Black Institutions (HBIs). While some HBIs offer programs with related themes, such as global studies or interdisciplinary perspectives, the Global Culture and Thought program is uniquely focused on the humanities, with a strong emphasis on language learning, literary and cultural analysis, and interpretive methods grounded in fields such as history,

[1] Maryland State Department of Labor: Maryland Long Term Occupational Projections (2022-2032): https://labor.maryland.gov/lmi/iandoproj/maryland.shtml

media studies, and cultural theory. It also includes a robust experiential learning component and is housed entirely within the School of Languages, Literatures, and Cultures.

For example, Coppin State University offers a BA in Global Studies, but its curriculum focuses more heavily on international affairs and does not have a comparable emphasis on multilingualism or humanities-based inquiry. Similarly, Morgan State University's BS in Interdisciplinary Global Perspectives and Practices is situated in a social science framework and does not require language study.

F. Relevance to the identity of Historically Black Institutions (HBIs)

We do not anticipate any negative impacts on the identities of Maryland's Historically Black Institutions. As noted above, the proposed Global Culture and Thought program is rooted in the humanities and housed within the School of Languages, Literatures, and Cultures, drawing on existing language and culture courses. The curricular design—centered on multilingualism, cultural theory, and experiential learning—does not overlap with the focus of existing HBI programs. Given its distinctive emphasis and modest projected enrollment, the Global Culture and Thought BA enriches the state's higher education landscape while fully respecting the uniqueness and mission of Maryland's HBIs.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

Curricular Development. The Global Culture and Thought curriculum was developed in response to both external and internal drivers. A 2018 ACTFL survey found that 90% of U.S. employers rely on employees with language skills beyond English, but many face a language skills gap—highlighting the urgent need for culturally competent, multilingual professionals. Internally, a 2017 survey of nearly 1,900 students in language courses revealed strong interest in language learning for professional purposes, but many cited scheduling conflicts as a barrier to majoring in a language. The Global Culture and Thought BA addresses these challenges with a flexible, interdisciplinary program to better accommodate double majors. The curriculum was collaboratively developed and refined by an interdisciplinary faculty committee to ensure academic rigor and alignment with evolving student needs and institutional priorities.

Faculty Oversight. The School of Languages, Literatures, and Cultures will provide academic direction and oversight for the program. Appendix A has a list of faculty who will teach in the program.

Educational Objectives and Learning Outcomes. The major in Global Culture and Thought is designed to prepare students for the opportunities and challenges of citizenship, employment, and intellectual life in the globalized world. With an emphasis on intercultural communication, multilingualism, and critical approaches to understanding diversity, Global Culture and Thought teaches fundamental skills required for a range of professional careers: critical thinking; historical awareness; research; information and media literacy; cogent development of ideas; analysis and argumentation; ability to work individually and as part of a team; and effective

communication in written, oral, and digital contexts. The learning outcomes for the program are as follows:

1. Demonstrate knowledge of the histories, institutions, values, practices, varieties, and intersections of global cultures as they are produced and received across national and regional boundaries.
2. Use the terminology and interpretive methods of humanities disciplines, including cultural theory, to interpret and analyze global movements and literary, cultural, and media texts.
3. Critically analyze issues of power related to gender, sexuality, class, race/ethnicity, and/or mental and physical disability with attention to differences across time, geography, and culture and with critical awareness of one's own worldview, values, and biases.
4. Critically interpret literary, cultural, and media texts reflecting a diversity of perspectives in a variety of genres with specific attention to their social, historical, and linguistic contexts, and formulate original arguments with reference to appropriate evidence and secondary sources.
5. Communicate effectively in written, oral, and digital forms, with the academic community and with the broader public.
6. Demonstrate an appropriate level of proficiency in at least one language other than English.

Institutional assessment and documentation of learning outcomes. Please see Appendix C for information about assessing the program's learning outcomes.

Course requirements. The Bachelor of Arts in Global Culture and Thought program will require 39 credits and will draw from existing world language courses. A list of courses and descriptions is included in Appendix B. Please note that GLBC will be a new course prefix and does not yet exist in the current academic catalog.

Course	**Course Title**	**Credits**
Core Courses		
GLBC200	Global Movements	**3**
GLBC360	Cultural Theory in a Global Age	**3**
Language Study (select one of the following options)		**12**
One language: 12 credits at the 200-level or above	(12 Credits in one language; see list below)	
or		
Two languages: 6 credits in each language at the 200-level or above	(6 credits in one language and 6 credits in another; see list below)	
Experiential Learning (choose from the following to total 6 credits)		**6**

Various	Education abroad, internships, on-campus learning communities (e.g., Language House, Language Partner Program), or experiential courses (e.g., ARAB386, CHIN369)	
Upper-Division Electives (select one of the following options)		**15**
One language: 15 credits at the 300-level or above in one language	(15 credits in one language program or in Cinema and Media Studies; see list below)	
or		
Two languages: 9 credits in one language, 6 in another language, all at 300-level or above	(9 credits in one language and 6 credits in another language; see list below; Cinema and Media Studies may also be used)	
Optional course (may be used to complete the 15-credit Upper-Division Elective requirement		
GLBC350	Translation in Global Context (3 credits)	

List of approved languages:

Arabic	Hebrew	Persian
Chinese	Italian	Portuguese
French	Japanese	Russian
German	Korean	Spanish

General Education. All UMD students are required to complete General Education requirements in Fundamental Studies (Mathematics, Writing, and Analytic Reasoning) and Distributive Studies in the sciences, humanities, and social sciences. The Distributive Studies area includes a diversity requirement, two practice-based courses, and two "Big Question" courses that address societal grand challenges. Maryland community college students who complete the associate degree and are admitted to UMD are deemed to have completed their General Education requirements, except for Professional Writing (typically completed in the 3rd year of study). See Appendix E for how students in the program will fulfill their General Education requirements.

Accreditation or Certification Requirements. There are no specialized accreditation or certification requirements associated with this program.

Other Institutions or Organizations. The School of Languages, Literatures, and Cultures is not planning to contract with another institution or non-collegiate organization for this program.

Student Support. Students enrolled in this program will have access to all the resources necessary to succeed in the program and make the most of the learning opportunity. Students entering the university as either first-time college students or transfer students will learn about the program through their orientation program. The School of Languages, Literatures, and Cultures' existing advising staff will support the students in this program. The School does not

anticipate the proposed program placing significant additional burdens on the department's administrative infrastructure.

Marketing and Admissions Information. The program will be clearly and accurately described in the university website and be marketed at university recruiting events. The University of Maryland's Office of Undergraduate Admissions markets nationally to a broad base of interested students who are admitted to the University as a whole. If the program is approved, it will be included among the more than 100 possible undergraduate majors available to students.

H. Adequacy of Articulation

While UMD accepts transfer students from all Maryland community colleges as well as from other four-year institutions, Montgomery College is one of our most common partners for transfers. UMD and Montgomery College have developed a transfer articulation pathway with the proposed major and the A.A. in International Studies at Montgomery College. See Appendix D.

I. Adequacy of Faculty Resources

Program faculty. Appendix A contains a list of faculty members who will teach in the program. Because the program leverages existing course offerings in the School of Languages, Literatures, and Cultures, a core group of faculty is already in place.

Faculty training. Faculty teaching in the program will use the university's learning management system along with its extensive electronic resources. They will have access to instructional development opportunities available across the College Park campus, including those offered as part of the Teaching and Learning Transformation Center, many of which are delivered in a virtual environment. Instructors will work with the learning design specialists on campus to incorporate best practices when teaching in the online environment.

J. Adequacy of Library Resources

The University of Maryland Libraries assessment concluded that the Libraries are able to meet, with current resources, the curricular and research needs of the program.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Resources

All physical facilities, infrastructure, and instructional equipment are already in place. No new facilities are required. The proposed program will be in-person, but for the online components of the coursework, UMD maintains an Enterprise Learning Management System (ELMS). ELMS is a Web-based platform for sharing course content, tracking assignments and grades, and enabling virtual collaboration and interaction. All students and faculty have access to UMD's electronic mailing system.

L. Adequacy of Financial Resources

The budget tables reflect the reallocation of internal UMD resources to operate the program.

Resources (see Table 1):
This table assumes an enrollment of 20 full-time students and 5 part-time students per year. The reallocated resources reflect that (1) some funds will be shifted from within the College of Arts and Humanities and School of Languages, Literatures, and Cultures to support new courses and (b) existing language courses have the capacity to handle students in the major.

1. Line 1 reflects the reallocated resources anticipated to support the program.
2. We assume no additional tuition revenue will be generated by this new major since we do not anticipate a significant change in the overall undergraduate population.
3. Our model assumes that most students will be full-time undergraduates enrolled at UMD.
4. No external sources of funding are assumed.
5. No other sources of funding are assumed.

Expenditures (see Table 2):
The administrative staff and faculty are already in place to operate this program. A small number of new courses will be offered for the major, but we expect no significant additional expenditures for the program.

1. Line 1 reflects the faculty who will teach the new courses in the program as well as the faculty who will continue their activities within their School of Languages, Literatures, and Cultures unit (e.g., French, Spanish, etc.).
2. Line 2 reflects the administrative support, which is also already in place in the School of Languages, Literatures, and Cultures.
3. Generally, facility, equipment, and other expenses are not listed as they are already part of the School's operating expenses. However, $5000 has been allotted to cover miscellaneous operational expenses.

M. Adequacy of Program Evaluation

Formal program review is carried out according to the University of Maryland's policy for Periodic Review of Academic Units, which includes a review of the academic programs offered by, and the research and administration of, the academic unit (http://www.president.umd.edu/policies/2014-i-600a.html). Program Review is also monitored following the guidelines of the campus-wide cycle of Learning Outcomes Assessment (https://irpa.umd.edu/Assessment/loa_overview.html). Faculty within the department are reviewed according to the University's Policy on Periodic Evaluation of Faculty Performance (http://www.president.umd.edu/policies/2014-ii-120a.html). Since 2005, the University has used an online survey instrument that standardizes student course feedback across campus. The survey has standard, university-wide questions and allows for supplemental, specialized questions from the academic unit offering the course.

N. Consistency with Minority Student Achievement goals

The Global Culture and Thought BA is deeply aligned with the goals of promoting access, inclusion, and success for minority students. Issues regarding race, equity, and justice are prominent within the curriculum. The program fosters critical engagement with global cultures, identities, and power structures. The program also builds on the School of Languages, Literatures, and Cultures' long-standing commitment to inclusive pedagogy, diverse faculty hiring, and multilingual education. Advising and mentoring are designed to support students from a wide range of backgrounds, and outreach efforts—such as recruitment through Maryland Day, the Language House, and collaborations with ARHU and the Office of Undergraduate Admissions—prioritize engaging underrepresented student populations. In all these ways, the Global Culture and Thought BA directly contributes to the University of Maryland's strategic commitment to excellence through diversity and student achievement.

O. Relationship to Low Productivity Programs Identified by the Commission

N/A

P. Adequacy of Distance Education Programs

This program is not intended for distance education.

Table 1: Resources

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1.Reallocated Funds	$175,000	$180,250	$185,658	$191,227	$196,964
2. Tuition/Fee Revenue (c+g below)	$0	$0	$0	$0	$0
a. #FT Students	10	20	20	20	20
b. Annual Tuition/Fee Rate	$23,025	$23,716	$24,428	$25,160	$25,915
c. Annual FT Revenue (a x b)	$230,254	$474,323	$488,553	$503,210	$518,306
d. # PT Students	5	5	5	5	5
e. Credit Hour Rate	$910.25	$937.56	$965.68	$994.65	$1,024.49
f. Annual Credit Hours	12	12	12	12	12
g. Total Part Time Revenue (d x e x f)	$54,615	$56,253	$57,941	$59,679	$61,470
3. Grants, Contracts, & Other External Sources	$0	$0	$0	$0	$0
4. Other Sources	$0	$0	$0	$0	$0
TOTAL (Add 1 - 4)	**$175,000**	**$180,250**	**$185,658**	**$191,227**	**$196,964**

Table 2: Expenditures

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	$133,000	$136,990	$141,100	$145,333	$149,693
a. #FTE	1	1	1	1	1
b. Total Salary	$100,000	$103,000	$106,090	$109,273	$112,551
c. Total Benefits	$33,000	$33,990	$35,010	$36,060	$37,142
2. Admin. Staff (b+c below)	$30,377	$31,289	$32,227	$33,194	$34,190
a. #FTE	0.25	0.25	0.25	0.25	0.25
b. Total Salary	$22,840	$23,525	$24,231	$24,958	$25,707
c. Total Benefits	$7,537	$7,763	$7,996	$8,236	$8,483
3. Total Support Staff (b+c below)	$0	$0	$0	$0	$0
a. #FTE	0	0	0	0	0
b. Total Salary	$0	$0	$0	$0	$0
c. Total Benefits	$0	$0	$0	$0	$0
4. Graduate Assistants (b+c)	$0	$0	$0	$0	$0
a. #FTE	0	0	0	0	0
b. Stipend	$0	$0	$0	$0	$0
c. Tuition Remission	$0	$0	$0	$0	$0
d. Benefits	$0	$0	$0	$0	$0
5. Equipment	$0	$0	$0	$0	$0
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7. Other Expenses: Operational Expenses	$5,000	$5,000	$5,000	$5,000	$5,000
TOTAL (Add 1 - 8)	**$163,377**	**$168,279**	**$173,327**	**$178,527**	**$183,882**

Appendix A: Core Faculty

The following faculty members are projected to teach in the program. All faculty are full-time unless otherwise indicated.

Name	Highest Degree/Institution	UMD Position	Possible Courses
Accilien, Cécile	Ph.D. Tulane U	Professor	Haitian Culture and Identity; Cultures of the African Diaspora
Alvizu, Josh	Ph.D. Yale U	Assistant Professor	The Great Derangement: Climate, Art, and Literature; The German-Soviet Avant Garde
Anishchenkova, Valerie	Ph.D. U Michigan	Associate Professor	Ideology of Stereotyping: American and Middle Eastern Film and Television; Filming War Zones: Representations of Wars in Iraq & Chechnya
Arsenjuk, Luka	Ph.D. Duke U	Associate Professor	Paranoia and Conspiracy in Contemporary Film; Film Theories: Marxism and Cinema; Cultural Theory in a Global Age
Baer, Hester	Ph.D. Washington U	Professor	Speculative Visions in Contemporary Literature and Film; Feminist Film and Media Theory; Global Movements; Cultural Theory in a Global Age
Benharrech, Sarah	Ph.D. Princeton U	Associate Professor	Science and Fiction in the Anthropocene; Cultural Visions of Vegetal Alterity
Beliaeva Solomon, Maria	Ph.D. New York U	Assistant Professor	Colonial Imaginaries in 19th Century Literature and Print Culture; Digital Humanities in Modern Language Studies
Browne, Jyana	Ph.D. U Washington, Seattle	Assistant Professor	Performance and Sexuality in Early Modern Japan; Technologies of Japanese Performance
Eades, Caroline	Ph.D.Université de la Sorbonne	Professor	Women and French Cinema; Film Art in a Global Society
Falvo, Guiseppe	Ph.D. Johns Hopkins U	Professor	Monsters and Demons: The Faces of Evil in Dante's Inferno; The Dark Side of the Italian Renaissance
Federici, Valeria	Ph.D. Brown U	Lecturer	Digital Humanities in Modern Language Studies; Women in Italian Cinema and Television; Global Movements
Frisch, Andrea	Ph.D. UC Berkeley	Professor	Early Modern Print Cultures; Marking Identity in the Early Modern Era

Gaul, Anny	Ph.D. Georgetown U	Assistant Professor	Food Cultures in the Global Middle East; Gender and Difference in the Arab World
He, Belinda	Ph.D. U Washington, Seattle	Assistant Professor	Where Truth Lies: Chinese Cinema Between Fact and Fiction; In the Mood for Cinema: Film and Love in East Asia
Keshavarz, Fatemeh	Ph.D. University of London	Professor	International Cinemas; Iranian Life in Literature and Film
Koser, Julie	Ph.D. UC Berkeley	Associate Professor	Criminals In German Literature and Film; Once Upon a Time: Fairy Tales of the Brothers Grimm; **Translation in a Global Context**
Lavery, Michael	Ph.D. UCLA	Assistant Professor	Museums, Masterworks, and Memes: Exploring Russophone Visual Cultures; The Soviet Union, Latin American Culture, and the Cold War
Lima, Thayse	Ph.D. Brown U	Associate Professor	Brazilian Cinema; Environmental Crisis in Latin America
Long, Ryan	Ph.D. Duke U	Professor	Representations of Childhood and Adolescence in Latin American and US Latinx Literature and Film; Approaches to World Literature: The Case of Roberto Bolaño; Global Movements; Cultural Theory in a Global Age
Mason, Michele M.	Ph.D. UC Irvine	Associate Professor	Japan from the Margins; Japanese Empire; Global Movements; Translation in a Global Context
Matar, Marylin	Ph.D. University of Maryland	Clinical Assistant Professor	Voices of the Francophone World: Migration, Exile, and Contemporary Challenges; Francophone Literature of the Middle East
Merediz, Eyda	Ph.D. Princeton U	Associate Professor	Transnational Cuban Cinema and Literature; Transatlantic Cultures
Miller, Matthew	Ph.D. Washington U	Assistant Professor	Sex, Gender, Sexuality in the Islamic World; Digital Humanities for Modern Language Studies
Orlando, Valerie	Ph.D. Brown U	Professor	Francophone Writers of Africa and the African Diaspora; Francophone African Film

Papazian, Elizabeth	Ph.D. Yale U	Associate Professor	Soviet Cinema and Empire; Soviet Cinema and Culture After Stalin
Penrose, Mehl	Ph.D. UCLA	Associate Professor	Queer Spain; Gender and Sexuality in the European Enlightenment
Resmini, Mauro	Ph.D. Brown U	Associate Professor	Italian Cinema: Neorealism; Images of Revolt: Strike, Riot, Uprising; Global Movements; Cultural Theory in a Global Age
Schine, Rachel	Ph.D. U Chicago	Assistant Professor	Making of Middle Eastern Identities; Premodern Race and Religion in Global Perspective
Schonebaum, Andrew	Ph.D. Columbia U	Associate Professor	Living the Good Life: Chinese Philosophy in the Modern World; Cultural Histories of Chinese Medicine
Zakim, Eric	Ph.D. UC Berkeley	Associate Professor	American Jewish Comedy: From the Marx Brothers to "The Marvelous Mrs. Maisel"; The Global Western

Appendix B: Course Descriptions

Core Sequence

The core sequence consists of six credits, taken in this order:

- **a.** GLBC 200: Global Movements (3 credits)
- **b.** GLBC 360: Cultural Theory in a Global Age (3 credits)

GLBC 200: Global Movements (3) is a required gateway course team-taught by faculty with varied cultural and linguistic expertise. The course, which focuses on a special topic with global relevance (e.g. migration; climate change; new authoritarianisms; democracy and citizenship) and includes a service-learning component, also serves as an introduction to the interpretive methods of the humanities. The course will be offered each semester, with each faculty team offering an incarnation that draws on their particular research and teaching interests.

GLBC 360: Cultural Theory in a Global Age (3) is a required advanced course that will develop students' knowledge of the theories and methodologies of humanities study while also cultivating their ability to interpret cultural texts. Prerequisite: GLBC 200.

Language Study

Students must take 12 credits at the 200-level or above in any language taught in SLLC. This requirement is satisfied through one of two paths:

a. 12 credits at the 200-level or above in one language other than English.

b. 6 credits at the 200-level or above in each of two languages other than English.

Please note that the languages taught in SLLC fall under these program prefixes: ARAB, CHIN, FREN, GERS, HEBR, ITAL, JAPN, KORA, PERS, PORT, RUSS, and SPAN.

Experiential Learning

This requirement may be satisfied through study abroad; domestic or international internships; and/or participation in on-campus learning communities, including the Language Partner Program or the Language House Living-Learning Program (up to 3 credits).

Any existing experiential learning course, such as ARAB 386 or CHIN 369, can also help fulfill this requirement.

Upper-Division Electives

Electives are to be selected from the existing course offerings of one, or a maximum of two, SLLC programs offered under the following prefixes: ARAB, CHIN, CINE, FREN, GERS, HEBR, ITAL, JAPN, KORA, PERS, PORT, RUSS, and SPAN. Students may therefore select:

a. Five courses at the 300-level or above in one SLLC program (e.g. ARAB 302: Arab Culture and Society II, ARAB 317: Key Moments in the History of the Middle East, ARAB 398M: Making of

Middle Eastern Identities, ARAB 499Z: Moroccan Society and Culture, ARAB 410: Ideology of Stereotyping: American and Middle Eastern Film and Television).

b. Three courses at the 300-level or above in one SLLC program (e.g. ARAB 302: Arab Culture and Society II, ARAB 317: Key Moments in the History of the Middle East, ARAB 398M: Making of Middle Eastern Identities) and two courses in a second SLLC program (e.g. FREN 313: Current Issues in the French-Speaking World, FREN 498G: Gender, Identity, and Race in France and the Francophone World).

The major elective GLBC 350: Translation in a Global Context may substitute for any of the courses with the prefixes noted above, and is strongly encouraged:

GLBC 350: Translation in a Global Context (3) examines the theory and practice of translation in a globalized and multilingual world. In addition to studying concepts, strategies, and problems of translation with a special focus on literary translation, students will undertake a guided translation project and produce a commentary and reflection on the process. Prerequisite: 6 credits at the 200-level or above in any language taught in SLLC, or permission of the advisor.

Microcourses

An innovation of the Global Culture and Thought major will be the introduction of microcourses, 1-credit courses that may be combined by students for credit toward the Experiential Learning and Upper-Division Elective requirements. These courses will facilitate curricular innovation in the major while also offering flexibility for students, who may enroll in one or more microcourses per semester. Microcourses may be used to offer supplemental language instruction (tied to a course held in English); as standalone short or block-format courses related to current events or relevant topics; as practicums focused on skills and professionalization; and as service-learning opportunities, among other possibilities.

Existing SLLC Course Offerings, Including Language Courses, Electives, and Courses in Experiential Learning

The complete listing of SLLC offerings can be found in UMD's catalog, here.

Appendix C: Plan for Learning Outcomes Assessment

GLBC Learning Outcomes Assessment Plan		AY 25-26		AY 26-27		AY 27-28		AY 28-29	
Goal	Goal Description	Fall '25	Spr '26	Fall '26	Spr '27	Fall '27	Spr '28	Fall '28	Spr '29
LO1	Demonstrate knowledge of the histories, institutions, values, practices, varieties, and intersections of global cultures as they are produced and received across national and regional boundaries.		**C A**				**C A**		
LO2	Use the terminology and interpretive methods of humanities disciplines, including cultural theory, to interpret and analyze global movements and literary, cultural, and media texts.			**C A**					
LO3	Critically analyze issues of power related to gender, sexuality, class, race/ethnicity, and/or mental and physical disability with attention to differences across time, geography, and culture and with critical awareness of one's own worldview, values, and biases.					**C A**			
LO4	Critically interpret literary, cultural, and media texts reflecting a diversity of perspectives in a variety of genres with specific attention to their social, historical, and linguistic contexts, and formulate original arguments with reference to appropriate evidence and secondary sources.		**C A**						
LO5	Communicate effectively in written, oral, and digital forms, with the academic community and with the broader public.				**C A**				

LO6	Demonstrate an appropriate level of proficiency in at least one language other than English.							**C A**	**C A**
Collect		**0**	**2**	**1**	**1**	**1**	**1**	**1**	**1**
Analyze		**0**	**2**	**1**	**1**	**1**	**1**	**1**	**1**

***Note*. C = collect; A = Analyze**

The above chart outlines the four-year plan for assessing learning outcomes for the Global Culture and Thought BA program. Each semester (beginning with the implementation of the major in Spring 2025), the LOA committee will collect data to assess student progress toward one or two of the major's learning outcomes. Data collection for LOs 1-5 will occur primarily in the core courses for the major, GLBC 2xxx: Global Movements and GLBC 3xxx: Cultural Theory in a Global Age; data may also be collected from the major elective GLBC 3xxx: Translation in a Global Context and/or from any elective course in which a significant group of majors enrolls. The committee will consult with course instructors to collect an appropriate sample of student assignments to assess for each LO (these may include papers, exams, digital assignments, audiovisual recordings, and more). Because the major allows students to pursue proficiency in a broad array of languages – meaning that enrollments will be distributed across a broad array of courses - LO6 will need to be assessed using a different process. The committee will work with the GLBC major advisor to create a tool that allows for assessment of students' language proficiency in consultation with the instructors of major electives held in the target language.

Appendix D Program Transfer Agreement Pathway with Montgomery College

MONTGOMERY COLLEGE A.A. in Arts and Sciences – International Studies area of concentration			UNIVERSITY OF MARYLAND B.A. in Global Culture and Thought	CATALOG YEAR: 2025-26
CREDITS	**MONTGOMERY COLLEGE** Requirements for Associate's Degree		**UNIVERSITY OF MARYLAND** Requirements for Bachelor's Degree	
3	ENGL 101 Introduction to College Writing*		Lower-level Elective	
3	MATH117 Elements of Statistics† (MATF)		STAT100	
3	POLI101 American Government (BSSD)		GVPT170	
3	HIST114 or HIST116 or HIST117 (HUMD)		See UMD note **	
3	World Language^		See UMD note*	
3	ENGL102 Critical Reading, Writing and Research (ENGF)		ENGL101	
3	ECON 202 or GEOG130 (BSSD)		ECON200 or GEOG110	
3	POLI203 International Relations		GVPT200	
3	World Language^		See UMD note*	
3	Arts Distribution (ARTD)		See UMD note***	
3	ECON201 Principles of Economics I		ECON201	
3	World Language^		See UMD note*	
3	HIST245 OR HIST247 OR HIST250 OR HIST252 OR HIST266 (GEIR)		See UMD note+	
3	POLI211 Comparative Politics and Government		GVPT280	
3	Natural Sciences Distribution without Lab (NSND)		See UMD note***	
3	COMM 108 or COMM 112 (GEIR)		COMM107	
4	Natural Sciences Distribution with Lab (NSLD)		See UMD note***	
3	World Language^		See UMD note*	
3	POLI205 Introduction to Human Rights		Lower-Level Elective	
3	ENGL201 Introduction to World Literature I (see alternatives ±±)		See UMD note++	
61	**TOTAL CREDITS TRANSFERRED**			

REMAINING UMD DEGREE REQUIREMENTS - RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE	
GLBC 350 Translation in a Global Context	3
300 or 400-Level SLLC Elective	3
Professional Writing (FSPW)	3
SPAN301 Advanced Grammar and Composition I (or equivalent level course in French)	3
Elective	3
SLLC Study Abroad 1xx-4xx	6
Elective	3
Elective	3
300 or 400-Level Elective	3
GLBC 360 Cultural Theory in a Global Age	3
300 or 400-Level SLLC Elective	3
Elective	3
300 or 400-Level Elective	3
300 or 400-Level Elective	3
300 or 400-Level SLLC Elective	3
300 or 400-Level SLLC Elective	3
Elective	2
300 or 400-Level Elective	3
300 or 400-Level Elective	3
TOTAL CREDITS REMAINING AT UNIVERSITY OF MARYLAND	**59**

MONTGOMERY COLLEGE NOTES

Suggested 1st Semester
Suggested 2nd Semester
Suggested 3rd Semester
Suggested 4th Semester

*If needed for ENGL102. If not, becomes Elective.

† MATH117 recommended, but MATH150 or MATH181 are also acceptable. If lower math placement is achieved, student should work towards completion of one of these courses through elective space.

±± ENGL122, ENGL202, ENGL205, ENGL208, ENGL213, ENGL214, ENGL248, GHUM101, HIST255, PHIL209

^ Students may satisfy the World Language requirements by completing either of the following two sequences:
SPAN 103, SPAN201, SPAN202, and SPAN215
FREN 101, FREN 102, FREN 201, and FREN 202

UNIVERSITY OF MARYLAND NOTES

* If students complete four approved World Language courses at Montgomery College (MC), they will have completed UMD's College of Arts & Humanities Global Engagement Requirement and 75% of the World Language requirement for the Global Culture and Thought Major. Students will complete the final 25% (one World Languages course) upon transfer to UMD.

** HIST114, HIST116, and HIST117 do not have specific UMD course equivalencies, but each count as a 3-credit UMD General Education Distributive Studies Humanities requirement.

*** MC students must select from approved MC General Education category course options; UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but will at minimum count for a UMD elective course.

+ HIST245, HIST247, HIST252, and HIST266 are also approved for UMD GenEd Understanding Plural Societies (DVUP) requirement.

++ ENGL201 and its alternatives (see MC note ±± above): UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but course chosen at minimum will count for a UMD elective course.

Re: International Studies Concentration - Global Cultures Program Pathway

1 message

Rhoe, Angela M <Angela.Rhoe@montgomerycollege.edu> Wed, May 7, 2025 at 6:03 PM
To: Michael D Colson <mcolson@umd.edu>

To:

From: Angela Rhoe, Director of Strategic Alliances

Subject: **Pending Articulation Agreement with the University of Maryland**

Date: May 7, 2025

In accordance with COMAR requirements regarding the establishment of new academic programs, this memorandum serves as notice that Montgomery College is in the process of finalizing a 2+2 articulation pathway from the Associate of Arts in Arts and Sciences – International Studies Area of Concentration to the University of Maryland's proposed Global Culture & Thought Bachelor of Arts.

Conversations between Montgomery College and the University of Maryland have occurred to ensure alignment of coursework and the seamless transfer of students under this proposed pathway. Both institutions have reviewed the curriculum, identified corresponding courses, and are collaboratively working toward the formalization of the articulation agreement.

We appreciate your consideration of this documentation as part of the program approval process. Please do not hesitate to contact me should you require any additional information or clarification.

Angela Rhoe

Director of Strategic Alliances

Montgomery College

Office of Academic Affairs

Appendix E: B.A. in Global Culture and Thought Four-Year Template (with General Education code)

Year 1	Fall		Spring	
	Course	Credit	Course	Credit
	ENGL101 (AW)	3	Natural Sciences (NS)	3
	Math (MA)	3	Analytic Reasoning (AR)	3
	ARHU158	3	SLLC Language 2xx-4xx	3
	GLBC200 (Benchmark)	3	History/Social Science (HS/UP)	3
	SLLC Language 2xx-4xx	3	Humanities (HU/IS)	3
	Total	**16**	**Total**	**15**
Year 2	Fall		Spring	
	Course	Credit	Course	Credit
	SLLC Language 2xx–4xx	3	SLLC Language 2xx–4xx	3
	Oral Communication (OC)	3	Scholarship in Practice (SP) #1	3
	Humanities (HU/UP)	3	Natural Science Lab (NL)	4
	History/Social Science (HS/IS)	3	Elective 1xx–4xx	3
	Elective 1xx–4xx	3	Elective 1xx–4xx	3
	Total	**15**	**Total**	**16**
Year 3	Fall		Spring	
	Course	Credit	Course	Credit
	GLBC 360	3	Study Abroad or SLLC Experiential Learning (6 credits)	3
	Professional Writing (PW)	3	SLLC Language 2xx–4xx	3
	SLLC Elective 3xx–4xx	3	Elective 1xx–4xx	3
	SLLC Elective 3xx–4xx	3	GLBC 350 (major elective, strongly encouraged)	3
	SLLC Elective 3xx–4xx	3	Elective 3xx–4xx	3
	Total	**15**	**Total**	**15**
Year 4	Fall		Spring	
	Course	Credit	Course	Credit
	Scholarship in Practice (SP) #2**	3	Elective 3xx–4xx	3
	SLLC Elective 3xx–4xx	3	Elective 3xx–4xx	3
	Elective 3xx–4xx	3	Elective 1xx–4xx	3
	Elective 3xx–4xx	3	Elective 1xx–4xx	3
	Elective 1xx–4xx	3	Elective 3xx–4xx	2
	Total	**15**	**Total**	**14**
			Total Credits	**120**

University of Maryland General Education Requirements Overview

Fundamental Studies: 15 Credits

Fundamental Studies Academic Writing	3	AW
Fundamental Studies Professional Writing	3	PW
Fundamental Studies Oral Communication	3	OC
Fundamental Studies Mathematics	3	MA
Fundamental Studies Analytic Reasoning[1]	3	AR

[1] If a student passes an Analytic Reasoning course that requires a Fundamental Studies Math course as a prerequisite, then the Fundamental Studies Math course is considered to be fulfilled (e.g., students who place into and pass a calculus course, which counts for FS-AR, do not need to take a less advanced Math course to fulfill the FS-MA requirement).

Distributive Studies: 25 Credits

Distributive Studies Natural Sciences	3	NS
Distributive Studies Natural Science Lab Course[2]	4	NL
Distributive Studies History and Social Sciences	6	HS
Distributive Studies Humanities	6	HU
Distributive Studies Scholarship in Practice[3]	6	SP

[2] A second DS-NL course can fulfill the DS-NS course requirement.

[3] Students learn and practice skills of critical evaluation and participate in the process of applying knowledge in the pursuit of a tangible goal. At least one course must be outside of the major.

Big Question Courses: 6 Credits [4]

The signature courses of the UMD General Education program, Big Question courses investigate a significant issue in depth and demonstrate how particular disciplines and fields of study address problems.

Big Question Course	6	IS

[4] Big Question credits may be double-counted with courses taken for the Distributive Studies requirement.

Diversity: 4-6 Credits[5]

Diversity Understanding Plural Societies[6] Courses examine how diverse cultural and ethnic groups co-exist.	3-6	UP
Diversity Cultural Competence Courses help students develop skills to succeed in a diverse world.	0-3	CC

[5] These credits may be double-counted with courses taken for the Distributive Studies requirement.

[6] Students may take either two DV-UP courses or one DV-UP course and one DV-CC course.

TOPIC: University of Maryland, College Park proposal for a Bachelor of Arts in Global and Foreign Policy

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The University of Maryland, College Park proposes a Bachelor of Arts in Global and Foreign Policy, an interdisciplinary degree housed in the School of Public Policy and collaboratively delivered with the Departments of History, Agricultural and Resource Economics, and the School of Languages, Literatures, and Cultures. The program equips students to address global challenges—such as conflict, migration, development, and sustainability—through a career-focused curriculum that blends academic rigor with professional training. Students complete 52–59 credits, including core courses in global policy, ethics, economic development, pluralism, and history, along with skill-based courses in statistics, research methods, and policy analysis. World language proficiency is required, and students select one of three thematic tracks—Security and Diplomacy; Human Security and Migration; or Development and Sustainability. The program's emphasis on experiential learning—via internships, capstones, or study abroad—ensures students graduate with practical experience. Located near Washington, D.C., students have unmatched access to global policy institutions, think tanks, and NGOs. The program is designed to prepare graduates for roles in public service, international organizations, development firms, and global industries, with a strong foundation in interdisciplinary policy analysis and ethical engagement.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland College Park proposal for a Bachelor of Arts in Global and Foreign Policy.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

1101 Thomas V. Miller, Jr. Administration Building
College Park, Maryland 20742
301.405.5803 TEL
301.314.9560 FAX

April 25, 2025

Chancellor Jay A. Perman
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:

I am writing to request approval for a new Bachelor of Arts program in Global and Foreign Policy. The proposal for the new program is attached. I am also submitting this proposal to the Maryland Higher Education Commission for approval.

The proposal was endorsed by the appropriate faculty and administrative committees. I also endorse this proposal and am pleased to submit it for your approval.

Sincerely,

Darryll J. Pines
President
Glenn L. Martin Professor of Aerospace Engineering

DJP/mdc

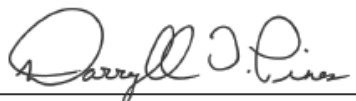
cc: Candace Caraco, Associate Vice Chancellor
Jennifer King Rice, Senior Vice President and Provost
Robert Orr, Dean, School of Public Policy

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

x	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

University of Maryland, College Park
Institution Submitting Proposal

Global and Foreign Policy
Title of Proposed Program

Bachelor of Arts	**Fall 2025**
Award to be Offered	Projected Implementation Date
210600	**44.0504**
Proposed HEGIS Code	Proposed CIP Code
School of Public Policy	Joshua Shifrinson
Department in which program will be located	Department Contact
301-405-6300	jris@umd.edu
Contact Phone Number	Contact E-Mail Address
	04-25-2025
Signature of President or Designee	Date

A. Centrality to the University's Mission and Planning Priorities

Description. The University of Maryland, College Park (UMD) proposes to establish a **Bachelor of Arts in Global and Foreign Policy**. This interdisciplinary program will be housed in the School of Public Policy but will be collaboratively offered with the School of Languages, Literatures, and Culture, the Department of History, and the Department of Agricultural and Resource Economics. The Bachelor of Arts in Global and Foreign Policy is designed to address the growing demand for interdisciplinary education that equips students to navigate the complex challenges of global governance, international conflict, diplomacy, development, and sustainability. Students enrolled in the major will leverage insights from international policy, history, language and cultural studies, and economics to gain an understanding of the forces shaping global and foreign policy challenges and options for advancing solutions to such challenges.

Relation to Strategic Goals. The Bachelor of Arts in Global and Foreign Policy is strongly aligned with the University of Maryland's mission and strategic priorities by equipping students to tackle complex global challenges through an interdisciplinary, applied, and inclusive curriculum. As called for in the UMD Strategic Plan 2022–2032, the major "places interdisciplinary grand challenges at the center" of undergraduate education by combining coursework in public policy, economics, history, and language to address pressing issues such as conflict, migration, development, and sustainability. It supports the university's goal to "reimagine learning" through a robust experiential learning requirement and responds to its emphasis on diversity and inclusion by examining how identity and structural inequality shape global policy outcomes. Additionally, the program reflects UMD's commitment to preparing students for meaningful global engagement and public service careers, expanding the university's impact locally and globally.

Funding. The program will draw on the physical facilities, administrative infrastructure and instructional resources already available within the School of Public Policy and collaborating departments.

Institutional Commitment. The program will be administered by the School of Public Policy and its collaborating departments, which have the administrative infrastructure and faculty resources to shift some resources to this new program.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

Need. The proposed Bachelor of Arts in Global and Foreign Policy addresses a compelling need within Maryland and the broader region for graduates prepared to navigate the complexities of global challenges and foreign policy decision-making. In a state that hosts a large concentration of federal agencies, international organizations, and global industries—including the National Security Agency, the Food and Drug Administration, and a growing number of defense and international development contractors—there is increasing demand for professionals with the analytical, cultural, and policy skills needed to operate in global contexts. The major's focus on global security, migration, sustainability, and development responds directly to this demand,

preparing students for public, private, and nonprofit sector roles in areas vital to Maryland's economy and civic infrastructure.

State Plan. The proposed program aligns with Priority 5 in the 2022 *Maryland State Plan for Postsecondary Education*: "Maintain the commitment to high-quality postsecondary education in Maryland." The Action Item to "Identify innovative fields of study" fits with this program. The Bachelor of Arts in Global and Foreign Policy is an innovative program that reimagines undergraduate education by combining interdisciplinary study, applied policy training, and high-impact experiential learning. Collaboratively delivered by four academic units—Public Policy, History, Agricultural and Resource Economics, and Languages, Literatures, and Cultures—the program integrates diverse scholarly approaches to address pressing global challenges. The Department of History contributes critical historical context through a global history requirement and upper-level electives that ground students in the evolution of international systems and identities. The Department of Agricultural and Resource Economics offers coursework in global poverty, development, and the economics of sustainability, providing essential tools to understand economic drivers of international policy. The School of Languages, Literatures, and Cultures delivers world language instruction and cultural analysis, supporting language proficiency and deepening students' capacity to navigate cross-cultural policy environments. Together, these core units support thematic tracks in Security and Diplomacy; Human Security and Migration; and Development and Sustainability, which are further enriched by contributions from a wide range of academic departments across campus—including Government and Politics, Sociology, Anthropology, Geography, Journalism, Philosophy, Environmental Science and Technology, and Israel Studies—whose upper-level electives expand students' exposure to diverse regional, thematic, and methodological perspectives. With its applied focus, ethical engagement, and collaborative governance model, the major embodies the kind of interdisciplinary, globally engaged, and professionally relevant education championed in the Maryland State Plan for Higher Education.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

The Global and Foreign Policy major prepares students for positions with the government, in the private sector (e.g., internationally-oriented businesses), with non-governmental organizations and think tanks, internationally-oriented state agencies (e.g., the Department of Commerce) and beyond. There is no one specific job (or even set of jobs) associated with this focus; illustrative positions include program managers, foreign service officers, intelligence analysts, research analysts, translators, trade advisors, development assistance coordinators, and operations analysts but, as a whole, students are trained to identify, analyze, and present solutions to policy challenges in and across these domains. Projecting market demand and job openings for the program therefore requires leveraging multiple sources of information.

While recent declines in federal hiring have tempered some expectations for near-term public sector growth, there remains strong and increasing demand for graduates with interdisciplinary

training in global and foreign policy across a wide range of sectors.[1] Maryland's proximity to Washington, D.C. continues to offer access to a dense network of global employers, including international NGOs, development contractors, philanthropic foundations, and global-facing businesses. Even excluding federal job listings, Indeed.com searches consistently return thousands of entry-level roles in fields such as international development, climate policy, migration, and national/international security.[2]

Moreover, multilateral institutions such as the World Bank, the International Monetary Fund, and various UN agencies—as well as global consulting and development firms like Chemonics and FHI 360—consistently hire undergraduates for roles in research, operations, policy support, and stakeholder engagement. A 2024-2025 employer survey conducted for this program found that 35 out of 37 respondents reported strong or growing demand for undergraduates trained in global and foreign policy, and 91% said they would be likely to interview a high-performing student in this field. Employers identified policy process knowledge, regional expertise, ethical reasoning, and foreign language proficiency as particularly valuable.[3]

While the federal government still projects long-term staffing needs due to retirements and workforce aging—especially in diplomacy, defense, and national security—the current slowdown in hiring places added importance on preparing graduates for roles in the private and nonprofit sectors.[4] The Association of Professional Schools of International Affairs (APSIA) lists over 100 career paths that do not rely on government employment, including roles in international education, humanitarian response, supply chain management, and transnational advocacy.[5]

Importantly, there is also state-level demand across sectors for graduates of a program like this. In addition to state government offices and agencies with a global component such as the Department of Commerce, the Office of Tourism, and the VA, Maryland's Governor Moore has highlighted the need for Maryland businesses to remain globally competitive. Companies like Booz Allen, Lockheed Martin, Marriott International, among others, would be natural employers for our students. In the non-profit sector, Maryland is home to organizations including Catholic Relief Services, the International Youth Foundation, and Lutheran World Relief.

The proposed program responds to these labor market dynamics by preparing students for a broad set of global roles through policy-oriented training, experiential learning, and thematic

[1] Notably, agencies dealing with issues such as national security affairs and intelligence analysis have been exempted from Federal hiring restrictions. The proposed major is ideally suited to prepare students for such fields, and graduates should be competitive for continued opportunities in these areas.
[2] Indeed.com. (2025). *Search results: Entry-level global and international policy jobs in Washington, DC region*. Retrieved April 2025 from https://www.indeed.com
[3] University of Maryland. (2025a). *Employer Survey Results – Global and Foreign Policy Major Proposal*. Unpublished internal survey.
[4] Partnership for Public Service. (2023). *A profile of the 2023 federal workforce*. https://ourpublicservice.org/fed-figures/a-profile-of-the-2023-federal-workforce/
[5] APSIA. (2020). *APSIA career guide: Careers in international affairs*. Association of Professional Schools of International Affairs. https://cdn.uconnectlabs.com/wp-content/uploads/sites/5/2021/01/2020-APSIA-Career-Guide-Final.pdf

specialization. At full maturity, the program anticipates graduating 70–75 students annually, contributing to a talent pipeline equipped to meet the interdisciplinary and cross-sectoral challenges of a rapidly changing global landscape.

D. Reasonableness of Program Duplication

While a number of institutions—such as UMBC, Loyola University Maryland, Salisbury, Towson, and Coppin State—offer programs in global or international studies, these are substantively and structurally distinct from the UMD program. Most existing programs emphasize global culture, international history, or interdisciplinary humanities perspectives, whereas the proposed major is expressly focused on applied global policy and foreign policymaking, including thematic training in areas such as security, development, and human security.

Moreover, the proposed major integrates a public policy foundation, experiential learning, world language proficiency, and interdisciplinary electives that directly prepare students for careers in global and foreign affairs across public, nonprofit, and private sectors. This policy-oriented, career-focused design represents a unique niche in the Maryland higher education landscape. For example, Morgan State's Interdisciplinary Global Perspectives major is broader and less policy-driven, and UMBC's Global Studies program emphasizes cultural fluency and global citizenship rather than applied policy engagement.

Given the limited number of comparable programs in the state and the differentiated mission and structure of the proposed major, duplication is minimal. Additionally, the strong demand for graduates with global competencies supports the creation of a new, complementary offering that can serve a growing student and employer demand without adversely affecting existing programs.

Additionally, from a geographical and student access perspective, no similar program offered by a public university is located within the Washington, D.C. area--indeed, this will be the first expressly policy-focused global and foreign policy major in the immediate DC area. Students who are completing their capstone or internship experiences will be able to take public transportation by either bus or Metro to downtown Washington or any place in the Washington metropolitan area serviced by the Washington Metropolitan Area Transit Authority (WMATA).

E. Relevance to Historically Black Institutions (HBIs)

The proposed Bachelor of Arts in Global and Foreign Policy, anchored in the University of Maryland's School of Public Policy, provides a distinctive, policy-centered approach to global studies that is not currently offered by any of Maryland's Historically Black Institutions (HBIs). While institutions such as Morgan State University and Coppin State University offer programs in global or interdisciplinary studies, those are generally oriented toward cultural, political, and historical inquiry. Neither program is anchored in a school of public policy or emphasizes the career-oriented training in policymaking. The UMD program emphasizes applied policymaking, experiential learning, and thematic specialization in areas such as security, migration, and

sustainability—core competencies developed through the lens of public policy. Additionally, and as noted, UMD is the only public university in Maryland offering such a program in the Washington, D.C. metropolitan area. This location affords students convenient access to global policy institutions and internship opportunities, including via Metro and bus service, that are not as easily accessible from HBI campuses in Baltimore. As a result, the program complements, rather than competes with, existing offerings.

F. Relevance to the identity of Historically Black Institutions (HBIs)

The proposed Global and Foreign Policy major aligns with the University of Maryland's institutional strengths in public policy and does not replicate or conflict with the academic identities of Maryland's Historically Black Institutions (HBIs). Grounded in the School of Public Policy, this program expands an already-established disciplinary area at UMD and offers a distinctly policy-centered curriculum focused on global challenges, policymaking, and applied analysis. While Morgan State University's B.S. in Interdisciplinary Global Perspectives and Practices and Coppin State University's B.A. in Global Studies both include interdisciplinary coursework and capstone experiences, their curricular models emphasize academic flexibility and global cultural, historical, and regional awareness. In contrast, UMD's major offers structured thematic tracks, a strong applied public policy foundation, quantitative research training, and career-aligned experiential learning. Additionally, UMD's location in the immediate Washington, D.C. metro area—adjacent to federal agencies, international NGOs, and global policy institutions—provides students with ready access to policy engagement opportunities. For these reasons, the proposed program complements the missions of Maryland's HBIs without overlapping in content or intent.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

Curricular Development. The development of the Bachelor of Arts in Global and Foreign Policy was the result of an extensive, multi-phase process involving sustained internal deliberation, external benchmarking, and broad stakeholder consultation. The initiative began in late 2023, when a review of peer institutions revealed that UMD lagged behind its AAU, Big Ten, and regional counterparts—50 of 55 surveyed universities offered interdisciplinary majors in global or foreign policy, while UMD did not. Concurrently, an external review of the School of Public Policy recommended that it leverage its faculty strengths to address this gap. A working group was formed to explore curricular models, to examine standards put out by the Association of Professional Schools of International Affairs (APSIA), and to identify programmatic elements that align with employer expectations. Drawing on best practices and UMD's interdisciplinary strengths, the group designed a draft program and engaged key campus partners—including the Department of History, the Department of Agricultural and Resource Economics, and the School of Languages, Literatures, and Cultures—to build a collaborative foundation. These concepts were then refined through student focus groups and surveys, which confirmed strong interest and shaped the program's inclusion of thematic tracks. Input from faculty and coordination with departments like Government and Politics further ensured the final program was both innovative and complementary to existing offerings.

Faculty Oversight. Academic direction and oversight of the Global and Foreign Policy major will be provided by the Global and Foreign Policy Governing Council (GFPGC), an innovative cross-unit body composed of faculty and staff from the School of Public Policy (SPP), Agricultural and Resource Economics (AREC), History, and the School of Languages, Literatures, and Cultures (SLLC). While the program is anchored in the School of Public Policy, with a School of Public Policy faculty member serving as Chair, the Council will collaboratively guide curriculum development, program assessment, resource planning, and strategic growth, including potential new tracks and study abroad opportunities. The GFPGC will meet at least once per semester and issue regular reports summarizing contributions, enrollment trends, and recommendations to ensure the program remains innovative, well-resourced, and responsive to student and institutional needs. Appendix A has a list of faculty who will teach in the program.

Educational Objectives and Learning Outcomes. The Global and Foreign Policy major is built around three core educational objectives that equip students with the empirical, conceptual, technical, and professional skills needed to address global challenges across sectors. First, students gain a broad understanding of the forces shaping global and foreign policy—local to transnational—through interdisciplinary coursework in policy, economics, history, power structures, and identity. Second, the curriculum emphasizes technical proficiency, including research design, policy analysis, communication, and language skills essential for real-world application. Third, the program fosters professional development through experiential learning, such as internships and research assistantships, and cultivates cross-cultural awareness and collaborative engagement. Together, these elements prepare students to enter a wide range of global careers while leveraging the University of Maryland's unique strengths and location in the Washington, D.C. region.

The learning outcomes for the program are as follows:

1. Analyze the complexity and range of historical and contemporary global and foreign policy and policymaking challenges.
2. Explain how foreign and global policymaking institutions, processes, and structures shape policy solutions and outcomes.
3. Demonstrate in-depth knowledge of one or more global and foreign policy challenges and solutions, by applying insights and frameworks from different disciplines while engaging relevant policymaking processes.
4. Interrogate how identities - including national, caste, ethnic, gender, racial, religious, socio-economic, political, and beyond - and their intersections shape global and foreign policy challenges and solutions.
5. Examine the role of values, ethics, justice, access, and the structural and systemic sources of (in)equality in and across global and foreign policy domains.
6. Utilize appropriate research tools, analysis, writing, and presentation skills to assess global and foreign policy challenges, and apply these techniques to an experiential learning endeavor to better understand the dynamics of policymaking.
7. Demonstrate a minimum of basic proficiency in a second world language.

Institutional assessment and documentation of learning outcomes. Please see Appendix B for information about assessing the program's learning outcomes.

Course requirements. The Bachelor of Arts program will require 52-59 credits. The curriculum is organized as follows:

- Core courses:
  - Global and Foreign Policy (GFPL) foundational courses
  - Global Poverty and Economic Development course (AREC)
  - Pluralism and Global Policy course (PLCY or GLBC)
  - Historical grounding course (HIST)
- Skills courses:
  - World Language requirement (at least two semesters, credits per course vary by language)
  - Statistics requirement
  - Policy research methods course (PLCY306)
  - Policy analysis course (PLCY304)
- Thematic track and elective area. Students take a required "anchor" course in one of three tracks along with two track electives and two other electives that can be in or outside of the track. The tracks are as follows:
  - Security, Conflict, and Diplomacy
  - Human Security and Migration
  - Development and Sustainability
- Experiential applications. Students have three options:
  - Capstone
  - Internship
  - Study abroad

A list of courses and descriptions is included in Appendix C. Please note that GFPL and GLBC will be new course prefixes once the program is approved. GFPL and GLBC courses do not yet exist in the current academic catalog, although some courses currently exist under different course codes.

Course	**Title**	**Credits**
Core Courses		18
GFPL100	War, Peace and Crisis: Foundations of Global Policy	3
GFPL102	Global Order and Policy Structures: Power, Access and Influence	3
GFPL203	Ethics of Global Action	3
AREC345	Global Poverty and Economic Development	3
Pluralism and Global Policy – Select one of the following 3-credit courses:		3
PLCY302	Examining Pluralism in Public Policy	
GLBC200	Global Movements	

Historical Grounding – Select one of the following 3-credit courses:		3
HIST113	The Making of Modern Europe	
HIST120	Islamic Civilization	
HIST131	The History of the American Dream	
HIST240	Europe in the Twentieth Century	
HIST245	Reformers, Radicals, and Revolutionaries: The Middle East in the Twentieth Century	
HIST251	Latin America Since Independence	
HIST266	The United States in World Affairs	
HIST284	East Asian Civilization I	
HIST285	East Asian Civilization II	
Skill Courses		
Language Requirement (2 semesters minimum; credits may vary)		6–12
Statistics Requirement – Select one of the following courses:		3–4
BMGT230	Business Statistics	
CCJS200	Statistics for Criminology and Criminal Justice	
EDMS451	Introduction to Educational Statistics	
PSYC200	Statistical Methods in Psychology	
SOCY201	Introductory Statistics for Sociology	
STAT100	Elementary Statistics and Probability	
PLCY304	Evaluating Evidence: Finding Truth in Numbers	4
PLCY306	Research Methods for Policy Analysis	3
Thematic Tracks and Electives		15
Track Anchor Course – Select One of the Following Courses:		3
GFPL/PLCY3XX (currently PLCY288Q)	Foundations of Security, Conflict, and Diplomacy	
GFPL/PLCY3XX (currently PLCY288W)	Foundations of Human Security and Migration	
GFPL/PLCY/AGNR301	Sustainability	
Track Elective Course One		3
Track Elective Course Two		3
Track or General Elective Course One		3
Track or General Elective Course Two		3
Experiential Applications – Select one of the following:		3
PLCY400	Senior Capstone	3
PLCY309	Internship in Political Institutions: State and Local	3
Approved Study Abroad		
Total Credits Required		**52–59**

General Education. All UMD students are required to complete General Education requirements in Fundamental Studies (Mathematics, Writing, and Analytic Reasoning) and Distributive Studies in the sciences, humanities, and social sciences. The Distributive Studies area includes a diversity requirement, two practice-based courses, and two "Big Question" courses that address societal grand challenges. Maryland community college students who complete the associate degree and are admitted to UMD are deemed to have completed their General Education requirements, except for Professional Writing (typically completed in the 3rd year of study). See Appendix E for how students in the program will fulfill their General Education requirements.

Accreditation or Certification Requirements. There are no specialized accreditation or certification requirements associated with this program.

Other Institutions or Organizations. The School of Public Policy is not planning to contract with another institution or non-collegiate organization for this program.

Student Support. Students in the Global and Foreign Policy major will receive comprehensive support through a holistic advising model anchored in the School of Public Policy and coordinated across partner units. Each student will meet with an advisor every semester to plan coursework, select tracks, and explore experiential learning opportunities such as internships and study abroad. A dedicated professional advisor and program coordinator will manage academic advising, scheduling, and student programming, while cross-trained advisors in History, AREC, and SLLC will provide additional guidance on language placement and elective choices. Students will also have access to university-wide resources in career services, academic support, mental health, and global engagement, ensuring they are well-supported both academically and professionally.

Marketing and Admissions Information. The program will be clearly and accurately described in the university website and be marketed at university recruiting events. The University of Maryland's Office of Undergraduate Admissions markets nationally to a broad base of interested students who are admitted to the University as a whole. If the program is approved, it will be included among the more than 100 possible undergraduate majors available to students.

H. Adequacy of Articulation

While UMD accepts transfer students from all Maryland community colleges as well as from other four-year institutions, Montgomery College is one of our most common partners for transfers. UMD and Montgomery College have developed a transfer articulation pathway with the proposed major and the A.A. in International Studies at Montgomery College. See Appendix D.

I. Adequacy of Faculty Resources

Program faculty. Appendix A contains a list of faculty members who will teach in the program. Instructional resources for the Global and Foreign Policy major will be provided by a combination of existing full-time faculty and strategically supported adjuncts across participating units. The School of Public Policy will cover the majority of required courses and, as the program grows, will fund additional adjunct instructors, teaching assistants, and graduate fellows to meet demand. Partner departments—AREC, History, and SLLC—have confirmed that current faculty and teaching capacity are sufficient to support their contributions, including core and elective offerings. Collectively, more than 50% of the credit hours in the major will be taught by full-time University of Maryland faculty, ensuring a high-quality and sustainable instructional foundation.

Faculty training. Faculty teaching in the program will use the university's learning management system along with its extensive electronic resources. They will have access to instructional development opportunities available across the College Park campus, including those offered as part of the Teaching and Learning Transformation Center, many of which are delivered in a virtual environment. Instructors will work with the learning design specialists on campus to incorporate best practices when teaching in the online environment.

J. Adequacy of Library Resources

The University of Maryland Libraries assessment concluded that the Libraries are able to meet, with current resources, the curricular and research needs of the program.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Resources

All physical facilities, infrastructure, and instructional equipment are already in place. No new facilities are required. The proposed program will be in-person, but for the online components of the coursework, UMD maintains an Enterprise Learning Management System (ELMS). ELMS is a Web-based platform for sharing course content, tracking assignments and grades, and enabling virtual collaboration and interaction. All students and faculty have access to UMD's electronic mailing system.

L. Adequacy of Financial Resources

The budget tables reflect the reallocation of internal UMD resources to operate the program.

Resources (see Table 1):
This table assumes an enrollment of approximately 200 full-time students and 10 part-time students per year. The reallocated resources reflect that (1) some funds will be shifted from within the School of Public Policy and (b) collaborating departments have the additional capacity to handle students in their existing courses

1. Line 1 reflects the reallocated resources anticipated to support the program.

2. We assume no additional tuition revenue will be generated by this new major since we do not anticipate a significant change in the overall undergraduate population.
3. Our model assumes that most students will be full-time undergraduates enrolled at UMD.
4. No external sources of funding are assumed.
5. No other sources of funding are assumed.

Expenditures (see Table 2):
Most faculty and staff are already in place to operate this program. A limited number of new courses, alongside additional staff, advising, and GA support will be required for the major.

1. Line 1 reflects the faculty who will teach the new courses in the program as well as the faculty who will continue their course instruction within the School of Public Policy and collaborating academic units.
2. Line 2 reflects the administrative support, which is also allocated by the School of Public Policy.
3. Line 3 reflects the staff support, which is also allocated by the School of Public Policy.
4. Line 4 reflects graduate student positions, already allocated, who will support the new program.
5. Generally, facility, equipment, and other expenses are not listed as they are already part of the School's operating expenses. However, $5000 has been allotted to cover miscellaneous operational expenses.

M. Adequacy of Program Evaluation

Formal program review is carried out according to the University of Maryland's policy for Periodic Review of Academic Units, which includes a review of the academic programs offered by, and the research and administration of, the academic unit (http://www.president.umd.edu/policies/2014-i-600a.html). Program Review is also monitored following the guidelines of the campus-wide cycle of Learning Outcomes Assessment (https://irpa.umd.edu/Assessment/loa_overview.html). Faculty within the department are reviewed according to the University's Policy on Periodic Evaluation of Faculty Performance (http://www.president.umd.edu/policies/2014-ii-120a.html). Since 2005, the University has used an online survey instrument that standardizes student course feedback across campus. The survey has standard, university-wide questions and allows for supplemental, specialized questions from the academic unit offering the course.

N. Consistency with Minority Student Achievement goals

The Global and Foreign Policy major is designed to advance UMD's goals for minority student achievement by fostering an inclusive, globally focused curriculum that emphasizes pluralism, identity, and equity in policymaking. Building on the School of Public Policy's strong record of attracting and supporting diverse students—evidenced by above-average enrollment of Black and Hispanic undergraduates—and similar records among the partner units, the program will engage underrepresented students through intentional advising, targeted outreach, and connections to opportunities such as the Rangel Fellowship and Global/Federal Fellows

programs. The interdisciplinary structure and applied learning focus further support equitable access to global career pathways.

O. Relationship to Low Productivity Programs Identified by the Commission

N/A

P. Adequacy of Distance Education Programs

This program is not intended for distance education.

Table 1: Resources

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1.Reallocated Funds	$320,000	$650,000	$660,000	$680,000	$700,000
2. Tuition/Fee Revenue (c+g below)	$0	$0	$0	$0	$0
a. #FT Students	25	75	150	200	250
b. Annual Tuition/Fee Rate	$23,025	$23,716	$24,428	$25,160	$25,915
c. Annual FT Revenue (a x b)	$575,635	$1,778,712	$3,664,147	$5,032,095	$6,478,823
d. # PT Students	1	3	6	8	10
e. Credit Hour Rate	$910.25	$937.56	$965.68	$994.65	$1,024.49
f. Annual Credit Hours	10	20	20	20	20
g. Total Part Time Revenue (d x e x f)	$9,102	$56,253	$115,882	$159,144	$204,898
3. Grants, Contracts, & Other External Sources	$0	$0	$0	$0	$0
4. Other Sources	$0	$0	$0	$0	$0
TOTAL (Add 1 - 4)	**$340,000**	**$650,000**	**$650,000**	**$675,000**	**$700,000**

Table 2: Expenditures

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	$133,000	$273,980	$273,980	$282,199	$290,665
a. #FTE	1	2	2	2	2
b. Total Salary	$100,000	$206,000	$206,000	$212,180	$218,545
c. Total Benefits	$33,000	$67,980	$67,980	$70,019	$72,120
2. Admin. Staff (b+c below)	$0	$89,044	$91,715	$94,466	$97,300
a. #FTE	0	1	1	1	1
b. Total Salary	$0	$66,950	$68,959	$71,027	$73,158
c. Total Benefits	$0	$22,094	$22,756	$23,439	$24,142
3. Total Support Staff (b+c below)	$15,960	$112,332	$115,702	$119,173	$122,748
a. #FTE	0.2	1	1	1	1
b. Total Salary	$12,000	$84,460	$86,994	$89,604	$92,292
c. Total Benefits	$3,960	$27,872	$28,708	$29,569	$30,456
4. Graduate Assistants (b+c)	$155,627	$160,295	$165,104	$170,057	$175,159
a. #FTE	3	3	3	3	3
b. Stipend	$78,912	$81,279	$83,718	$86,229	$88,816
c. Tuition Remission	$50,674	$52,194	$53,760	$55,372	$57,034
d. Benefits	$26,041	$26,822	$27,627	$28,456	$29,309
5. Equipment	$0	$0	$0	$0	$0
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7. Other Expenses: Operational Expenses	$5,000	$5,000	$5,000	$5,000	$5,000
TOTAL (Add 1 - 8)	**$304,587**	**$635,651**	**$646,501**	**$665,896**	**$685,873**

Appendix A: Core Faculty

The following faculty members are projected to teach in the program. All faculty are full-time unless otherwise indicated. In addition to those faculty listed, please note that an array of History (HIST), Agricultural and Resource Economics (AREC), and School of Language, Literatures, and Cultures (SLLC) faculty will teach the courses to be delivered by partner units. The relevant faculty member for these supporting courses will vary by semester and student demand. We have been assured by Dr. Ahmet Karamustafa (Chair of History) and Dr. Mary Ellen Scullen (SLLC Director) that all faculty will be qualified per disciplinary and professional standards.

Name	**Highest Degree Earned, Program, and Institution**	**UMD Title (indicate if part-time)**	**Courses**
Joshua Shifrinson	PhD, Political Science, Massachusetts Institute of Technology (MIT)	Associate Professor	GFPL 100, Track 1 anchor course, electives
Michael Woldemariam	PhD, Politics, Princeton University	Associate Professor	PLCY/GFPL 302, electives
Lena Andrews	PhD, Political Science, MIT	Associate Research Professor	GFPL 100, GFPL 102, electives
Catherine Worsnop	PhD, Politics, Brandeis University	Assistant Professor	GFPL 102, Track 2 anchor course, electives
Alec Worsnop	PhD, Political Science, MIT	Assistant Professor	PLCY/GFPL 304, 306, electives
Thomas Hilde	PhD, Philosophy, Penn State	Associate Research Professor	GFPL 203, PLCY/GFPL/AAGNR 301
Robert Orr	PhD, Politics, Princeton University	Professor and Dean (SPP)	PLCY/GFPL 309, 400
Steve Fetter	PhD, Energy and Resources, University of California at Berkeley	Professor	PLCY/GFPL 309, 400,

Colleen Woods	PhD, History, University of Michigan	Associate Professor	[various History offerings; will help coordinate appropriate History offerings]
Caroline Ritter	PhD, University of California at Berkeley	Assistant Professor	[various History and core course offerings]
Elisa Gironzetti	PhD, English Applied Linguistics, Texas A&M	Associate Professor	SLLC/GLBC 200; Spanish, Portuguese, [will help coordinate appropriate SLLC offerings]
Lars Olson	PhD, Economics, Cornell University	Professor	GFPL/AGNR 345
Ahmet Karamustafa	PhD, Islamic Studies, McGill University	Professor & Chair (History)	[will help coordinate appropriate History offerings]
Mary Ellen Scullen	PhD, French and Theoretical Linguistics, Indiana University	Professor & Director (SLLC)	[will help coordinate appropriate SLLC offerings]
Kenneth Leonard	PhD, Economics, University of California at Berkeley	Professor & Chair (AREC)	[will help coordinate AREC offerings]
Lori Lynch	PhD, Agricultural and Resource Economics, University of California at Berkeley	Professor	[will help coordinate AREC offerings]

Appendix B: Learning Outcomes Assessment Plan

The School of Public Policy has been successfully conducting Learning Outcomes Assessment with its Bachelor of Arts in Public Policy. Reports have been very successful, sometimes noted as a model for other units by the Provost's Commission on Learning Outcomes Assessment. The Global and Foreign Policy Learning Outcome Assessment will be conducted by the Global and Foreign Policy Governing Council. The Director of Undergraduate Studies in the School of Public Policy, as a member of the Council, will ensure reports adhere to the guidelines and expectations of the Provost's Commission on Learning Outcomes Assessment. The team will also generate a report that is shared with the leadership of the School of Public Policy, College of Arts and Humanities and College of Agriculture and Natural Resources. We will also report our results to the overall faculty committee in each School or College. The report and subsequent discussions will be used to continually improve the curriculum and individual courses to best ensure a high level of student proficiency and experience.

We will assess 1-2 of the LOs each year, so that all are assessed on a four-year cycle. The Global and Foreign Policy Governing Council, will develop rubrics which will be used to assess student mastery of each of these learning objectives. Faculty members will then use the rubric to assess a sample of student projects/papers produced in the academic year. The rubric will contain categories related to the specific learning outcome and students will be assessed as "Advanced," "Competent," "Introductory," or "Undeveloped" in each category. The individual categories will be aggregated to produce an overall score. Our overall goal is that 85% of our students are scored as "Advanced" or "Competent" on each program-level learning outcome assessed.

Any recommendations made by the assessment committee are considered and implemented by the Global and Foreign Policy Governing Council, and if necessary, the School PCC. We also work with faculty who teach primary core classes within the learning outcome to implement recommendations and strengthen outcomes.

Global and Foreign Policy Program Learning Outcomes

LO1: Analyze the complexity and range of historical and contemporary global and foreign policy and policymaking challenges.

LO2:Explain how foreign and global policymaking institutions, processes, and structures shape policy solutions and outcomes.

LO3: Demonstrate in-depth knowledge of one or more global and foreign policy challenges and solutions, by applying insights and frameworks from different disciplines while engaging relevant policymaking processes.

LO4: Interrogate how identities - including national, caste, ethnic, gender, racial, religious, socio-economic, political, and beyond - and their intersections shape global and foreign policy challenges and solutions.

LO5: Examine the role of values, ethics, justice, access, and the structural and systemic sources of (in)equality in and across global and foreign policy domains.

LO6: Utilize appropriate research tools, analysis, writing, and presentation skills to assess global and foreign policy challenges, and apply these techniques to an experiential learning endeavor to better understand the dynamics of policymaking.

LO7: Demonstrate a minimum of basic proficiency in a second world language. All students will minimally demonstrate a basic proficiency in a second world language by taking the appropriate language sequence administered by SLLC or otherwise demonstrating native/near-native fluency. In practice, students will enter the major with varying levels of familiarity in second world language. As a result, students will ultimately develop their communicative competence at different levels of proficiency commensurate with their existing skill set.

I: Introduction
R: Reinforcing
M: Mastery

Course	LO1	LO2	LO3	LO4	LO5	LO6	LO7
GFPL 100: Foundations of Global and Foreign Policy	I	I	I			I	
GFPL 102: Global Order and Policy Structures: Power, Access, and Influence		I		I	I		
EITHER GFPL 302: Pluralism and Global Encounters OR SLLC/GLBC 200: Global Movements				R	I/R		
GFPL 203: Ethics of Global Action		I			I/R	I	

Global History Requirement (offered by History) - selected from list	R			I/R			
AREC 345: Global Poverty and Development	R	I	I	I	I		
World Language requirement Two semesters of a language							I/R/M
PLCY304 Prerequisite (selected from list)						I	
PLCY 304: Evaluating Evidence - Finding Truth in Numbers						R	
PLCY 306: Public Policy Analysis in Action						I	
CHOOSE ONE: GFPL/PLCY 400: Capstone GFPL/PLCY 309: Internship in Political Institutions Study Abroad	M	M	M	M		M	
TRACK 1: Security, Conflict, and Diplomacy	I/R	R	R	R		R	
TRACK 2: Human Security and Migration	I/R	R	R	R		R	
TRACK 3: Development and Sustainability	I/R	R	R	R		R	

Appendix C: Course Descriptions

Core Courses (18 credits; students)

*GFPL 100: War, Peace and Crisis: Foundations of Global and Foreign Policy (3 credits) (required)

Why are wars, crises, and human catastrophes a regular feature of the global landscape? What can we as individuals, communities, states and societies do to make a difference? This course introduces students to core theories, concepts, and debates within global and foreign policy, and the approaches used to analyze these issues. Equal emphasis is placed on both the causes of policy issues and the policymaking challenges of operating within a fragmented international system. The course will include an introduction to themes such as security, conflict and diplomacy; human security and migration; as well as development and sustainability.

*GFPL 200: Global Order and Policy Structures: Power, Access, and Influence (3 credits) (required)

Provides an overview of the key historical and contemporary forces and structures (e.g., the United Nations, decolonization, (de)globalization) defining the context within which global issues play out and foreign policy is conducted. Specific emphasis is placed on the legacy effects of prior policy choices, questions of which actor(s) have more or less influence in global and foreign policy decisions and why, and the importance of considering intended and unintended consequences of a given decision or initiative.

Students must enroll in either GFPL 302 or SLLC/GLBY 200

*GFPL 302: Identities in Global and Foreign Policy across Time and Place (3 credits)

GFPL302 will allow students to interrogate how identities - including national, caste, ethnic, gender, racial, religious, socio-economic, political, and beyond - and their intersections shape global and foreign policy challenges and solutions. The course emphasizes the centrality of identity to making, implementing, evaluating, and adapting policy across time and place. Examples are drawn from an array of national, trans-national, and global policy issues, including policies designed to tackle global health challenges, climate change, national security concerns, and more.

*SLLC/GLBC 200: Global Movements (3 credits)

Introduces students to a variety of frameworks for understanding our interconnected world by focusing on one or more issues of global relevance today, including but not limited to conflict, revolution, and war; democracy, citizenship, and human rights; migration; and climate change. Focusing on the interpretive methods of the humanities, including critical analysis, close readings, and engagement with theoretical approaches, we will discuss the historical, social, and cultural contexts of major global movements in comparative perspective. In addition to examining literary, cultural, and media texts, the class will ask students to make connections between global and local contexts through a group service-learning project.

*GFPL 203: Ethics of Global Action (3 credits) (required)

Frontloads debates over the manners in which ethics, morality, and norms do or do not inform policy issues on the global stage, the complicated ethical and moral tradeoffs involved in making foreign policy, and the often fraught balance between addressing the world as it is versus the world as one may wish it to be. Explores these issues through topics such as the ethics of humanitarian military intervention, genocide prevention, poverty alleviation and development, and more.

Students must enroll in one of HIST 113,120, 240, 245, 251, 266, 284, or 285.
History 113: Modern Europe (3 credits)

Evolution of modern nation states since late medieval times. Industrial-economic structure and demography. Emergence of modern secular society.

History 120: Islamic Civilization (3 credits)

Introduction to society and culture in the Middle East since the advent of Islam: as a personal and communal faith; as artistic and literary highlights of intellectual and cultural life; and as the interplay between politics and religion under the major Islamic

History 240: Europe in the Twentieth Century (3 credits)

Political, cultural, and economic developments in 20th-century Europe.

History 245: Reformers, Radicals, and Revolutionaries: The Middle East in the Twentieth Century (3 Credits)

The 20th century was a period of dramatic changes in the Middle East. Within the global context of the two World Wars and the Cold War, countries in the region struggled with the effects of colonialism and painful processes of decolonization. The course offers a thematic-comparative approach to issues such as social and political reform, nationalism, the colonial experience, independence struggles, models of governance, political violence, and Islamism. Course lectures and the analysis and discussion of primary sources will lead students to understand that the peoples of the Middle East found answers to the challenges posed by Western dominance based on their specific historical, cultural and socio-economic circumstances.

History 251: Latin America Since Independence (3 Credits)

Introductory survey of the history of Latin America from the era of independence (c. 1810-1825) through the early 1980s. Major themes include independence and sovereignty, postcolonialism and neocolonialism, nation- and state-building, liberalism, citizenship, economic development and modernization, social organization and stratification, race and ethnicity, gender relations, identity politics, reform and revolution, authoritarianism and democratization, and inter-American relations.

History 266: The United States in World Affairs (3 Credits)

A study of the United States as an emerging world power and the American response to changing status in world affairs. Emphasis on the relationship between internal and external development of the nation.

History 284: East Asian Civilization I (3 Credits)

An interdisciplinary survey of the development of East Asian cultures. An historical approach drawing on all facets of East Asian traditional life, to gain an appreciation of the different and complex cultures of the area.

History 285: East Asian Civilization II (3 Credits)

A survey of the historical development of modern Asia since 1700. Primarily concerned with the efforts of East Asians to preserve their traditional cultures in the face of Western expansion in the 18th and 19th centuries, and their attempts to survive as nations in the 20th century.

AREC 345: Global Poverty and Development (3 credits)

This interdisciplinary course explores social and economic development around the world. Topics include geography, democratization, political instability and conflict, health and education, agricultural development, micro-entrepreneurship, and an introduction to impact evaluation methods used to evaluate the efficacy of public policy aimed at alleviating poverty.

Skill Courses (13-24 credits)

World Languages (offered by SLLC) - 6-12 credits

Students must complete 2 semesters of a language, at a level determined by SLLC-administered testing. At least two courses (6-12 credits, depending on the language) must be taken in the same language for a minimum of basic proficiency. More courses are encouraged to acquire professional fluency. Please see SLLC website for placement requirements and expectations. Students may only test out of this requirement if they demonstrate native or near-native fluency per ARHU/SLLC guidelines.

PLCY 304 Evaluating Evidence: Finding Truth in Numbers (4 credits)

Enables students to understand the research done by others with a sufficiently skeptical eye to allow them to determine whether the findings of the research are valid given the assumptions made and methods used. This will involve, in part, thinking about the various problems in research design or conduct that could lead to faulty conclusions. It will also involve being able to differentiate between credible sources of information and those that are not objective. At the conclusion of the course, students should be able to differentiate objective evidence from political argumentation.

PLCY306: Public Policy Analysis in Action (3 credits)

Utilizes our unique location in the Washington, D.C. region to create a laboratory within which to analyze local, regional, national and international policy problems. Students will be put into teams and assigned to real and timely policy cases. The course will include meetings and field trips with local leaders in the field, ideally connected to the cases. Student will then expand and apply their use of policy analysis and evaluation skills to define those problems, analyze alternative responses, devise appropriate strategies for implementation, and evaluate the success of the proposed policy and implementation. The course will conclude with team presentations to local leaders and faculty. This distinctive course will serve to prepare students for their client- based senior capstone course.

Statistical Analysis Course (3-4 Credits)

Business Management 230: Business Statistics (3 credits)

Introductory course in probabilistic and statistical concepts including descriptive statistics, set-theoretic development of probability, the properties of discrete and continuous random variables, sampling theory, estimation, hypothesis testing, regression and decision theory and the application of these concepts to problem solving in business and management.

Criminology and Criminal Justice 200: Statistics for Criminology and Criminal Justice (3 credits)

Introduction to descriptive and inferential statistics, graphical techniques, and the computer analysis of criminology and criminal justice data. Basic procedures of hypothesis testing, correlation and regression analysis, and the analysis of continuous and binary dependent variables. Emphasis upon the examination of research problems and issues in criminology and criminal justice.

EDMS [Measurement, Statistics and Evaluation] 451 - Introduction to Educational Statistics (3 credits)

Introduction to statistical reasoning; location and dispersion measures; computer applications; regression and correlation; formation of hypotheses tests; t-test; one-way analysis of variance; analysis of contingency tables.

Psychology 200 - Statistical Methods in Psychology (3 Credits)

A basic introduction to quantitative methods used in psychological research.

Sociology 201 - Introductory Statistics for Sociology (4 Credits)

Elementary descriptive and inferential statistics. Construction and percentaging of bivariate contingency tables; frequency distributions and graphic presentations; measures of central tendency and dispersion; parametric and nonparametric measures of association and correlation; regression; probability; hypothesis testing; the normal, binomial and chi-square distributions; point and interval estimates.

Statistics 100: Elementary Statistics and Probability (3 credits)

Simplest tests of statistical hypotheses; applications to before-and-after and matched pair studies. Events, probability, combinations, independence. Binomial probabilities, confidence limits. Random variables, expected values, median, variance. Tests based on ranks. Law of large numbers, normal approximation. Estimates of mean and variance.

Thematic Tracks and Electives (15 credits)

Students will select a track by taking (a) the required anchor course for a given track, and (b) 2 electives linked to that track. An additional 2 electives can be taken within the selected track and/or from among other tracks (including anchor courses).

TRACK 1: Security, Conflict, and Diplomacy

PLCY/GFPL 3XX: Foundations of Security, Conflict, and Diplomacy (3 credits) (required for Track 1) (formerly PLCY 288Q)

Introduces major concepts, debates, and challenges in international security policy. Some of today's problems have existed in various forms for centuries, such as potential conflicts between great powers, violence by governments against their own people and by terrorist organizations, and the disruptive effects of powerful new technology. Some are more recent, such as nuclear deterrence and non-proliferation, humanitarian crises, and human security. And others, including cyber security, drones, and climate change, are the leading edge of future security challenges. Fundamental questions about how to make the world safer will be a major theme of this course.

TRACK 2: Human Security and Migration

PLCY/GFPL 3XX: Foundations Human Security and Migration (3 credits) (required for Track 2) (formerly PLCY288W)

Today's most pressing problems do not stop at national borders. Meeting these challenges requires a range of state and non-state actors to work together. In this course, students gain familiarity with key actors in the global system and how they approach today's most intractable problems, including violent conflict, human rights, non-proliferation of weapons of mass destruction, migration, trade, climate change, and global health. How do countries, international organizations, multinational corporations, and nongovernmental organizations find ways to cooperate when their interests and capabilities sometimes differ drastically? What barriers exist that impede such cooperation?

TRACK 3: Development and Sustainability

PLCY/GFPL/AGNR 301: Sustainability (3 credits) (required for Track 3)

Designed for students whose academic majors would be enhanced by the complementary study of a widely shared but hard-to-operationalize aspiration: that present choices should preserve or improve future options rather than foreclose or degrade them. How should we understand sustainability? How might we achieve it? How would we

know if we had achieved it? And how could sustainability activists of a rising generation lead by example?

Experiential Applications (3-6 credits)

Students must complete an experiential learning course by selecting from one of the following:

GFPL/PLCY 400: Senior Capstone (3 credits)

Prerequisite: PLCY306

Students will take the skills and knowledge gained through their curriculum and apply them through their senior capstone course. Students will work in teams on problems and issues presented by outside clients, with guidance from faculty facilitators and interaction with the clients. Each team will work with the client to address a particular problem and produce a mutually agreed upon outcome. These hands-on projects will advance students' understanding of the analytical, leadership, communication and problem solving skills necessary to address today's policy problems while allowing them to gain professional level experience that could contribute to their success in their post UMD endeavors. The course will conclude with an event that allows all teams to present their findings and outcomes to their client while being evaluated by faculty and public policy professionals.

GFPL/PLCY 309: Internship in Political Institutions (3-6 credits)

Prerequisite: Permission of School of Public Policy

Offers students supervised internship placements in state, local, federal, and global political or public policy organizations. (To be updated)

Approved Study Abroad

The Global and Foreign Policy Governing Council will review available student study abroad opportunities to identify options that allow students to become involved in the challenges and opportunities of policymaking in a non-U.S. context. Only vetted programs of study will qualify for the experiential learning component of the major.

Appendix D Program Transfer Agreement Pathway with Montgomery College

MONTGOMERY COLLEGE		UNIVERSITY OF MARYLAND	CATALOG YEAR: 2025-26
A.A. in Arts and Sciences – International Studies area of concentration		B.A. in in Global and Foreign Policy	

CREDITS	MONTGOMERY COLLEGE Requirements for Associate's Degree		UNIVERSITY OF MARYLAND Requirements for Bachelor's Degree
3	ENGL 101 Introduction to College Writing*		Lower-level Elective
3	MATH117 Elements of Statistics† (MATF)		STAT100
3	POLI203 international Relations (BSSD)		GFPL100
3	HIST148, HIST245, HIST247, HIST250, or HIST266 (HUMD)		HIST113, HIST251, HIST284, HIST285, or HIST123 (respectively)
3	World Language^		See UMD note*
3	ENGL102 Critical Reading, Writing and Research (ENGF)		ENGL101
3	ECON 202 or GEOG130 (BSSD)		ECON200 or GEOG110
3	POLI211 Comparative Politics and Government		GVPT280**
3	World Language^		See UMD note*
3	Arts Distribution (ARTD)		See UMD note**
3	ECON201 Principles of Economics I		ECON201
3	200-Level ENGL course or World Language^		See UMD note***
3	HIST245, HIST247, OR HIST250 (GEIR)**		HIST251, HIST284, or HIST285
3	POLI270 Politics in Action		Lower-level Elective
3	Natural Sciences Distribution without Lab (NSND)		See UMD note**
3	COMM 108 or COMM 112 (GEIR)		COMM107
4	Natural Sciences Distribution with Lab (NSLD)		See UMD note**
3	POLI205 Introduction to Human Rights		GLBC/SLLC 200
3	POLI230 or POLI256**		GVPT250 or GVPT282
2-3	ELECTIVE (e.g., History 257 or 258)**		HIST224 or HIST225; see UMD note+
60-61	TOTAL CREDITS TRANSFERRED		

REMAINING UMD DEGREE REQUIREMENTS - RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE	
GFPL 200 Global Order and Policy Structures	3
PLCY 200 Research Methods for Policy Analysis	3
Professional Writing (FSPW)	3
AREC 345 Global Poverty and Development	3
300 or 400-Level Elective	3
GFPL 203 Ethics of Global Action	4
PLCY 304 Evaluating Evidence - Finding Truth in Numbers	3
300-Level GFPL Thematic Track Anchor	3
300 or 400-Level Elective	3
GFPL Elective	3
GFPL/PLCY 400 Capstone	3
GFPL Elective	3
Elective	3
300 or 400-Level Elective	3
300 or 400-Level GFPL Elective	3
300 or 400-Level Elective	3
Elective	2
300 or 400-Level Elective	3
300 or 400-Level Elective	3

MONTGOMERY COLLEGE NOTES

Suggested 1st Semester
Suggested 2nd Semester
Suggested 3rd Semester
Suggested 4th Semester

*If needed for ENGL102. If not, becomes Elective.

** Students may apply one of the specified courses as elective credit for the GFPL major, up to a maximum of two electives for the major.

† MATH117 recommended, but MATH150 or MATH181 are also acceptable. If lower math placement is achieved, student should work towards completion of one of these courses through elective space.

ǂǂ ENGL122, ENGL202, ENGL205, ENGL208, ENGL213, ENGL214, ENGL248, GHUM101, HIST255, PHIL209

^ Students may satisfy the World Language requirements by completing either of the following two sequences:
SPAN 103, SPAN201, and SPAN202
FREN101, FREN102, and FREN201

UNIVERSITY OF MARYLAND NOTES

* Montgomery College (MC) students must select from approved MC World Languages course options, UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but will at minimum count for a UMD elective course.

** MC students must select from approved MC General Education category course options; UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but will at minimum count for a UMD elective course.

*** UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but will at minimum count for a UMD elective course.

+ Suggested MC courses include HIST257 and HIST258, which are equivalent to UMD courses HIST224 and HIST225, respectively. For other electives, UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but will at minimum count for a UMD elective credit.

UNIVERSITY OF MARYLAND

Michael D Colson <mcolson@umd.edu>

Re: International Studies Concentration - Global & Foreign Policy

1 message

Rhoe, Angela M <Angela.Rhoe@montgomerycollege.edu> Tue, Apr 29, 2025 at 4:50 PM
To: Michael D Colson <mcolson@umd.edu>
Cc: Joshua Shifrinson <jris@umd.edu>, Jennifer Nash Littlefield <jnlittle@umd.edu>

To:

From: Angela Rhoe, Director of Strategic Alliances

Subject: **Pending Articulation Agreement with the University of Maryland**

Date: April 29, 2025

In accordance with COMAR requirements regarding the establishment of new academic programs, this memorandum serves as notice that Montgomery College is in the process of finalizing a 2+2 articulation pathway from the Associate of Arts in Arts and Sciences – International Studies Area of Concentration to the University of Maryland's proposed Global & Foreign Policy Bachelor of Arts.

Conversations between Montgomery College and the University of Maryland have occurred to ensure alignment of coursework and the seamless transfer of students under this proposed pathway. Both institutions have reviewed the curriculum, identified corresponding courses, and are collaboratively working toward the formalization of the articulation agreement.

We appreciate your consideration of this documentation as part of the program approval process. Please do not hesitate to contact me should you require any additional information or clarification.

Angela

Angela Rhoe

Director of Strategic Alliances

Montgomery College

Office of Academic Affairs

9221 Corporate Blvd.

Appendix E: B.A. in Global and Foreign Policy Four-Year Template (with General Education code)

Year 1	Fall		Spring	
	Course	Credit	Course	Credit
	GFPL100	3	ENGL101 (AW)	3
	STAT100 (MA & AR)	3	Oral Communication (OC)	3
	Humanities (HU/IS)	3	Elective	3
	PLCY306/GFPL200	3	GFPL102	3
	Natural Sciences (NS)	3	SLLC Language 2xx-4xx	3
	Total	**15**	**Total**	**15**
Year 2	Fall		Spring	
	Course	Credit	Course	Credit
	HIST Course of Choice (HS)	3	Natural Science Lab (NL)	4
	SLLC Language 2xx-4xx	3	Humanities (HU, UP)	3
	General Education (IS)	3	GFPL203	3
	Statistics Analysis Course	3-4	Elective	3
	Elective	3	Elective	3
	Total	**15-16**	**Total**	**16**
Year 3	Fall		Spring	
	Course	Credit	Course	Credit
	Track Anchor Course	3	GFPL302, SLLC200, or GLBC200	3
	PLCY304	4	Track Elective	3
	AREC345 (HS, UP)	3	Scholarship in Practice (SP)	3
	Elective	3	Elective	3
	Elective	3	Elective	3
	Total	**16**	**Total**	**15**
Year 4	Fall		Spring	
	Course	Credit	Course	Credit
	GFPL400 or PLCY400	3	Track/General Elective	3
	Track Elective	3	Track/General Elective	3
	Professional Writing (PW)	3	Scholarship in Practice (SP)	3
	Elective	3	Elective	3
	Elective	2	Elective	1-2
	Total	**14**	**Total**	**13-14**
			Total Credits	**120**

University of Maryland General Education Requirements Overview

Fundamental Studies: 15 Credits

Fundamental Studies Academic Writing	3	AW
Fundamental Studies Professional Writing	3	PW
Fundamental Studies Oral Communication	3	OC
Fundamental Studies Mathematics	3	MA
Fundamental Studies Analytic Reasoning[1]	3	AR

[1] If a student passes an Analytic Reasoning course that requires a Fundamental Studies Math course as a prerequisite, then the Fundamental Studies Math course is considered to be fulfilled (e.g., students who place into and pass a calculus course, which counts for FS-AR, do not need to take a less advanced Math course to fulfill the FS-MA requirement).

Distributive Studies: 25 Credits

Distributive Studies Natural Sciences	3	NS
Distributive Studies Natural Science Lab Course[2]	4	NL
Distributive Studies History and Social Sciences	6	HS
Distributive Studies Humanities	6	HU
Distributive Studies Scholarship in Practice[3]	6	SP

[2] A second DS-NL course can fulfill the DS-NS course requirement.
[3] Students learn and practice skills of critical evaluation and participate in the process of applying knowledge in the pursuit of a tangible goal. At least one course must be outside of the major.

Big Question Courses: 6 Credits [4]

The signature courses of the UMD General Education program, Big Question courses investigate a significant issue in depth and demonstrate how particular disciplines and fields of study address problems.

Big Question Course	6	IS

[4] Big Question credits may be double-counted with courses taken for the Distributive Studies requirement.

Diversity: 4-6 Credits[5]

Diversity Understanding Plural Societies[6] Courses examine how diverse cultural and ethnic groups co-exist.	3-6	UP
Diversity Cultural Competence Courses help students develop skills to succeed in a diverse world.	0-3	CC

[5] These credits may be double-counted with courses taken for the Distributive Studies requirement.
[6] Students may take either two DV-UP courses or one DV-UP course and one DV-CC course.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland, College Park proposal for a Bachelor of Arts in Public Service Interpreting and Translation

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The University of Maryland proposes a Bachelor of Arts in Public Service Interpreting and Translation (PSIT) to address the growing need for professional interpreters and translators in Maryland, particularly in Spanish-speaking communities. Offered at the Universities at Shady Grove, the interdisciplinary program targets heritage Spanish speakers and bilingual students, combining communication theory, linguistic proficiency, and applied training. With a focus on public service sectors such as healthcare, education, and legal services, the program prepares students for direct workforce entry through a community-based practicum.

The PSIT major requires 45 credits of specialized coursework in translation, interpreting, intercultural communication, and language training, equipping students with both theoretical foundations and applied skills needed for professional public service roles. Admission is contingent upon demonstrated Spanish and English proficiency. The program supports UMD's strategic goals by investing in underserved communities, fostering workforce development, and enhancing educational access. No similar undergraduate degree currently exists in the state, and labor market projections indicate high regional demand, with job growth for interpreters in the D.C. metro area expected to exceed 26% by 2033.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland College Park proposal for a Bachelor of Arts in Public Service Interpreting and Translation.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY OF MARYLAND
OFFICE OF THE PRESIDENT

1101 Thomas V. Miller, Jr. Administration Building
College Park, Maryland 20742
301.405.5803 TEL
301.314.9560 FAX

April 25, 2025

Chancellor Jay A. Perman
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:

I am writing to request approval for a new Bachelor of Arts program in Public Service Interpreting and Translation. The program will be offered at the Universities at Shady Grove regional higher education center. The proposal for the new program is attached. I am also submitting this proposal to the Maryland Higher Education Commission for approval.

The proposal was endorsed by the appropriate faculty and administrative committees. I also endorse this proposal and am pleased to submit it for your approval.

Sincerely,

Darryll J. Pines
President
Glenn L. Martin Professor of Aerospace Engineering

DJP/mdc

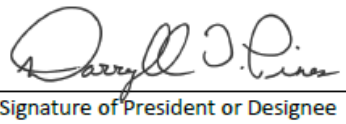
cc: Candace Caraco, Associate Vice Chancellor
Jennifer King Rice, Senior Vice President and Provost
Stephanie Shonekan, Dean, College of Arts and Humanities

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

x	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

University of Maryland, College Park
Institution Submitting Proposal

Public Service Interpreting and Translation
Title of Proposed Program

Bachelor of Arts	**Fall 2025**
Award to be Offered	Projected Implementation Date
110101	**16.0103**
Proposed HEGIS Code	Proposed CIP Code
Department of Communication and School of Languages, Literatures, and Cultures	Shawn Parry-Giles
Department in which program will be located	Department Contact
301-405-6527	spg@umd.edu
Contact Phone Number	Contact E-Mail Address
	04-25-2025
Signature of President or Designee	Date

A. Centrality to the University's Mission and Planning Priorities

Description. The **Bachelor of Arts in Public Service Interpreting and Translation (PSIT)** will provide students with a fundamental understanding of how to communicate messages between speakers of one language and speakers of a different language through the spoken (interpreting) and written word (translation) in community-based settings. There is a growing and unmet need across Maryland for trained interpreters and translators, particularly in Spanish, to support communication in schools, hospitals, legal services, and other public sectors. This program responds directly to that demand by preparing bilingual students with the skills and credentials to serve diverse communities across the state and region. The program is targeted to speakers of Spanish and English with particular focus on heritage speakers of Spanish. This interdisciplinary undergraduate major will be jointly administered by the Department of Communication and the School of Languages, Literatures, and Cultures, within the College of Arts and Humanities.

Location. The program will be offered at the Universities at Shady Grove (Shady Grove) regional higher education center (we request a waiver to the requirement that there must be an existing program on campus in order for this to be off-campus program to be approved).

Relation to Strategic Goals. As Maryland's flagship campus and a national leader in higher education, the University of Maryland (UMD) strives to provide exceptional and affordable instruction for the state's most promising students, regardless of income. As one of the country's first land-grant institutions, UMD uses its research, educational, cultural, and technological strengths in partnership with state, federal, private, and non-profit sectors to promote economic development and improve the quality of life in the state and the region. The proposed B.A. in PSIT aligns with the four overarching pillars of UMD's 2022 Strategic Plan, "*Fearlessly Forward in Pursuit of the Public Good*:"

1. **Reimagining Learning**
   The program offers a unique, interdisciplinary curriculum that combines communication theory, linguistic proficiency, and practical training, preparing students for emerging career fields in public service language access.
2. **Investing in People and Communities**
   PSIT supports workforce development by providing heritage Spanish speakers and other bilingual students with marketable skills that directly serve their communities.
3. **Partnering to Advance the Public Good**
   The program includes a required practicum component and is establishing partnerships with community colleges and public service organizations. This reflects the plan's priority to "expand and invest in partnerships that leverage our expertise to serve the public good" (*Strategic Plan 2022*, p. 7). Moreover, because Shady Grove programs are meant for students who have completed their associate's degree, the program will provide an incentive for students to attend and finish their community college program.
4. **Humanities Grand Challenges**
   PSIT embodies the grand challenges associated with cultural identity, migration, and

multilingualism. It prepares students to engage constructively in Maryland's multilingual and multicultural society.

Funding. The program will be funded through its own tuition revenue. The Department of Communication currently offers a Communication major at Shady Grove, and therefore has the administrative infrastructure to accommodate students in the program.

Institutional Commitment. UMD is fully committed to supporting the B.A. in PSIT. The program builds on UMD's previous decade-long experience offering graduate-level training in interpreting and translation (via a Master of Professional Studies program), leveraging existing faculty expertise, community connections, and instructional infrastructure at Shady Grove. Administrative support, advising, and teaching resources will be provided by the Department of Communication and the School of Languages, Literatures, and Cultures. This program exemplifies UMD's broader mission to address state workforce needs, promote educational access, and prepare students to serve diverse communities through innovative, community-engaged learning.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

Need. The B.A. in Public Service Interpreting and Translation directly addresses a critical statewide need for trained interpreters and translators who can ensure equitable access to public services across Maryland's linguistically diverse communities. As Maryland continues to become one of the most diverse states on the East Coast, with Hispanic populations exceeding 20% in counties such as Prince George's and Montgomery, there is a growing demand for bilingual professionals capable of navigating complex linguistic and cultural contexts in education, health care, law enforcement, and social services.

According to 2022 data from the Migration Policy Institute, 47.1% of Spanish speakers in Maryland report limited English proficiency—well above the national average of 39.9%. The Maryland State Department of Education also reports that Spanish-speaking students constitute 75% of those requiring language services in K-12 schools. In the absence of professionally trained interpreters, schools, hospitals, and other agencies often rely on untrained bilingual individuals—including minors—to provide essential language access. This results in frequent miscommunication, inequitable service delivery, and in some cases, legal or medical risk. The NIH's National Library of Medicine has reported that trained interpreters are 70% less likely to introduce clinical errors than untrained ones, underscoring the life-altering importance of professional language services.

State Plan. The proposed program aligns with the 2022 *Maryland State Plan for Postsecondary Education* through its strong emphasis on access, affordability, and support for historically underserved students. The program supports *Priority 1: Study the affordability of postsecondary education in Maryland,* by using the Universities at Shady Grove's built-in affordability model, in which students complete their first two years at a community college before transferring to complete their bachelor's degree at a four-year institution. The program also advances *Priority*

4: Analyze systems that impact how specific student populations access affordable and high-quality postsecondary education. As a commuter campus, Shady Grove serves working adults, transfer students, and other non-traditional learners—populations often underrepresented at flagship campuses. The PSIT program specifically prioritizes access for heritage Spanish speakers and bilingual students, many of whom are first-generation college students. It therefore directly supports the *Action Item: "Consider how first-generation students navigate the higher education 'system' for the first time*." Designed as a clearly scaffolded major with applied training in interpreting and translation, the PSIT program culminates in a community-based practicum that provides students with professional experience and facilitates a timely transition to the workforce.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

According to the U.S. Bureau of Labor Statistics Occupational Outlook Handbook, jobs in interpreting and translation are projected to grow by 2% nationally between 2023 and 2033.[1] Maryland, a state with a highly diverse population, anticipates a significantly higher 9.65% increase in interpreter and translator positions, according to the Maryland Department of Labor.[2] Additionally, a labor market analysis conducted by the university using Lightcast data found that jobs in interpreting and translation in the Washington, DC metropolitan region are projected to grow by 26.9% between 2020 and 2033. Demand is particularly concentrated in urban centers, with positions distributed across multiple high-need sectors, including K-12 education, hospitals, legal systems, social service agencies, and local governments. The same regional analysis reported a median advertised salary of $84,400 for these positions in Maryland, DC, and Virginia—substantially higher than the national median of $65,200. Nearly half (48%) of job postings specify a minimum requirement of a bachelor's degree, reinforcing the importance of academic preparation for entry into the field.

Despite this demonstrated need, there are currently no undergraduate degree programs in interpreting and translation offered in Maryland. Existing options are limited to non-credit certificates or standalone courses. Once fully established, the proposed program anticipates a steady-state enrollment of 15 to 25 students per year, with a projected annual graduation rate of approximately 20 students. Given the absence of dedicated undergraduate training and the workforce demand in the region, the program is well positioned to contribute meaningfully to the development of a professionalized language access workforce in Maryland.

D. Reasonableness of Program Duplication

We are unaware of any degree programs in interpreting and translation at the undergraduate level in the state. While there are other Spanish language programs in the state, including one

[1] US Bureau of Labor Statistics Occupational Outlook Handbook: Interpreters and Translators: https://www.bls.gov/ooh/media-and-communication/interpreters-and-translators.htm
[2] Maryland Department of Labor: Maryland Occupational Projections 2022-2032: https://labor.maryland.gov/lmi/iandoproj/maryland.shtml

on our own campus, this program is unique in its focus on translation and interpreting and higher level training in communication.

E. Relevance to Historically Black Institutions (HBIs)

There are no Historically Black Institutions within the state of Maryland that offer a program in translation and interpreting, and it appears unlikely that the proposed program would adversely affect any existing programs and/or the uniqueness or identity of a Maryland HBI.

F. Relevance to the identity of Historically Black Institutions (HBIs)

We do not anticipate any negative impacts on the identities of the HBIs in the state of Maryland, as none offer this degree program.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes

Curricular Development. The proposed PSIT program builds on a decade of experience from UMD's Graduate Studies in Interpreting and Translation (GSIT) program, which offered Master of Professional Studies degrees and Post-Baccalaureate Certificate of Professional Studies certificates between 2013 and 2023 before being suspended due to declining international graduate enrollment during the COVID pandemic. In response to growing regional needs—exacerbated by recent migrant arrivals and a critical shortage of trained interpreters in K-12 schools—the two academic units began re-envisioning GSIT as an undergraduate program. Feedback from Shady Grove, area employers, and service organizations, along with input from GSIT alumni now working in courts, hospitals, international agencies, and public service sectors, underscored strong demand for a professionally focused, community-engaged program in interpreting and translation.

Faculty Oversight. The program will be jointly housed in the Department of Communication and the School of Languages, Literatures, and Cultures and overseen by a faculty and staff team from both academic units. Appendix A includes a list of faculty who will teach in the program.

Educational Objectives and Learning Outcomes. The B.A. in Public Service Interpreting and Translation is designed to prepare students to meet the growing demand for trained interpreters and translators in Maryland and the broader DMV region. Graduates will develop theoretical and applied expertise in interpreting (spoken word) and translation (written word), with emphasis on consecutive interpreting, sight translation, and an introduction to simultaneous interpreting, all within public service contexts. Students will deepen their oral and written proficiency in both English and Spanish while gaining a strong foundation in intercultural communication theory—particularly as it applies to Spanish-speaking communities—and an understanding of specialized vocabulary in sectors such as health, law, education, and business. The curriculum also emphasizes professional ethics and standards in community language work, preparing students to serve effectively in K-12 schools, hospitals, legal systems, community and migrant services, and beyond.

The learning outcomes for the PSIT major are as follows:

1. Show advanced competence in speaking, reading, writing, and understanding English in order to communicate in culturally sensitive ways.
2. Show advanced competence in speaking, reading, writing, and understanding at least one other language spoken in the United States in order to communicate in culturally sensitive ways.
3. Translate and interpret written and verbal messages from one language to another for public service agencies (e.g., medical, education, community services, and law enforcement).
4. Apply major theories and concepts that could facilitate the effective use of intercultural communication competence skills within diverse cultural and professional communities.
5. Demonstrate specialized knowledge in health, education, law, and/or institutional operations and terminologies.

Institutional assessment and documentation of learning outcomes. A curriculum map is provided to show alignment between coursework and learning outcomes can be found in Appendix D.

Special Admissions Requirement: Students will need to achieve a certain level of language proficiency to be in the major courses. In order to be admitted to the program, students must have:

- Rating of "Advanced Low" after taking the ACTFL Oral Proficiency Interview (OPI). Note: Applicants may take an in-house version of this test free of charge with examiners from the Spanish and Portuguese unit at UMD or
- An Advanced Placement (AP) score of 5 ("Extremely qualified") in Spanish, or
- An International Baccalaureate program score of 6 (equivalent to ACTFL´s "Advanced Low") in Spanish, or
- Completion of Spanish 311-Advanced Spanish I at the UMD or equivalent in other institutions with a minimum grade of B-.
- English proficiencies will be tested through TOEFL, IELTS, or other UMD approved English admissions exams required for Shady Grove enrollment for international students.

Course requirements. The B.A. in Public Service Interpreting and Translation (PSIT) provides students with a fundamental understanding of how to communicate messages between speakers of one language and speakers of a different language through the spoken (interpreting) and written word (translation) in community-based settings. The program requires 45 credits of major courses including:

Course Requirements		
Course Number	**Course Title**	**Credits**

Introductory Courses (taken at a community college)		
COMM107	Oral Communication: Principles and Practices	3
COMM250	Introduction to Communication Inquiry	3
Theory and Method Courses		
SPAN374	Spanish in the Community	3
COMM382	Essentials of Intercultural Communication	3
Interpreting and Translation Courses		
PSIT310	Fundamentals of Translation	3
PSIT320	Fundamentals of Interpreting	3
PSIT388	Public Service Interpreting and Translation Practicum	3
Select one of the following 3-credit courses:		**3**
PSIT410	Public Service Translation	
PSIT420	Public Service Interpreting	
Select two of the following 3-Credit Communication Studies Courses:		**6**
COMM390	Health Communication	
COMM424	Communication in Complex Organizations	
COMM434	Legal Communication	
Select one of the following 3-Credit Language Courses (English):		**3**
COMM407	Advanced Public Speaking	
COMM406	English Writing in Professional Communication	
Language Courses (Spanish)		**12**
SPAN325	Hispanic Linguistics I: Grammar and Society	
SPAN370	Spanish for Business I	
SPAN420	Spanish and Spanish-Speaking Communities in the US	
SPAN476	Central Americans in the DMV	

The PSIT course prefix does not yet exist, so these courses are not listed in the current academic catalog. Please see Appendix B for course descriptions.

General Education. Students who transfer to UMD with an associate's degree from a Maryland community college are deemed to have completed their General Education requirements, with the exception of Professional Writing, which is typically taken in their third year of study.

Accreditation or Certification Requirements. The are no accreditation or certification requirements relative to this program.

Other Institutions or Organizations. The department is not planning to contract with another institution or non-collegiate organization for this program.

Student Support. Students in the PSIT program will benefit from the existing advising and support system coordinated through the Department of Communication at Shady Grove. The program will leverage existing infrastructure, including dedicated academic advising, career

counseling, and internship placement support. Faculty and staff at Shady Grove work closely with a diverse student body, many of whom are first-generation college students and transfer students from community colleges. Students will also have access to the library services, writing support services, peer mentoring, wellness and counseling resources.

Marketing and Admissions Information. Advertising, recruiting, and admissions materials for the B.A. in Public Service Interpreting and Translation (PSIT) will clearly and accurately describe the program structure, admissions criteria, language proficiency requirements, curriculum, and support services available to students. These materials will be developed in coordination with the Office of Undergraduate Admissions, the Department of Communication, and the School of Languages, Literatures, and Cultures, and will be reviewed regularly to ensure accuracy and clarity.

H. Adequacy of Articulation

While UMD accepts transfer students from all Maryland community colleges as well as from other four-year institutions, Montgomery College is our most common partner for transfers. UMD and Montgomery College have developed a transfer articulation pathway with the proposed major and the A.A. in General Studies (focus on Humanities, Arts, Communication and Languages) at Montgomery College. See Appendix C.

I. Adequacy of Faculty Resources

Program faculty. Appendix A contains a list of faculty members who will be the core members responsible for the delivery of instruction. The Communication Department currently staffs its courses at Shady Grove with predominantly full-time professional-track faculty members. The School of Languages, Literatures, and Cultures will likewise staff its Spanish courses with full-time professional-track faculty members and some tenured-track faculty members. We anticipate hiring some part-time faculty to teach the four interpreting and translation classes.

Faculty training. Faculty teaching in the program will use the university's learning management system along with its extensive electronic resources. They will have access to instructional development opportunities, including those offered as part of the Teaching and Learning Transformation Center, many of which are delivered in a virtual environment. Instructors will work with the learning design specialists on campus to incorporate best practices when teaching in the online environment. Shady Grove features IT support on site. The Communication Department's administrative office will also provides support for PSIT instructors in terms of instructional needs. The administrative office schedules classes and liaisons with instructors in terms of their schedules and curricular needs.

J. Adequacy of Library Resources

The University of Maryland Libraries assessment concluded that the Libraries are able to meet, with current resources, the curricular and research needs of the program.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Resources

All physical facilities, infrastructure, and instructional equipment are already in place. No new facilities are required. The proposed program will be in-person, but for the online components of the coursework, UMD maintains an Enterprise Learning Management System (ELMS). ELMS is a Web-based platform for sharing course content, tracking assignments and grades, and enabling virtual collaboration and interaction. All students and faculty have access to UMD's electronic mailing system.

L. Adequacy of Financial Resources

The budget tables reflect the reallocation of internal UMD resources to establish the program.

Resources:
The program will be self-supported through tuition revenue based on an expected 15 students per year at steady state.

1. Line 2 reflects tuition revenue based on both full-time and part-time students.
2. It is assumed that most students will be full-time, and that most students (90%) will be in-state.
3. Resident tuition is projected at $10,087 for full-time in-state students and $39,464 for full-time out-of- state students.
4. Part-time student tuition is $420.24 for in-state and $1645.26 for out-of-state.
5. The tuition rates assume a 3% yearly tuition increase.
6. No external sources of funding are assumed.
7. No other sources of funding are assumed.

Expenditures:
Most of the costs for the program will be for instructional salary and benefits.

1. Faculty salary and benefits assume a 3% yearly increase.
2. Administrative staff is set at .2 FTE as the administrative support is already in place serving the existing Communication program.
3. No other support staff costs are anticipated.
4. There is a 10% administrative fee charged to the Extended Studies, which handles costs associated with marketing and recruitment and program and other institutional costs related to registration, record-keeping, and admissions.

M. Adequacy of Program Evaluation

Formal program review is carried out according to the University of Maryland's policy for Periodic Review of Academic Units, which includes a review of the academic programs offered by, and the research and administration of, the academic unit (http://www.president.umd.edu/policies/2014-i-600a.html). Program Review is also monitored following the guidelines of the campus-wide cycle of Learning Outcomes Assessment

(https://irpa.umd.edu/Assessment/loa_overview.html). Faculty within the department are reviewed according to the University's Policy on Periodic Evaluation of Faculty Performance (http://www.president.umd.edu/policies/2014-ii-120a.html). Since 2005, the University has used an online course evaluation instrument that standardizes course evaluations across campus. The course evaluation has standard, university-wide questions and allows for supplemental, specialized questions from the academic unit offering the course.

N. Consistency with Minority Student Achievement goals

The proposed program is closely aligned with state and university goals to expand access and improve outcomes for minority and underrepresented students. The program is designed with heritage Spanish speakers and bilingual students in mind—many of whom are first-generation college students and come from educationally or economically disadvantaged backgrounds. Shady Grove serves a diverse and commuter-based student population. The program's pathway model, including an articulation agreement with Montgomery College, also supports transfer students and reduces barriers to degree completion.

In addition to access, the program promotes success through culturally responsive coursework, a community-based practicum, and individualized academic advising. These supports align with the *2022 Maryland State Plan for Higher Education*, particularly its emphasis on closing achievement gaps and "ensuring equitable access to affordable and high-quality postsecondary education for all Maryland residents" (p. 29). By preparing students to serve in linguistically and culturally diverse public service roles, the PSIT program not only reflects the state's demographic makeup but also contributes to a more inclusive and representative public workforce.

O. Relationship to Low Productivity Programs Identified by the Commission

N/A

P. Adequacy of Distance Education Programs

This program is not intended for distance education.

Table 1: Resources

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1.Reallocated Funds	$0	$ 0	$ 0	$ 0	$ 0
2. Tuition/Fee Revenue (c+g below)	$136,761	$207,941	$214,179	$234,837	$241,882
a. #FT Students	9	14	14	15	15
b. Annual Tuition/Fee Rate	$13,025	$13,415	$13,818	$14,232	$14,659
c. Annual FT Revenue (a x b)	$117,222	$187,816	$193,451	$13,487	$219,891
d. # PT Students	3	3	3	3	3
e. Credit Hour Rate	$542.74	$559.02	$575.79	$593.07	$610.86
f. Annual Credit Hours	12	12	12	12	12
g. Total Part Time Revenue (d x e x f)	$19,539	$20,125	$20,729	$21,350	$21,991
3. Grants, Contracts, & Other External Sources	$0	$0	$0	$0	$0
4. Other Sources	$0	$0	$0	$0	$0
TOTAL (Add 1 - 4)	**$136,761**	**$207,941**	**$214,179**	**$234,837**	**$241,882**

Table 2: Expenditures

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	$104,278	$155,142	$159,796	$164,590	$169,528
a. #FTE	1.125	1.625	1.625	1.625	1.625
b. Total Salary	$79,723	$118,610	$122,169	$125,834	$129,609
c. Total Benefits	$24,555	$36,532	$37,628	$38,757	$39,919
2. Admin. Staff (b+c below)	$17,339	$17,860	$18,395	$18,947	$19,516
a. #FTE	0.2	0.2	0.2	0.2	0.2
b. Total Salary	$12,731	$13,113	$13,506	$13,911	$14,329
c. Total Benefits	$4,609	$4,747	$4,889	$5,036	$5,187
3. Total Support Staff (b+c below)	$0	$0	$0	$0	$0
a. #FTE	0.0	0.0	0.0	0.0	0.0
b. Total Salary	$0	$0	$0	$0	$0
c. Total Benefits	$0	$0	$0	$0	$0
4. Technical Support and Equipment	$0	$0	$0	$0	$0
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7. Other Expenses: Administrative Fee (10% of Revenue)	$13,676	$20,794	$21,418	$23,484	$24,188
TOTAL (Add 1 - 4)	**$135,293**	**$193,796**	**$199,610**	**$207,021**	**$213,232**

Appendix A: Core Faculty

The following faculty members are projected to teach in the program. All faculty are full-time unless otherwise indicated.

Name	Highest Degree Earned, Program, and Institution	UMD Title (indicate if part-time)	Courses
Manel Lacorte	Ph.D., University of Edinburgh, Scotland	Professor	SPAN325, SPAN420, SPAN370, PSIT310
Jose Magro	Ph.D., The CUNY Graduate Center, New York	Assistant Clinical Professor	SPAN420, SPAN370, SPAN476
Barbara Zocal Da Silva	Ph.D., Spanish, University of Sao Paulo, Brazil	Assistant Clinical Professor	SPAN374, PSIT310, PSIT320
Elisa Gironzetti	Ph.D., Texas A&M University-Commerce and Ph.D.	Associate Professor	PSIT310, PSIT320, SPAN325, SPAN420, SPAN476
Chris Lewis	Ph.D, University of Maryland		SPAN420, PSIT310, PSIT320, PSIT388
Mollie Kaufer	M.A., Carnegie Mellon	Lecturer	COMM406, COMM407
Skye de Saint Felix	Ph.D., University of Maryland	Lecturer	COMM406, COMM407
Daniel Foster	Ph.D., University of Denver	Lecturer	COMM424
John Leach	Ph.D., University of Maryland	Lecturer	COMM390
Maggie Williams	Ph.D. University of Illinois–Chicago	Lecturer	COMM382
Jade Olson	Ph.D., University of Maryland	Lecturer	COMM434
Ayo Otusanya	Ph.D., George Mason Univ.	Lecturer	COMM390, COMM382
Shawn Parry-Giles	Ph.D., Indiana University	Professor	PSIT388

Appendix B: Course Descriptions
Note that the PSIT course prefix will be newly created upon approval of the proposal and therefore courses with the prefix do not appear in the current academic catalog.

PSIT310 Fundamentals of Translation (3 credits)
Seeks to improve translation skills. The focus will be on building the basic theories and practices of translation. These include solving problems and selecting the necessary translation techniques between two languages.

PSIT320 Fundamentals of Interpreting (3 credits)
Seeks to improve consecutive interpreting skills. The focus will be on building the requisite skills, approaches and knowledge needed for top performance, including but not limited to active listening and analysis, effective use of memory, delivery /presentation, note-taking and proper understanding of the communicative function of interpreting.

PSIT420 Public Service Interpreting (3 credits)
Builds upon the systematic, reflective approach to interpreting in real-world settings introduced in Fundamentals of Interpreting. Consecutive interpreting skills are consolidated through individual and group practice, and any remaining challenges related to consecutive interpreting sub-skills are identified and addressed. The ability to perceive essential meaning is reinforced, as note-taking skills are refined. We expand our active vocabulary, as exercises grounded in authentic, domain-specific settings are prepared and completed.

PSIT410 Public Service Translation (3 credits)
Builds upon the systematic, reflective approach to translation introduced in Fundamentals of Translation by addressing the development of translation skills required for specialization in specific domains. In written and sight translation exercises, we develop approaches to researching specialized subject material, such as locating and assessing source and target language resources, developing and maintaining domain-specific terminology, and consulting experts in the field. We complete authentic, real-world translation tasks and projects. Prerequisite:

PSIT388 Public Service Interpreting and Translation Practicum (3 credits)
Designed to help guide students in the pursuit of experiences to practice their skills in a workplace setting through internships, volunteering, and practice sessions.

COMM434 Legal Communication (3 credits)
Designed for professionals working in legal communication fields. The course is centered on knowledge of the legal process, legal terminology, theoretical and practical knowledge of legal communication, and knowledge of the U.S. legal system at the city, county, state, and federal levels. Prerequisite:

COMM407 Advanced Public Speaking (3 credits)
Enhance skills in public speaking, including strengthening research, organizational, resource-support, and presentational skills for professional settings. Prerequisite:

COMM406: English Writing in Professional Communication Contexts (3 credits)
Enhance skills in professional writing for professional communicators across such contexts as business, health, law, politics, and education.

Appendix C Program Transfer Agreement Pathway with Montgomery College

MONTGOMERY COLLEGE A.A. in General Studies: Humanities, Arts, Communication, and Languages area of concentration			UNIVERSITY OF MARYLAND B.A. in Public Service Interpreting & Translation	CATALOG YEAR: 2024-25
CREDITS	MONTGOMERY COLLEGE Requirements for Associate's Degree		UNIVERSITY OF MARYLAND Requirements for Bachelor's Degree	
3	ENGL 101 Introduction to College Writing*		Lower-level Elective	
3	Mathematics Foundation† (MATF)		See UMD note*	
4	SPAN103 Intensive Elementary Spanish (HUMD) ††		SPAN103	
3	COMM 108 or COMM 112 (GEIR)		COMM107	
3	Natural Sciences Distribution without Lab (NSND)		See UMD note**	
3	ENGL102 Critical Reading, Writing and Research (ENGF)		ENGL101	
3	ANTH256 World Cultures (BSSD)		Lower-level Elective	
3	COMM225 Intercultural Communication (HACL Core 1)		Diversity & Cultural Competency	
4	Natural Sciences Distribution with Lab (NSLD)		See UMD note**	
3	SPAN201 Intermediate Spanish I †† (GEIR)%		SPAN203	
3	Arts Distribution (ARTD)		See UMD note**	
3	PSYC100 General Psychology (BSSD)		PSYC100	
3	COMM204 Interpersonal Communication (HACL Core 2)		Lower-level Elective	
3	COMM250 Intro to Communication Inquiry and Theory (HACL Core 3)		COMM250	
3	SPAN 202 Intermediate Spanish II †† (HACL Core 4)		SPAN204	
3	SPAN215 Advanced Spanish Conversation & Composition (HACL Core 5)		Lower-level Elective	
3	SPAN216 Advanced Readings in Spanish: Introduction to Latin American Literature		Lower-Level Elective	
3	Elective^		See UMD Note***	
3	Elective^		See UMD Note***	
1	Elective^		See UMD Note+	
60	TOTAL CREDITS TRANSFERRED			

REMAINING UMD DEGREE REQUIREMENTS - RECOMMENDED SEQUENCE UPON TRANSFER WITH ASSOCIATE'S DEGREE	
COMM 382 Essentials of Intercultural Communication	3
COMM 390 Health Communication	3
SPAN 325 Hispanic Linguistics I: Grammar and Society	3
PSIT 310 Fundamentals of Translation	3
Elective	3
SPAN 370 Spanish for Business I	3
SPAN 374 Spanish in the Community	3
PSIT 320 Fundamentals of Interpreting	3
Elective	3
Elective	3
SPAN 420 Spanish and Spanish-Speaking Communities in the US	3
COMM 424 Communication in Complex Organizations or COMM 434 Legal Communication	3
Professional Writing (FSPW)	3
Elective	3
Elective	3

COMM 406 English Writing in Professional Communication or COMM 407 Advanced Public Speaking	3
PSIT 388 Public Service Interpreting and Translation Practicum	3
PSIT 410 Public Service Translation or PSIT 420 Public Service Interpreting	3
SPAN 476 Central Americans in the DMV	3
Elective	3
TOTAL CREDITS REMAINING AT UNIVERSITY OF MARYLAND	60

MONTGOMERY COLLEGE NOTES

Suggested 1st Semester

Suggested 2nd Semester

Suggested 3rd Semester

Suggested 4th Semester

*If needed for ENGL102. If not, becomes Elective.

† MATH117 or higher

†† Students with previous knowledge of a language should take the language placement test. Students who have completed the placement test or received equivalent course credit for AP, IB or CLEP tests should consult a program advisor for world languages or work with the world languages/humanities departments on their language placement for this track. Completion of WL 202 and higher courses for the selected language are required for students intending to pursue this major at UMD after transfer.

MC Students who have not followed the Foreign Language Sequence for Spanish courses at MC would need to obtain a rating of "Advanced Low" in the ACTFL Oral Proficiency Interview (OPI). Note: Applicants may take an in-house version of this test free of charge with examiners from the Department of Spanish and Portuguese at the University of Maryland (UMD)

% Suggested for Winter Session

^Suggested Electives: PHIL140 Introduction to the Study of Ethics; LING200 Introduction to Linguistics; CCJS110 Administration of Justice; HINM115 Medical Terminology I; HINM116 Medical Terminology II

UNIVERSITY OF MARYLAND NOTES

* MC students must select from approved MC Mathematics Foundations course options; UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but will at minimum count for a UMD elective course.

** MC students must select from approved MC General Education category course options; UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but will at minimum count for a UMD elective course.

*** UMD equivalency may vary depending on course taken (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database), but will at minimum count for a UMD elective course.

+ UMD equivalency may vary (consult UMD transfer credit database, https://registrar.umd.edu/transfer-credit/transfer-course-database). Students should choose a 1-credit MC course that will transfer as elective credit to UMD if possible.

UNIVERSITY OF MARYLAND

Michael D Colson <mcolson@umd.edu>

PIST Pathway

1 message

Rhoe, Angela M <Angela.Rhoe@montgomerycollege.edu> Wed, Apr 30, 2025 at 4:22 PM
To: Michael D Colson <mcolson@umd.edu>

To:

From: Angela Rhoe, Director of Strategic Alliances

Subject: **Pending Articulation Agreement with the University of Maryland**

Date: April 25, 2025

In accordance with COMAR requirements regarding the establishment of new academic programs, this memorandum serves as notice that Montgomery College is in the process of finalizing a 2+2 articulation pathway from the Associate of Arts in General Studies--Humanities, Arts, Communication, and Languages AOC to the University of Maryland's proposed Public Service and Interpreting and Translation Bachelor of Arts.

Conversations between Montgomery College and the University of Maryland have occurred to ensure alignment of coursework and the seamless transfer of students under this proposed pathway. Both institutions have reviewed the curriculum, identified corresponding courses, and are collaboratively working toward the formalization of the articulation agreement.

We appreciate your consideration of this documentation as part of the program approval process. Please do not hesitate to contact me should you require any additional information or clarification.

Angela Rhoe

Director of Strategic Alliances

Montgomery College

Office of Academic Affairs

Appendix D: Learning Outcomes Assessment

Curriculum maps show the alignment between the learning outcomes and what is taught in the curriculum. Curriculum maps reveal where learning occurs and the educational experience (introduced, reinforced, and emphasized). Programs could alternatively indicate the depth of coverage as basic, intermediate or advanced expectation. Curriculum maps are a useful tool for tracing assessment results back to where curricular improvements can be made. This table refers to program learning outcomes in the top row, and program courses in the first column.

LO1: Show advanced competence in speaking, reading, writing, and understanding English in order to communicate in culturally sensitive ways.

LO2: Show advanced competence in speaking, reading, writing, and understanding at least one other language spoken in the United States in order to communicate in culturally sensitive ways.

LO3: Translate and interpret written and verbal messages from **one language to another** for public service agencies (e.g., medical, education, community services, and law enforcement).

LO4: Apply major theories and concepts that could facilitate the effective use of intercultural communication competence skills within diverse cultural and professional communities.

LO5: Demonstrate specialized knowledge in health, education, law, and institutional operations and terminologies.

Courses	LO1	LO2	LO3	LO4	LO5
SPAN325: Hispanic Linguistics I: Grammar and Society		Introduced		Introduced	
SPAN374: Spanish in the Community		Introduced		Introduced	
SPAN370: Spanish for Business I		Introduced			Introduced
COMM382: Essentials of Intercultural Communication	Introduced			Introduced	Introduced
PSIT310: Fundament	Introduced		Introduced	Introduced	

als of Translation					
PSIT320: Fundamentals of Interpreting	Introduced		Introduced	Introduced	
PSIT388: Public Service Interpreting and Translation Practicum	Emphasized	Emphasized	Emphasized	Emphasized	Emphasized
COMM390: Health Communication	Emphasized				Emphasized
COMM434: Legal Communication	Emphasized				Emphasized
COMM424: Communication in Complex Organizations	Emphasized				Emphasized
COMM407: Advanced Public Speaking	Emphasized			Emphasized	
COMM406: English Writing in Professional Communication Contexts	Emphasized			Emphasized	
SPAN420: Spanish and Spanish-Speaking Communities in the US		Emphasized		Emphasized	
SPAN476: Central		Emphasized		Emphasized	

Americans in the DMV					
PSIT420: Public Service Interpreting	Reinforced	Reinforced	Reinforced	Reinforced	Reinforced
PSIT410: Public Service Translation	Reinforced	Reinforced	Reinforced	Reinforced	Reinforced

Appendix E: Public Service Interpreting and Translation Four-Year Template (General Education Codes in Parentheses)

Requirements	Year 1: Fall	Credit	Year 1: Spring	Credit
	ENGL101 (AW)	3	Natural Sciences (NS)	3
	MATH (MA)	3	Humanities (HU, UP)	3
	History/Social Sciences (HS, IS)	3	COMM250	3
	COMM107 or 200 (OC)	3	Elective	3
	ARHU158	3	Elective	3
	Total	*15*	*Total*	*15*
	Year 2: Fall	**Credit**	**Year 2: Spring**	**Credit**
	Scholarship in Practice #1 (SP)	3	Humanities (HU, UP)	3
	Global Engagement #1	3	Global Engagement #2	3
	Analytic Reasoning (AR)	3	Scholarship in Practice #2 (SP)	3
	Lab Science (NL)	4	History/Social Sciences (HS, IS)	3
	Elective	3	Elective	3
	Total	*16*	*Total*	*15*
	Year 3: Fall	**Credit**	**Year 3: Spring**	**Credit**
	COMM382	3	SPAN370	3
	COMM390	3	SPAN374	3
	SPAN325	3	PSIT320	3
	PSIT310	3	Elective	3
	Elective	3	Elective	3
	Total	*15*	*Total*	*15*
	Year 4: Fall	**Credit**	**Year 4: Spring**	**Credit**
	SPAN420	3	COMM406 or COMM407	3
	COMM434	3	PSIT388	3
	Professional Writing (PW)	3	PSIT410 or PSIT420	3
	Elective	3	SPAN476	3
	Elective	3	Elective	2
	Total	*15*	*Total*	*14*
TOTAL Credits = 120				

Note: Most students will enter the program having completed an associate's degree at a Maryland community college, following the typical Universities at Shady Grove model. If students do not complete an associate's degree from a Maryland community college, they will follow the above four-year template and will need to complete UMD General Education requirements.

Spanish Proficiency Note: Students must meet with Spanish advisor for a comprehensive language proficiency assessment in lieu of, or in addition to, the following prerequisites:

- **SPAN325 and SPAN370** Prerequisites: [SPAN 301 or SPAN 306]; and SPAN 303; and (SPAN 311 or SPAN 316), or permission of instructor.
- **SPAN420** Prerequisite: SPAN 325, SPAN 425, or permission of instructor.
- **SPAN476** Prerequisite: SPAN 331, SPAN 332, SPAN 333, SPAN 361 SPAN 362 or SPAN 363, or permission of instructor.

University of Maryland General Education Requirements Overview

Fundamental Studies: 15 Credits

Fundamental Studies Academic Writing	3	AW
Fundamental Studies Professional Writing	3	PW
Fundamental Studies Oral Communication	3	OC
Fundamental Studies Mathematics	3	MA
Fundamental Studies Analytic Reasoning[1]	3	AR

[1] If a student passes an Analytic Reasoning course that requires a Fundamental Studies Math course as a prerequisite, then the Fundamental Studies Math course is considered to be fulfilled (e.g., students who place into and pass a calculus course, which counts for FS-AR, do not need to take a less advanced Math course to fulfill the FS-MA requirement).

Distributive Studies: 25 Credits

Distributive Studies Natural Sciences	3	NS
Distributive Studies Natural Science Lab Course[2]	4	NL
Distributive Studies History and Social Sciences	6	HS
Distributive Studies Humanities	6	HU
Distributive Studies Scholarship in Practice[3]	6	SP

[2] A second DS-NL course can fulfill the DS-NS course requirement.
[3] Students learn and practice skills of critical evaluation and participate in the process of applying knowledge in the pursuit of a tangible goal. At least one course must be outside of the major.

Big Question Courses: 6 Credits [4]

The signature courses of the UMD General Education program, Big Question courses investigate a significant issue in depth and demonstrate how particular disciplines and fields of study address problems.

Big Question Course	6	IS

[4] Big Question credits may be double-counted with courses taken for the Distributive Studies requirement.

Diversity: 4-6 Credits[5]

Diversity Understanding Plural Societies[6] Courses examine how diverse cultural and ethnic groups co-exist.	3-6	UP
Diversity Cultural Competence Courses help students develop skills to succeed in a diverse world.	0-3	CC

[5] These credits may be double-counted with courses taken for the Distributive Studies requirement.
[6] Students may take either two DV-UP courses or one DV-UP course and one DV-CC course.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland Eastern Shore proposal for Bachelor of Science in Mathematics

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The University of Maryland Eastern Shore (UMES) is pleased to present a proposal for establishing a Bachelor of Science in Mathematics degree in the Department of Mathematics, within the School of Education, Social Sciences, and the Arts. This proposed program supports the priorities of the University's strategic plan. Previously, the mathematics curriculum was considered a classical course of study with a heavy emphasis on fundamental mathematics, leading to more successful graduate study. Nationally, interest in mathematics has shifted as students seek more applied tracks than traditional or "pure" mathematics training. The opportunities to apply analytical, statistical, computational, and modeling skills to various engineering, business, natural science, and industrial environments are becoming more attractive to students with high mathematics aptitude. The proposed undergraduate program in mathematics prepares graduates to practice applied mathematics and related fields in industry and government effectively, in addition to continuing advanced study. The principal focus of a major in mathematics is to improve a student's mathematical, computational, and communication skills. Moreover, significant attention is placed on modeling problems from various areas, including business, engineering, and science.

The proposed program is designed to include general education courses (39 credits), the program core (40 credits), supportive courses (12 credits), major electives (18 credits), and free electives (11 credits).

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland Eastern Shore proposal for a Bachelor of Science in Mathematics.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY OF MARYLAND EASTERN SHORE
Office of the President

May 1, 2025

Dr. Jay Perman, Chancellor
University System of Maryland
701 E. Pratt St.
Baltimore, MD 21202

RE: Substantial Change Proposal (Bachelor of Science degree in Mathematics)

Dear Chancellor Perman:

The University of Maryland Eastern Shore (UMES) hereby submits a new program proposal to begin offering the Bachelor of Science degree in Mathematics within the School of Education, Social Sciences, and the Arts.

As a public 1890 land-grant Historically Black University that embraces diversity, UMES is committed to serving first-generation and underserved students and providing educational, research, and community engagement opportunities to transform the lives of its students, who will impact the state, the region, and the world. To further this mission, UMES reviews national, regional, and local trends and needs to ensure that its academic programs are competitive and allow stakeholders an opportunity for optimum return on their financial and time investments.

Previously, the mathematics curriculum was considered a classical course of study with a heavy emphasis on fundamental mathematics, leading to more successful graduate study. Nationally, interest in mathematics has shifted as students seek more applied tracks than traditional or "pure" mathematics training. The opportunities to apply analytical, statistical, computational, and modeling skills to various engineering, business, natural science, and industrial environments are becoming more attractive to students with high mathematics aptitude.

The proposed undergraduate program in mathematics prepares graduates to practice applied mathematics and related fields in industry and government effectively, in addition to continuing advanced study. The intent is to produce students who are prepared to demonstrate proficiency in a wide range of mathematical topics and be candidates to pursue graduate study or take on employment in a wide range of companies and laboratories.

The proposed Bachelor of Science program in Mathematics supports the priorities in the University's Strategic Plan. It has a higher level of impact on the University's goal to expand the number of graduates in fields critical to Maryland's economy such as STEAM, Cyber, and Healthcare.

The attached proposal has undergone the established UMES curriculum approval process, and I fully support the proposed program.

Thank you for your consideration.

Sincerely,

Heidi M. Anderson, Ph.D., FAPhA
President

Copy:
Dr. Rondall Allen, Provost and Vice President of Academic Affairs
Mr. Christopher J. Harrington, Acting Dean, School of Education, Social Sciences, and the Arts
Dr. Tiara Cornelius, Acting Chair, Department of Mathematics

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

University of Maryland Eastern Shore (UMES)
Institution Submitting Proposal

Bachelor of Science in Mathematics
Title of Proposed Program

Bachelor of Science	FALL 2025
Award to be Offered	Projected Implementation Date
170100	270101
Proposed HEGIS Code	Proposed CIP Code
Department of Mathematics	Leesa Thomas Banks
Department in which program will be located	Department Contact
410-651-7591	lpthomasbanks@umes.edu
Contact Phone Number	Contact E-Mail Address
	05-01-2025
Signature of President or Designee	Date

Office Use Only: PP#

Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program

Institution Submitting Proposal	University of Maryland Eastern Shore

Each action below requires a separate proposal and cover sheet.

- (●) New Academic Program
- ( ) New Area of Concentration
- ( ) New Degree Level Approval
- ( ) New Stand-Alone Certificate
- ( ) Off Campus Program
- ( ) Substantial Change to a Degree Program
- ( ) Substantial Change to an Area of Concentration
- ( ) Substantial Change to a Certificate Program
- ( ) Cooperative Degree Program
- ( ) Offer Program at Regional Higher Education Center

Payment Submitted: (●) Yes ( ) No Payment Type: (●) R*STARS # ( ) Check # JJ553208 Payment Amount: $850 Date Submitted: 4/28/25

Department Proposing Program	Mathematics
Degree Level and Degree Type	Undergraduate/Bachelor of Science
Title of Proposed Program	Mathematics
Total Number of Credits	120
Suggested Codes	HEGIS: 170100 CIP: 270101
Program Modality	(●) On-campus ( ) Distance Education (fully online) ( ) Both
Program Resources	(●) Using Existing Resources ( ) Requiring New Resources
Projected Implementation Date (must be 60 days from proposal submisison as per COMAR 13B.02.03.03)	(●) Fall ( ) Spring ( ) Summer Year: 2025
Provide Link to Most Recent Academic Catalog	URL: https://wwwcp.umes.edu/schedule/academic-catalogs/
Preferred Contact for this Proposal	Name: Tiara Cornelius Title: Associate Professor & Acting Chair Phone: 410-651-6284 Email: tdturner@umes.edu
President/Chief Executive	Type Name: Heidi M. Anderson, Ph.D., FAPhA Signature: Heidi M Anderson Date: 5/1/25
	Date of Approval/Endorsement by Governing Board:

Revised 4/2025

Proposal for New Undergraduate Degree Program

Bachelor of Science in Mathematics

A. Centrality to Institutional Mission Statement and Planning Priorities

1. **Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.**

As a public 1890 land-grant Historically Black University that embraces diversity, the University of Maryland Eastern Shore (UMES) is committed to serving first-generation and underserved students and providing educational, research, and community engagement opportunities to transform the lives of its students, who will impact the state, the region, and the world. To further this mission, UMES reviews national, regional, and local trends and needs to ensure that its academic programs are competitive and allow stakeholders an opportunity for optimum return on their financial and time investments. Previously, the mathematics curriculum was considered a classical course of study with a heavy emphasis on fundamental mathematics, leading to more successful graduate study. Nationally, interest in mathematics has shifted as students seek more applied tracks than traditional or "pure" mathematics training. The opportunities to apply analytical, statistical, computational, and modeling skills to various engineering, business, natural science, and industrial environments are becoming more attractive to students with high mathematics aptitude. The proposed undergraduate program in mathematics prepares graduates to practice applied mathematics and related fields in industry and government effectively, in addition to continuing advanced study. The principal focus of a major in mathematics is to improve a student's mathematical, computational, and communication skills. Moreover, significant attention is placed on modeling problems from various areas, including business, engineering, and science. The intent is to produce students who are prepared to demonstrate proficiency in a wide range of mathematical topics and be candidates to pursue graduate study or take on employment in a wide range of companies and laboratories.

In the Spring 2022 semester, the Mathematics Department contacted the Director of the Career and Professional Development Center at UMES to partner with STEM (Science, Technology, Engineering, and Mathematics) professionals to work as an advisory board to review and advise on these proposed modifications for a reactivated degree. The Committee found that programs highly successful in attracting and maintaining interest in mathematics provided students with not only solid fundamental training in classical topics such as calculus, analysis, abstract algebra, etc., but also infusions of computational, business, engineering, statistical, and natural science applications.

In general, the proposed program is designed as follows:

- General Education (39 credits);
- Program Core (40 credits);
- **Major Electives (18 credits);**
- **Supportive Course Electives (12 credits)**; and
- Free Electives (11 credits).

The most significant modifications to the previous curriculum are:

- Modifications to the current applied mathematics concentration.
- Course revisions in the fundamental courses, linear algebra, advanced calculus, modern algebra, analysis, etc., to include early study of matrix and numerical methods, modeling, and other applications.
- Increased involvement in faculty/student expository and research projects, co-curricular projects, external internships at regional industrial partners, and student and industry colloquia.

2. **Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.**

The current 2023 UMES Strategic Plan includes the following priorities:

- Priority 1: Academic Excellence and Innovation
- Priority 2: Access, Affordability, and Achievement
- Priority 3: Workforce and Economic Development
- Priority 4: Research and Community Engagement
- Priority 5: Diversity, Equity, and Inclusion

The proposed Bachelor of Science in Mathematics degree supports the priorities of the Strategic Plan in general; however, it has a higher significant level of impact on the following:

Goal 1.1: Attract, retain, and graduate more aspiring students at the undergraduate and graduate levels – The University has set a target of increasing undergraduate enrollment by 2%, year over year, through 2030. To effectively serve this increased population, the University is investing in providing more funding to hire tenure-track personnel in mathematics to provide quality instruction and develop co-requisite models for fundamental mathematics courses, improve mathematics placement processes, and provide supplemental instruction activities in mathematics.

Goal 1.3: Recruit, retain, and develop exceptional faculty and staff – The University is providing funding for multiple tenure-track assistant/associate professor positions in mathematics to provide quality instruction in existing general education, pure and applied mathematics, as well as the proposed new concentrations in computational sciences, data and statistical sciences, and actuarial sciences.

Goal 2.2: Improve transfer pathways – Develop MOUs/articulation agreements/dual enrollment activities with the local school system and Wor-Wic Community College, allowing students interested in accumulating college credit or pursuing further study in the bachelor's program in mathematics after completing associate degrees at community colleges.

Goal 2.6: Strengthen programs, concentrations, and certificates, making them more relevant to workforce and societal needs – The addition of three new concentrations: (1) actuarial, (2) statistical and data science, and (3) computational sciences.

Goal 3.2 (and 3.3): Expand the number of graduates in fields critical to Maryland's economy: STEAM, cyber, healthcare – The Bachelor's in Science in Mathematics proposes to help provide competitive candidates, including the underrepresented, for employment in the industrial, government, engineering, and local secondary school systems.

Goal 3.4 – Develop new, revise, and enhance existing academic programs to remain current with evolving workforce demands – The proposed program builds upon solid fundamental mathematics training designed to prepare students for advanced study in graduate school or entry into analytical/engineering environments and incorporates courses and training in data science, statistics, and computer science thereby providing students a wider and competitive foundation for today's market needs.

Goal 4.2: Align UMES research strengths with emerging national research priorities – The University is providing funding for multiple tenure-track positions in mathematics in the emerging areas of data science, enterprise computing, statistical analysis, and actuarial sciences.

3. **Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.)**

The Mathematics program will be housed in the School of Education, Social Sciences, and the Arts under the Department of Mathematics. All bachelor's degree programs and the Department of Mathematics are outfitted with an annual budget that supports existing tenured/tenure-track professors, support staff, chair, faculty support materials, etc. In addition, the University is currently allocating funding to hire three (3) more tenure-track professors to align with the expanded academic offerings of the program. Along with the additional allocations for faculty, the existing faculty and staff, classroom and laboratory facilities, and faculty support resources are sufficient to support the program.

4. **Provide a description of the institution's a commitment to:**
    a) **ongoing administrative, financial, and technical support of the proposed program**

The Mathematics Programs will operate under the Office of Academic Affairs (Provost and Vice-President), the School of Education, Social Sciences, and the Arts (Dean), and the Department of Mathematics (Chair). All degree programs are outfitted with administrative, financial, human resources, and IT structures to carry out academic activities as expected by the Middle States Commission on Higher Education, the University System of Maryland, and UMES. The proposed program has been reviewed and vetted by the Department of Mathematics Curriculum Committee, the School of Education, Social Sciences, and the Arts Curriculum Committee, the Faculty

Assembly, the Provost and Vice-President of Academic Affairs, and the President of UMES. Technical support for the programs is provided by the Center for Instructional Technology and Online Learning and the Department of Information Technology. The Department of Mathematics is currently providing the University's fundamental and service courses in mathematics and is allotted a budget for instructional staffing, support staff, faculty support resources, and supplies.

b) continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

The University is fully committed to the long-term success of the Mathematics Program. This is realized in its allocation of classroom and office space in the Engineering and Aviation Sciences Complex and the allocation of funding to hire three (3) new tenure-track professors. The proposed program is designed to recruit aspiring mathematics students, provide high-quality advisement, mentoring, and instruction, and provide a seamless path traversing all academic requirements for the degree and transitioning to the workforce and/or further graduate study. Given the additional resources committed by the University (new faculty, research resources, classroom/office space), the Department of Mathematics will continue its service role by providing fundamental mathematics courses and relaunch its efforts in providing the bachelor's degree in mathematics.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

1. **Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:**

a) The need for the advancement and evolution of knowledge

Mathematics is essential for productive societies. Mathematics is said to help understand branches of thought. Mathematics helps improve communication skills, teaches process value, drives technology to enhance the quality of life, sharpens problem-solving skills, etc. The world and its economies will continue relying on a robust digital presence, leading to incremental advancements in engineering, programming, data analysis, and e-commerce. In addition, mathematics is suggested to promote financial literacy, flexible thinking, creativity, and emotional health.

Academic programs in mathematics are needed to produce more technically proficient personnel who help assist all citizens, including the underrepresented, in accessing mathematical training to unlock opportunities for rewarding careers as well as improved quality of life, and to join a robust community of existing persons dedicated to the advancement and evolution of knowledge.

b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education

UMES is the only HBCU on the Eastern Shore of Maryland and continues to strongly commit to providing higher education opportunities for minorities and other underrepresented students.

UMES is relatively close to the Washington, DC, Delaware, Baltimore, MD, and Northern Virginia region, which provides many lucrative opportunities for well-trained mathematics students in government, business, and engineering industries. Industry leaders who employ persons with high levels of mathematics training have stated that a more diverse workforce is needed in order for those industries to grow and hit organizational targets successfully. However, many underrepresented students fail to access the mentoring, academic resources, training, or confidence that is typically thought to encourage a student to enter a mathematics program. UMES then provides an opportunity for first-generation, under-served, and economically disadvantaged students to access high-quality mathematics that is unavailable at more highly selective or costly institutions.

The National Science Foundation reports that HBCUs are the leading baccalaureate institutions for Black students who later earn a research doctorate. Specifically, the UMES Department of Mathematics has graduated five (5) students since 2005 who have successfully completed a Ph.D. in Mathematics.

c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs

A Gloat article states that a diverse workforce is a win-win, as it benefits employees and the organization. Diversity leads to positive business practices and higher levels of innovation and creativity. UMES is the only HBCU on the Eastern Shore of Maryland and proposes to make this program of fundamental and applied mathematics accessible to those who desire the unique cultural experiences afforded by HBCUs, the Lower Shore Counties of the Eastern Shore region, underrepresented citizens in mathematics professions, and the economically disadvantaged. Given the demands of the technical, analytical, and engineering workplace, more applied and broader (than traditional programs in mathematics) mathematics programs are now needed to promote innovation.

2. **Provide evidence that the perceived need is consistent with the** Maryland State Plan for Postsecondary Education.

The 2022 Maryland State Plan for Higher Education has three main areas: (1) Student Access, (2) Student Success, and (3) Innovation.

Student Access: Ensure equitable access to affordable and high-quality postsecondary education for all Maryland residents. In a recent U.S. News Money report, twenty (20) of the top fifty (50) career opportunities require moderate or higher levels of mathematical and computational proficiency. As is our tradition here at UMES, our mission encompasses providing access to high-quality, in-demand educational offerings to those who may have been previously underserved, are financially challenged, and/or desire the unique cultural and supportive experience at the HBCU campus. The 2022 MHEC Data Book states that:

- 77% of the total enrollment at UMES are Maryland citizens;
- 11% of the total enrollment at UMES are age 25 and older;
- 59.9% of Maryland high school graduates enrolling in UMES as first-time, full-time students were given remedial and developmental academic activities to better prepare them to complete college-level courses;

- 51.7% of total undergraduate enrollment received Pell support (2019);
- **With regards to affordability, UMES tuition and fees are 11.2% below the average tuition of Maryland four-year institutions and 14.4% less than the tuition and fees charged at the other four-year institutions on the Eastern Shore of Maryland, making UMES an affordable option for academic study.**

UMES has a documented history of graduating students from mathematics programs. Many recruitment, access, and retention programs have produced productive mathematics professionals. Specifically, there are six (6) students who have matriculated into graduate programs to earn doctorate degrees in mathematics. In addition, mathematics education graduates have been appointed to many teaching and administrative positions here in the Lower Shore Counties of Maryland (Talbot, Dorchester, Wicomico, Somerset, and Worcester), thereby serving a severe need to identify qualified mathematics personnel for in-class instruction.

Mathematics Program Degrees Awarded Fall 1998 – Fall 2023							**Totals**
Program	**Ethnicity**						
	Asian	**Black**	**Hispanic**	**Pacific**	**White**	**Other/Blank**	
Mathematics	2	62	1	1	8	3	77
Mathematics Education		6			7		13
Totals	2	68	1	1	15	3	**90**

UMES is an open-access university; we have several effective resources in place to create awareness of the program and prepare students for college coursework:
Significant efforts will be established to seek opportunities to encourage transfers from other four (4)-year and two (2)-year institutions such as Wor-Wic Community College, Chesapeake Community College, Eastern Shore of Virginia Community College, and others. The Department has set a goal of forty (40) or more total enrolled students by the Fall 2030 semester. The University has committed several financial and physical resources to assist in reestablishing a vibrant program and enrollment, including:

- **University Achievement Scholarships** (5) – Financial scholarships offered to high-achieving first-time full-time students seeking to major in mathematics programs. This commitment is evidenced by including the reactivation of the mathematics program in the **University's Strategic Plan.**
- **Richard A. Henson Honors Program** – The University Honors Program provides programmatic and financial support for students with high academic records.
- **UMES STEM STARS Program** – Howard Hughes Medical Institute program designed to attract and support students with high academic achievement in STEM areas.

The Department will create the Program Promotion and Recruitment Committee, comprised of faculty members who will:

a) Develop professional-looking promotional items such as brochures, website materials, pens, promotional videos, writing pads, etc.
b) Provide an up-to-date analysis of past enrollment data to determine the county school districts that have the highest levels of eventual enrollment at the University.

c) Develop and implement mass mailings to local and regional math and science teachers, especially those in Baltimore City, Baltimore County, Montgomery County, Prince George's County, District of Columbia Public Schools, Eastern Shore of Maryland School Districts, and the Eastern Shore of Virginia School Districts;
d) Schedule faculty visits to school district college fairs.
e) Establish:

- **Fall Semester (October) High School Algebra/Geometry/Calculus Mathematics Competition –** mathematics competition inviting student teams from neighboring schools in Dorchester, Worcester, Wicomico, Somerset, Talbert, and the Eastern Shore of Virginia. Students will also compete for individual and group awards in the mathematics areas.

- **Spring Semester Applied and Computational Math Showcase/Colloquium** (guest speakers from NASA, NSA, IBM, etc.) to coincide with the longstanding UMES Springfest recruitment program. Students and teachers from neighboring school districts will be invited to attend to learn about opportunities for students with mathematics backgrounds in their organizations.

- **Faculty/Teacher Research Projects, workshops** (math placement, career trends, hands-on projects, grant proposals, etc.). The Department wishes to develop workshops for more effective relationships with neighboring mathematics teachers and supervisors.

- **Summer Mathematics Readiness Camp** (4–5-week all-day camp for middle/high schoolers). Applications of algebra/linear **algebra**, statistics, and computer science.

Secondly, after identifying candidates for enrollment, the Department will create stronger communications through:

- **Phone and email communications**- Starting in October and November, the Department will contact student candidates, providing application materials/updates, invitations to campus events, financial aid information, and question/answer sessions.

- **Notification of Meritorious Scholarships/Financial Awards** and contact information to discuss details. Continue question/answer sessions regarding acceptance, obligations, and other opportunities for financial and program assistance.

- **Follow-up visits to campus** – students and parents will be encouraged to revisit the campus to observe classroom organization and protocols, everyday student interactions, available academic and social services, and living arrangements.

- **Monthly email/mailings of news and University and Departmental achievements** – The Key, the monthly University of Maryland Eastern Shore newsletter, highlights the achievements of University students, alumni, and staff, along with the Department's newsletter, will be provided to potential candidates.

After the candidates have committed to the University, the Department will:

a) **Assign a faculty advisor to begin assisting students with academic planning** (first-year placement examination preparation, calculator and supplies needed for course study, list of reading materials for preparation for collegiate mathematics, etc.)

b) The faculty advisor will alert the University's Office of Enrollment Management and Student Experience of the student's plan for enrollment and serve as a liaison between the student and the University.

Summer Bridge - The program will encourage recruits to attend the summer sessions (Summer I, II, and III) to enroll in developmental and precalculus courses (as determined by the placement process). This process significantly decreases the student's time to degree and overall expenses in completing the program.

Student Success: Promote and implement practices and policies that will ensure student success

Central to the mission of the University, UMES structures its academic and support services to provide and maintain high-quality postsecondary education (priority #5), removing any barriers and improving internal systems that realize timely completion of academic programs (priority #6). According to the 2022 Maryland State Plan for Higher Education, programs should exhibit many characteristics, including:

Identify innovative fields of study – The proposed Mathematics program recognizes the high demand the market is placing on areas requiring advanced mathematical and computational skills training. Locally and regionally, UMES is located on the mid-Atlantic corridor, home to aerospace and defense, cybersecurity, distribution and logistics, financial services, military and federal institutions, and agencies. The program is flexible and allows students to prepare for more in-depth study in many of the more rewarding careers.

Consider specializing as opposed to expanding academic programs – The base of the proposed program is a fundamental study of calculus, linear algebra, differential equations, probability, and statistics, thereby allowing students a foundation to be able to select program specialties (concentrations) in computational sciences, data and statistical sciences, actuarial science, applied, and traditional "pure" mathematics. The foundation also serves as a platform to assist students in continuous life-long study as interests change or their potential to enter a future emerging specialty.

Evaluate assessment strategies for purpose, including assessing a student for real-world application and capstone projects as representative of experience - The program proposes to utilize experiential activities as significant pathways to encourage, captivate, and elevate proficiency in students as they have real-world applications and partners, revealing the power of the theoretical material. The program is also designed to prepare students to engage in an off-

campus internship after the third year of courses and complete a more intense senior-year project culminating in a writing and speaking presentation in MATH 490 Senior Seminar.

Evaluate the quality of remote education - The University's remote education infrastructure is robust (high-quality internet access, Canvas LMS, smart classrooms, etc.) and is well able to involve industry experts and RHEC staffing for guest lectures or colloquia, allow students off-campus internships or work ships, an opportunity to continue course work to ensure on-time degree completion, and the Department's ability to offer courses on-line during summer or winter sessions to move students forward in their degree plan. In addition, the University has a wide range of software packages that students can access off-campus through the UMES Desktop VPN infrastructure.

Improving systems that prevent timely completion of an academic program - In addition to the faculty advisor in the Department of Mathematics, all first-year students will be assigned an additional advisor in the Center for Access and Academic Success (CAAS). CAAS is committed to assisting students in their successful transition to the University of Maryland Eastern Shore through a proactive, data-informed, holistic approach to advising. Our academic counselors collaborate with students to develop a personalized plan for success consistent with individual aspirations and strengths. Counselors encourage students to engage in educationally meaningful activities to promote self-reliance and degree completion. This dual advising process allows students to take advantage of Departmental mentoring and support and University-wide resources.

MATH 100 Introduction to Mathematics - MATH 100 provides an opportunity for first-year mathematics majors to learn college success strategies, explore careers available to mathematics majors, learn how to get involved on campus, and discover what your future in the mathematical job market or future graduate study will entail. The course will focus on the following:

- Academic success in mathematics and general education
- Major and career exploration
- Student engagement and leadership
- Ethics and academic integrity
- Presentation skills
- Resume creation
- Time management
- Diversity, Equity, and Inclusion

Mathematics Learning Community

The Department proposes to create a Mathematics Learning Community for first- and second-year students. The goal is to help students gain higher levels of interest in persisting and pursuing mathematics training (academic and practical) by living and studying with other students who share similar interests. Learning Communities give students an opportunity to:

- Share common courses in the fall and spring, with required out-of-class, experiential learning activities. The courses targeted are the Honors Algebra/Trigonometry or Calculus I.

- Benefit from a faculty mentor who encourages students to carry great classroom conversations into their residential community.
- Participate in trips and activities designed to bring the community theme to life.
- Be part of an engaged learning experience that goes beyond the traditional classroom experience.
- Develop their leadership skills by helping to organize events for a vibrant community;
- Jump-start their college career by establishing connections with faculty and other student leaders.
- Explore their academic options and focus their interests in an area in which they are passionate – identifying future opportunities for research, internships, and study abroad;
- Understand how their courses connect with each other and gain an expanded perspective on their education.
- Meet people from different backgrounds and network with university faculty and staff.

Faculty/Student Undergraduate Research Projects
To help students boost confidence in transferring learned theories and techniques, students will be strongly encouraged to partner with a faculty member on projects (expository and technical) that extend to practical applications or lead to further research. Further, the aim of the undergraduate research experience is to:

- Improve student reading comprehension and communication skills.
- Give opportunities to present and publish student results.
- Help students foster and develop their determination and perseverance.
- Develop creativity, problem-solving, and intellectual independence.

Faculty advisors will assist first- and second-year students in identifying an expository research area to investigate. Students will be directed to the vast depository of the Mathematics Contest in Modeling (MCM) to provide a variety of problems recently pursued by undergraduate students nationwide. After the third year, students will be directed to a more "open" problem in the network to hone their original thinking and pursuit of solutions. MATH 490 Senior Seminar will give students the opportunity to formulate their progress in written and oral form as well as determine future extensions.

Establish Student Chapters of National Mathematics Organizations and Societies
Membership in student chapters of Mathematics societies and organizations allows students to network with professionals, develop communication skills, and develop leadership and team-building skills. The Department will petition to establish local chapters of Pi Mu Epsilon and Kappa Mu Epsilon. These societies promote mathematics achievement among undergraduate students. Student chapter advisors indicate that the opportunity and enjoyment of the national conference and professional and career development opportunities are the most important reasons students participate. There are longstanding societies in which students will be encouraged to participate:

- National Association of Mathematicians (NAM)
- Mathematical Association of America (MAA)
- American Mathematics Society (AMS)

- Society of Industrial and Applied Mathematics (SIAM)
- Association for Women in Mathematics (AWM)

Students will have the opportunity to present their research findings and attend workshops and research presentations at the annual National Association of Mathematics (NAM) MATHFest meeting and the Joint Mathematics Meeting (AMS/MAA/NAM/SIAM) Winter meeting.

Regarding student success related to academic quality, the program will undergo an academic program review (APR) every seven years. The process is required by the University System of Maryland (USM) Board of Regents and includes an internal self-study, external review, and a final report to the USM. The Department of Mathematics will use the external review to gather expert perspectives on the program's strengths, weaknesses, and direction. Further, the University hosts yearly Faculty Institutes that provide faculty development workshops and review course assessment processes and policies, retention and mentoring support resources, and other best practices in academia. The overall goal is to chart and promote high levels of student achievement relative to documented student learning outcomes. Program review activities develop assessment matrices that map the mission, goals, and strategies and provide an effective pathway for efficiency, effectiveness, and overall continuous program improvement.

Innovation: The goal is to foster innovation in all aspects of Maryland Higher Education to improve access and student success. The program has developed a core set of courses (40 credits) that gives a nearly equal mix of traditional, computational, and applied mathematics fundamentals, giving students the ability and foundation to choose to pursue traditional (pure), modeling (applied), computational sciences, actuarial sciences, and statistical and data science specialties. Completing the chosen specialties can be achieved with the opportunity for students to enroll in a few courses in other specialties without exceeding the 120-credit target. Essentially, the student can begin studying a second or third specialty area, fostering lifelong education activities within four years. The new aim of the program is to build skills in student enrollees that enable them to define problems, work to derive solutions, create innovation questions, and finally drive solutions to innovations. As UMES is the HBCU of the Eastern Shore of Maryland, it is important to prepare underrepresented populations to participate in the wide range of innovation opportunities that exist locally and regionally in aerospace, manufacturing, analytics, and government. The program will incorporate internships, colloquia, and faculty/student research activities to create a more workforce-ready candidate upon graduation.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

1. Describe potential industry or industries, employment opportunities, and expected level of entry (*ex: mid-level management*) for graduates of the proposed program.

The Bureau of Labor Statistics (BLS.gov) states that persons with high-level mathematical training are needed in a wide range of industries such as utilities, manufacturing, computing and information, finance and insurance, scientific and engineering, education, and healthcare. Graduates finding employment in the mathematical environment will work in teams of researchers, statisticians, and/or engineers as mid-level research analysts. For those desiring to enter the

educational communities, graduates find opportunities to teach mathematics and computer science in elementary, middle, and high school or enter into graduate studies for more mathematical training.

2. **Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.**

The BLS.gov report also states that overall employment in mathematical occupations is projected to grow much faster (10%) than the average for all occupations (4%) from 2022 to 2032. On average, about 33,500 openings are projected each year in these occupations due to employment growth and the need to replace workers who leave the occupations permanently. Our proposed programs serve the top four math-related occupations listed in the BLS.gov report: (1) Actuaries, (2) Data Scientists, (3) Mathematicians and Statisticians, and (4) Operations research analysts. Median salaries for those occupations range from $83,000 to $120,000.
Specifically, in the State of Maryland, there were, in 2020, 2330 employees listed as mathematical/data scientists/all other, and we project that number will rise to 3,050 (projectionscentral.org). That marks a more than 30% increase, far exceeding the national average of 10% over the same period.

3. **Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.**

A recent article on the *essaypro.com* website confirms that innovative programs in mathematics:

- Highlight problem-solving prowess, showcasing how mathematical skills address real-world challenges
- Have a strong dedication to ongoing learning, staying abreast of industry trends and technological advancements
- Leverage university career services, attend job fairs, and seek guidance from industry experts;
- Acquire proficiency in a wide range of programming languages, statistical and data analysis techniques, and business and industry applications.

The BLS.gov report cites that mathematical employees require a high level of cognitive and mental capabilities that allow them to use judgment, make decisions, interact with others, and adapt to market changes. A bachelor's degree was required for 65.5% of computer and mathematical workers. The American Mathematical Society (AMS.org) states that good undergraduate mathematical study includes work in algebra, analysis, geometry, differential equations, linear algebra, mathematical logic, numerical analysis, probability and statistics, and computer programming.

The next five years will see a significant surge in the demand for mathematics occupations, driven by technological advancements and evolving industry needs. According to the Bureau of Labor Statistics, employment in mathematical occupations is projected to grow by 22% from 2021 to 2031, much faster than the average for all occupations. This growth is primarily attributed to the

increasing reliance on data analysis, modeling, and statistical techniques across various sectors, including finance, healthcare, technology, and research.

To meet this growing demand, individuals pursuing careers in mathematics will need to possess a strong foundation in mathematical concepts and advanced analytical skills. While a bachelor's degree in mathematics or a related field is often considered the minimum requirement, many employers are seeking candidates with specialized knowledge in areas such as statistics, data science, machine learning, and computational mathematics. However, there is a widening skills gap between the educational qualifications of graduates and the specific competencies required by employers. This gap highlights the need for more tailored and industry-relevant mathematics programs that equip students with the practical skills necessary to excel in today's job market.

In addition to formal education, continuous learning and skill development will be essential for professionals in mathematics occupations. The rapid pace of technological change and the emergence of new tools and techniques mean that staying up-to-date with the latest advancements is crucial. This can be achieved through professional development courses, online learning platforms, and participation in industry conferences and workshops. By investing in ongoing education, individuals can enhance their employability, increase their earning potential, and contribute effectively to the evolving landscape of mathematics-related fields.

4. **Provide data showing the current and projected supply of prospective graduates.**

Currently, there are two students remaining in the previous (now deactivated) Bachelor of Science in Mathematics program and are scheduled to complete the program requirements by Spring 2025. Upon program approval, the Department proposes to initiate recruitment efforts in the Spring 2025 semester and sets a goal of at least five (5) new students in the new program. Enhanced efforts to include Fall and Spring mathematics competitions, Springfest Open House events, and statewide recruitment efforts will pursue a more aggressive number of ten (10) additional new recruits (freshmen and transfer) per year.

Projections	AY 2026	AY 2027	AY 2028	AY 2029	AY 2030	AY 2031	AY 2032
Enrollment	5+	15	25	40	45	45	45
Graduates				5	12	12	12

D. Reasonableness of Program Duplication

1. **Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.**

Maryland Higher Education Commission (MHEC) lists in its Academic Program Inventory nineteen (19) institutions in the State offering Bachelor's degree programs in Mathematics. Generally, most bachelor's degree programs in Maryland offer a mathematics program. At the core program levels, the programs are mostly identical as the blueprint for mathematics programs over the last one hundred fifty (150) years has been exposing students to a three-part calculus sequence, differential equations, linear algebra, real and complex variables, abstract algebra, probability, and

mathematical statistics. However, in most of these programs, student electives then allow them to centralize their further study in only "pure" or "applied" mathematics. These terms are relevant but broad terms highlighting student interest in pursuing further academic study in graduate programs or entering business, industrial, or government settings.
The proposed program will have students mine their career interests and select specific sequences of courses that fine-tune their intuitive and critical abilities and problem-solving skills, and give them more opportunities for success in their choice of career. The main options the program offers are in critical and lucrative fields of computational science, actuarial science, statistical analysis, and data science, as well as preparation for more advanced study leading to graduate degrees. Also, it provides a clear pathway for those students who may have a change of interest from one area to another. This plan provides efficient pathways for students to clearly understand their career plans and, for those with limited initial knowledge of the vast opportunities that exist, a chance to pivot as their interests become more focused.

2. Provide justification for the proposed program

Several factors, including technological advancements, economic growth, and the increasing complexity of modern problems, drive the need for more mathematics graduates. According to the Bureau of Labor Statistics, employment in mathematical occupations is projected to grow by 22% from 2021 to 2031, much faster than the average for all occupations. This growth is primarily attributed to the increasing reliance on data analysis, modeling, and statistical techniques across various sectors, including finance, healthcare, technology, and research.

Data from the University System of Maryland shows that a total of 842 students are enrolled in mathematics programs, with only 45 in HBCUs (approximately 7.2%). Of those 842 students enrolled in mathematics programs, it is estimated that only 36% of that population is underrepresented populations (including women), and 9% is African American enrollment.

The underrepresentation of African Americans in mathematics is a longstanding issue with significant implications for both individuals and society. Increasing the number of African Americans pursuing and succeeding in mathematical fields is essential for many reasons. A diverse workforce, including representation from underrepresented groups, is crucial for fostering innovation and creativity. When people from different backgrounds come together to solve problems, they bring unique perspectives and approaches that can lead to groundbreaking discoveries and solutions. By increasing the number of African Americans in mathematics, we can help close the opportunity gap and ensure that everyone has the chance to reach their full potential.

Furthermore, the global economy is becoming increasingly data-driven, requiring businesses and organizations to make informed decisions based on quantitative analysis. This has led to a surge in demand for data scientists, statisticians, and other mathematics-related professionals who can extract meaningful insights from large datasets.

The proposed program seeks to increase efforts in the State of Maryland to recruit, enroll, and graduate those from underrepresented populations to assist in diversifying the mathematical and computational workforce.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

1. **Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.**

The University has a significant record in establishing and maintaining high-quality, high-demand programs such as pharmacy studies, physician assistant, physical therapy, and engineering. In the current Strategic Plan, Priority Area Number 3 lists three specific action items relative to researching and establishing high-impact, high-demand programs:
3.2. Expand the number of graduates in fields critical to Maryland's economy: STEAM, cyber, and healthcare.
3.3. Diversify and strengthen Maryland's knowledge workforce by expanding the pipeline of underrepresented minority students entering critical workforce fields (STEAM, cyber, health care, education, social work, human services, technology);
3.4. Develop new, revise, and enhance existing academic programs to remain current with evolving workforce demands;
Again, the University System of Maryland data shows that 842 students are enrolled in mathematics programs, with only 45 in HBCUs (approximately 7.2%). Also, of those 842 students enrolled in mathematics programs, it is estimated that only 36% of that population is underrepresented minorities, and 9% is African American enrollment.

HBCUs have had a major impact on providing underrepresented populations access to high-demand employment through their educational offerings. Graduates with skills in these areas are more likely to find well-paying jobs and contribute to economic growth. The proposed program can help address racial disparities in STEM fields by providing access to high-quality education and training in mathematics and computational sciences to help improve community development in the Lower Shore of Maryland. Additionally, UMES supports and encourages students in high-demand programs to pursue innovation and entrepreneurship.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1. **Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.**

The Mission: As a public 1890 land-grant Historically Black University that embraces diversity, UMES is committed to serving first-generation and underserved students and providing educational, research, and community engagement opportunities to transform the lives of its students, who will impact the state, region, and the world. To assist students in fully engaging in the academic study and training needed to take advantage of the vast opportunities that exist in the mathematical and computational environments, UMES will employ its high-impact practices in student support areas such as:

a. Fostering a supportive and inclusive environment for students, recognizing their unique experiences and challenges.
b. Implement mentorship programs that connect students with successful alumni and faculty who can offer guidance and support.

c. Offer soft skills and leadership development programs to equip students with the skills and confidence needed to become successful leaders in their communities and professions.
d. Providing opportunities for students to network with alumni, industry professionals, and community leaders can help them build valuable relationships.

These highly successful strategies have repeatedly been employed and shown to significantly affect student persistence and graduation. However, more outcomes are identified, such as closing the achievement gap, encouraging students to promote social justice and equity, and increasing community engagement.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10):

1. Describe how the proposed program was established, and also describe the faculty who will oversee the program.

How Was the Proposed Program Established?

The mathematics curriculum has been redesigned to better align with the shifting interests in mathematics, where students seek more applied tracks than traditional or "pure" mathematics training. The intent is to produce students who are prepared to demonstrate proficiency with a wide range of mathematical topics and be candidates to pursue graduate study and/or take on employment in a wide range of companies and laboratories.

Describe the Faculty Who Will Oversee the Program

The proposed program will be overseen and supported by full-time and part-time faculty from the Department of Mathematics. Details on the faculty who can make such contributions to the program development and implementation are discussed in a later section of this document.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

In terms of education objectives, it is the goal of the proposed program to:

1) Acquire foundational knowledge in calculus, ordinary and partial differential equations, vector spaces and matrix methods, real analysis, numerical analysis, and complex variables;
2) Acquire an in-depth knowledge of an area of applications (statistics, an engineering or natural science field, or one of the quantitative areas of finance and economics);
3) Acquire problem-solving and modeling skills that allow students to formulate a real-world problem in a mathematical setting and implement a (numerical) solution;
4) Acquire the ability to clearly and concisely communicate analytic arguments in oral and written forms.

In terms of learning outcomes, graduates of the program will have the ability to:

1) Use problem-solving approaches to investigate and understand mathematical content.
2) Recognize and formulate problems from situations within and outside mathematics.
3) Formulate mathematical definitions and express generalizations discovered through investigations.
4) Use mathematical vocabulary, notation, and structure to represent ideas, describe relationships, and model situations.
5) Read written presentations with understanding.
6) Make and test conjectures.
7) Follow logical arguments.
8) Represent situations that involve variable quantities with expressions, equations, and inequalities.
9) Operate on expressions and solve equations and inequalities.
10) Represent and analyze relationships.
11) Translate among tabular, symbolic, and graphical representations of functions.
12) Use and analyze algorithms.

3. Explain how the institution will:

a) provide for assessment of student achievement of learning outcomes in the program

Periodic assessment of the impact of the proposed program will be monitored as a part of the institutional assessment process and will include an evaluation plan. Data on the program's operation (enrollment, student-credit-hour production, expenses, and revenue) will be included in an annual assessment report and be used to improve the quality and relevance of educational opportunities offered by the School of Education, Social Sciences, and the Arts at UMES.
Assessment methods for student achievement of learning outcomes will be based on established school and departmental standards and will include the following:

1. Assess written and oral student presentations, written assignments, and research projects;
2. Evaluate student performance in exams, quizzes, and assignments in required major courses; and
3. Assess senior seminar research project reports by presenting at regional and national conferences.

b) document student achievement of learning outcomes in the program

The proposed program will periodically document student achievement of the learning outcomes in the program. Assessment methods based on previously established educational objectives and learning outcomes for the proposed program would include the following:

1. Assess written and oral student presentations, written assignments, and research projects;

2. Evaluate student performance in exams, quizzes, and assignments in required major courses; and,
3. Evaluate students through a comprehensive exam and course-based projects.

4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements

Proposed Program

General Education Requirements (39 Credits):

The courses used to satisfy the general education requirements for the proposed mathematics program can be found in the next section.

Program Core Requirements: 40 Credits

- MATH 211 Calculus II (4 credits)
- MATH 212 Calculus III (4 credits)
- MATH 232 Linear Algebra and Matrix Methods (3 credits)
- MATH 300 Foundations of Mathematics (3 credits)
- MATH 309 Introduction to Probability (3 credits)
- MATH 310 Mathematical Statistics I (3 credits)
- MATH 321 Differential Equations (4 credits)
- MATH 342 Advanced Engineering Mathematics (3 credits)
- MATH 411 Modern Algebra and Applications (3 credits)
- MATH 412 Linear Algebra (3 credits)
- MATH 442 Complex Analysis and Applications (3 credits)
- MATH 443 Real Analysis and Applications (3 credits)
- MATH 490 Senior Capstone (1 credit)

Major Electives: 18 Credits

Students should consult with their assigned advisor and select at least 6 additional courses according to their desired interest:

Pure Mathematics Concentration

- MATH 301 College Geometry (3 credits)
- MATH 302 Number Theory (3 credits)
- MATH 413 Modern Algebra and Applications II (3 credits)
- MATH 440 Topology (3 credits)

- MATH 444 Real Analysis II (3 credits)
- MATH 498 Selected Topics in Mathematics (3 credits)
- **MATH 499 Undergraduate Research (3 credits)**

Applied Mathematics Concentration

- MATH 302 Number Theory (3 credits)
- MATH 350 Linear Programming/Operations Research (3 credits)
- ***MATH 307 Scientific Computation (3 credits)**
- ***MATH 409 Partial Differential Equations (3 credits)**
- MATH 455 Mathematical Models (3 credits)
- MATH 498 Selected Topics in Mathematics (3 credits)
- **MATH 499 Undergraduate Research (3 credits)**

Statistical and Data Science Concentration

- ***MATH 312 Introduction to Statistical and Data Science (3 credits)**
- CSDP 431 Data Warehousing and Data Mining (3 credits)
- ***MATH 313 Applied Regression Analysis (3 credits)**
- ***MATH 314 Statistical Research Methodology and Design of Experiments (4 credits)**
- ***MATH 315 Markov Chains and Random Walks (3 credits)**
- ***MATH 316 Machine Deep Learning and Artificial Intelligence (3 credits)**
- ***MATH 415 Multivariate Statistics and Application (3 credits)**

Actuarial Science Concentration

- ACCT 201 Accounting (3 credits)
- FINA 201 Finance (3 credits)
- ECON 201 Microeconomics (3 credits)
- ECON 202 Macroeconomics (3 credits)
- ***MATH 416 Theory of Interest and Investment (3 credits)**
- ***MATH 417 Risk Analysis (3 credits)**

Computational Science Concentration

- CSDP 250 Data Structures (3 credits)
- CSDP 305 Software Engineering (3 credits)
- CSDP 401 Operating Systems (3 credits)
- CSDP 402 Computer Networks (3 credits)
- CSDP 403 Computer Language Theory (3 credits)
- CSDP 404 Database Management Systems (3 credits)
- CSDP 450 Algorithms and Data Structures (3 credits)

Supportive Course Requirements: Credits 12

- CSDP 120 Introduction to Computer Programming (3 credits)
- CSDP 150 Advanced Programming (3 credits)
- CSDP xxx Additional Computer Language Topic (Python, Java, Unix, etc.) (3 credits)
- CSDP 341 Numerical Analysis (3 credits)

Free Elective Courses: Credits 11

*New Mathematics Course

It is recommended that a student enroll in 300 and 400-level mathematics, computer science, engineering, technology, and natural science courses relevant to fields of interest.

Total Credits Required for Bachelor of Science in Mathematics: 120 credits

Proposed New Mathematics Course Description

MATH 100 Introduction to Mathematics 1 credit

This course provides an opportunity for first-year mathematics majors to learn college success strategies, explore careers available to mathematics majors, learn how to get involved on campus, and discover what their future in the mathematical job market or future graduate study will entail. The topics for this course include: academic success in mathematics and general education; major and career exploration; student engagement and leadership; ethics and academic integrity; presentation skills; resume creation; time management; and, diversity, equity, and inclusion.

MATH 307 Scientific Computation 3 credits

This course introduces the theoretical and practical aspects of using computers to solve complex STEM problems by applying numerical methods to model and analyze real-world phenomena. Topics covered will include numerical differentiation and integration, solving linear and nonlinear equations, numerical solutions of differential equations, and fundamental concepts and algorithms in linear algebra.

MATH 409 Partial Differential Equations 3 credits

This course introduces students to the theory and applications of partial differential equations applied to various STEM fields. This course will cover the three main types of partial differential equations: diffusion, elliptic, and hyperbolic. Topics covered will include classifying PDEs, solving initial and boundary value problems, separation of variables, Fourier transform techniques, and numerical methods.

MATH 312 Introduction to Statistical and Data Science 3 credits

This course introduces the fundamental concepts and techniques in statistical and data sciences. Students will learn sampling methods and the basics of data collection, analysis, and interpretation using statistical methods and tools. Emphasis will be placed on understanding data visualization, exploratory data analysis, hypothesis testing, and basic predictive models. Prerequisites: No formal prerequisites are required, but a basic understanding of mathematics (at or above the level of College Algebra) and familiarity with computer usage are recommended.

MATH 313 Applied Regression Analysis 3 credits

This course introduces students to the fundamental concepts and techniques of regression analysis. Students will learn how to use regression models to analyze relationships between variables, make predictions, and infer causal relationships. Emphasis will be placed on practical applications of regression analysis in various fields such as business, natural sciences, and more.

MATH 314 Statistical Research Methodology and Design of Experiments 4 credits

This course introduces students to statistical research methods and the design of experiments. It covers fundamental concepts and techniques used in conducting research, analyzing data, and drawing meaningful conclusions. Students will learn how to design experiments, collect data, and apply statistical methods to address research questions in various disciplines. Prerequisites: Basic knowledge of statistics and modeling and familiarity with research methods.

MATH 315 Markov Chains and Random Walks 3 credits

This course provides an introduction to Markov chains and random walks, which are mathematical models used to study Stochastic Processes. Topics covered include the theory, applications, and properties of Markov chains and random walks in various fields, such as Statistics, Computer Science, and Biology. Prerequisites: Basic knowledge of probability theory and familiarity with linear and matrix algebra.

MATH 316 Machine Deep Learning and Artificial Intelligence 3 credits

This course provides a comprehensive overview of machine learning, deep learning, and artificial intelligence. Students will learn the fundamentals of machine learning algorithms, delve into deep learning techniques, and explore the applications of artificial intelligence in various domains. This course covers topics such as supervised and unsupervised learning, neural networks, reinforcement learning, and ethical considerations of AI development.

MATH 415 Multivariate Statistics and Applications 3 credits

This course is designed to provide an in-depth understanding of multivariate statistics and its applications in various fields. Students will learn advanced statistical techniques for analyzing and

interpreting data sets with multiple variables. This course will cover topics such as multivariate data analysis, multivariate regression, principal component analysis, factor analysis, discriminant analysis, cluster analysis, and multidimensional scaling. Emphasis will be placed on the practical applications of multivariate statistics in research, business, science, and other relevant fields.

MATH 416 Theory of Interest and Investment **3 credits**

This course covers the mathematical aspects of investment. Topics covered include simple and compound interest, discount rates, present value, accumulated value, annuities, yield rates, amortization schedules, and sinking funds. Applications include bonds, real estate mortgages, methods of depreciation, and insurance.

MATH 417 Risk Analysis **3 credits**

This course provides an in-depth exploration of the mathematical techniques used in risk analysis, with a focus on applications in finance and insurance. Students will learn to model and analyze risks using advanced mathematical tools, including probability theory, stochastic processes, and statistical methods. The course emphasizes both theoretical foundations and practical applications, preparing students for careers in actuarial science, financial engineering, and risk management.

5. Discuss how general education requirements will be met, if applicable.

UMES has a standardized general education program (GEP) for all undergraduate programs. The GEP for the mathematics program is 39 credits:

All students are expected to complete a common body of academic coursework. The General Education Requirements are designed to promote the development of a comprehensive educational base that will effectively support a student's choice of a major concentration.

Curriculum Area I - Arts and Humanities: 6 Credits

Select one course from any of the courses within Arts, Languages, and Literature, and ENGL 203 from 1.2:

1.1 Arts, Languages, and Literature

- ARTS 101 Exploration of the Visual Arts (3 credits)
- ARTS 310 African American Art History (3 credits)
- ARAB 101 Fundamentals of Arabic I (3 credits)
- ARAB 102 Fundamentals of Arabic II (3 credits)
- ASLS 203 American Sign Language I (3 credits)
- ASLS 204 American Sign Language II (3 credits)
- CHIN 101 Fundamentals of Chinese I (3 credits)

- CHIN 102 Fundamentals of Chinese II (3 credits)
- ENGL 204 Introduction to Fiction (3 credits)
- ENGL 205 Introduction to Drama (3 credits)
- ENGL 206 Introduction to Poetry (3 credits)
- ENGL 207 Introduction to Creative Writing (3 credits)
- FREN 101 Fundamentals of French I (3 credits)
- FREN 102 Fundamentals of French II (3 credits)
- HIND 101 Fundamentals of Hindi I (3 credits)
- HIND 102 Fundamentals of Hindi II (3 credits)
- HONR 101 Honors Freshmen Seminar: Selves and Others (3 credits)
- JAPN 101 Fundamentals of Japanese I (3 credits)
- JAPN 102 Fundamentals of Japanese II (3 credits)
- PORT 101 Fundamentals of Portuguese I (3 credits)
- PORT 102 Fundamentals of Portuguese II (3 credits)
- SPAN 101 Fundamentals of Spanish I (3 credits)
- SPAN 102 Fundamentals of Spanish II (3 credits)

1.2 Speech

- ENGL 203 Fundamentals of Contemporary Speech (3 credits) [1]

Curriculum Area II - Social and Behavioral Sciences: 6 Credits

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Select two courses from any of the courses within Social and Behavioral Sciences:

2.1 Social and Behavioral Sciences

- AGEC 213 Introduction to Agricultural Economics (3 credits)
- CRJS 101 Introduction to Criminal Justice (3 credits)
- ECON 201 Principles of Economics (Macro) (3 credits)
- ECON 202 Principles of Economics (Micro) (3 credits)
- GEOG 201 The World Geography I (3 credits)
- GEOG 202 The World Geography II (3 credits)
- HIST 101 History of World Civilization I (3 credits)
- HIST 102 History of World Civilization II (3 credits)
- HIST 201 History of American Civilization I (3 credits)
- HIST 202 History of American Civilization II (3 credits)
- HONR 201 Honors Sophomore Seminar: Leadership: From Theory to Practice (3 credits)
- HUEC 203 Human Development: A Lifespan Perspective (3 credits)
- HUEC 220 Perspectives on Aging (3 credits)
- PHIL 201 Introduction to Logic (3 credits)
- POLI 200 Introduction to American Government (3 credits)
- POLI 220 Introduction to Political Behavior (3 credits)
- POLI 342 Urban Politics (3 credits)
- PSYC 100 Introduction to Psychology (3 credits)
- SOCI 101 Introduction to Sociology (3 credits)

- SOCI 201 Social Problems (3 credits)

Curriculum Area III - Biological and Physical Sciences: 7 Credits

Students must select two science courses and one science laboratory course within Physical Sciences:

- BIOL 111 Principles of Biology I (3 credits)
- BIOL 113 Principles of Biology I Laboratory (1 credit)
- BIOL 112 Principles of Biology II (3 credits)

Or

- CHEM 111 Principles of Chemistry I (3 credits)
- CHEM 113 Principles of Chemistry I Lab (1 credit)
- CHEM 112 Principles of Chemistry II (3 credits)

Or

- PHYS 181 Introductory Physics I (3 credits)
- PHYS 183 Introductory Physics I Lab (1 credit)
- PHYS 182 Introductory Physics II (3 credits)

Curriculum Area IV - Mathematics: 4 credits

- MATH 112 Calculus I (4 credits)

Curriculum Area V - English Composition: (9 credits)

- ENGL 101 Principles of Composition I (3 credits) [1, 2]
- ENGL 102 Principles of Composition II (3 credits) [1, 2]
- ENGL 305 Technical Writing Credit (3 credits) **or**
- ENGL 310 Advanced Composition (3 credits)

Curriculum Area VI – Institution-Specific Courses: (7 credits)

These courses are identified by the University as essential to a full General Education Program for UMES students. One course from each of the three areas is required for all students.

6.1 Freshmen Experience

- ***MATH 100 Introduction to Mathematics (1 credit)**

6.2 Computer Literacy

- BUAD 213 Business Software Applications (3 credits)
- BUED 212 Computer Concepts/Applications I (3 credits)

6.3 JEDI (Justice, Equity, Diversity, Inclusion): UMES Signature Course

- BUAD 311 Justice and Diversity in Organizations (3 credits)
- DMST 440 African American Cinema (3 credits)
- ENGL 359 Women's Literature (3 credits)
- HUEC 230 Multicultural Perspectives on Families in the US (3 credits)
- HUEC 463 Food, Clothing, and Culture (3 credits)

Total Required for General Education: 39 Credits

[1]Students must pass ENGL 101 and ENGL 102 with a grade of "C" or above before taking ENGL 203.
[2]Honors students should take honors courses.

6. **Identify any specialized accreditation or graduate certification requirements for this program and its students.**

This section is not applicable as the proposed program is not required to meet any specialized accreditation or graduate certificate requirements.

7. **If contracting with another institution or non-collegiate organization, provide a copy of the written contract.**

This section is not applicable as the proposed program will not have a contract with another institution or non-collegiate organization.

8. **Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

As with all other academic programs offered by the University of Maryland Eastern Shore, the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interactions, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.

9. Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.

As with all other academic programs offered by the University of Maryland Eastern Shore, the proposed program will ensure that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.

H. Adequacy of Articulation

1. If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements.

A provisional articulation agreement has been created between Wor-Wic Community College and the University of Maryland Eastern Shore to facilitate the transfer of academic credits from the STEM Transfer (Mathematics) Associate degree to the completion of the Mathematics Bachelor's degree.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

1. Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of **faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faulty member will teach in the proposed program.**

The following faculty are course masters and instructors to support the proposed program at its outset:

Full-Time Faculty

Dr. Jason Cornelius is an Assistant Professor in the Department of Mathematics. Dr. J. Cornelius earned his PhD in Applied Mathematics, specializing in Computational Electrodynamics, and his M.S. in Applied Mathematics and B.S. in Mathematics from Delaware State University.

Dr. Tiara Cornelius is an Associate Professor in the Department of Mathematics. Dr. T. Cornelius earned her PhD in Applied Mathematics, specializing in Inverse Problems, and her M.S. in Applied Mathematics from Delaware State University. She received her B.S. in Mathematics (non-teaching) from the University of Maryland Eastern Shore.

Pf. Manal Elbeshir is a Lecturer in the Department of Mathematics. Pf. Elbeshir earned her M.S. in Applied Computer Science from the University of Maryland Eastern Shore and her B.S. in Chemical Engineering from the University of Khartoum.

Dr. Robert A. Johnson, Jr. is an Associate Professor in the Department of Mathematics. Dr. Johnson earned his PhD in Mathematics from Saint Louis University, M.S. in Mathematics from

Southern University and A&M College, and B.S. in Mathematics from the University of Southwestern Louisiana (now University of Louisiana at Lafayette).

Dr. Russel Kohl is an Associate Professor in the Department of Mathematics. Dr. Kohl earned his PhD, specializing in Soliton Theory, in Interdisciplinary Applied Mathematics and Mathematical Physics, M.S. in Applied Mathematics, and B.S. in Mathematics from Delaware State University.

Dr. Malik B. Malik is a Professor in the Department of Mathematics. Dr. Malik earned his PhD in Mathematics from the University of Essex and his B.S. in Statistics from the University of Khartoum.

Pf. Mohamed Salih Mohamed Salih is a Lecturer in the Department of Mathematics. Pf. Mohamed Salih earned his M.S. in Applied Mathematics from Delaware State University and B.S. in Applied Mathematics from the University of Maryland Eastern Shore.

Dr. Candice Ridlon is a Professor in the Department of Mathematics. Dr. Ridlon earned her PhD in Mathematics Education and B.S. in Mathematics Education from Florida State University.

Pf. Manal Salamabi is a Lecturer in the Department of Mathematics. Pf. Salamabi earned her M.S. in Applied Computer Science from the University of Maryland Eastern Shore and her B.S. in Econometrics and Social Statistics from the University of Khartoum.

Dr. Mark Williams is an Associate Professor in the Department of Mathematics. Dr. Williams earned his PhD in Physics from the University of Cincinnati, M.S. in Physics from the University of Cincinnati, M.S. in Physics from Oakland University, and B.A. in Physics from Oakland University.

2. **Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:**

    a) **Pedagogy that meets the needs of the students**

The Center for Teaching Excellence (CTE) provides ongoing pedagogy training for faculty in evidence-based best practices to support high-impact practices pedagogy to meet the needs of UMES students. To accomplish its mission of ensuring the expansion and enhancement of faculty pedagogy training, CTE has developed three broad program areas to support faculty teaching success, which include evaluation of teaching techniques, professional development of faculty as it relates to pedagogy, and recognition of faculty who have demonstrated outstanding pedagogy methodology.

The evaluation of the teaching techniques program includes using student experience of learning surveys, peer observation of teaching, and an open classroom week. The professional development of the faculty program includes funding to attend pedagogy conferences, faculty workshops, FACTE working groups, seminar series for new faculty, and an innovation in teaching and learning

conference. Lastly, CTE's faculty recognition program includes the student choice for teaching excellence e-badge, the new CTE website, faculty spotlights, and SOTL publication opportunities.

b) The learning management system

The Center for Instructional Technology and Online Learning (CITOL) at UMES supports the development, design, and delivery of online and hybrid programs, classes, and workshops focusing on flexibility, resiliency, equity, accessibility, privacy, and safety (FREAPs). CITOL assists faculty, staff, and students in all aspects of digital teaching and learning concerning pedagogy and technology. This includes using the Canvas Learning Management System, Yuja Verity, and Canva.

c) Evidenced-based best practices for distance education, if distance education is offered.

The Center for Instructional Technology and Online Learning (CITOL) at UMES supports the development, design, and delivery of online and hybrid programs, classes, and workshops focusing on flexibility, resiliency, equity, accessibility, privacy, and safety (FREAPs). CITOL assists faculty, staff, and students in all aspects of digital teaching and learning concerning pedagogy and technology. This includes using the Canvas Learning Management System, Yuja Verity, and Canva. Other services offered by the Center for Instructional Technology and Online Learning include supporting Canvas Learning Management System (LMS) and other instructional software, which can be found on the CITOL website; new resources, providing ongoing professional development through virtual workshops; conducting UMES Online Teaching Certification and Course Quality Review; developing interactive and assessment materials for classes; and, helping troubleshoot accessibility issues on the LMS.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12)**.**

1. **Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.**

The University of Maryland Eastern Shore assures that the institutional library resources meet the needs of new and existing programs. The library resources for the proposed degree program will include but are not limited to textbooks, reference books, and technical papers. The Frederick Douglas Library at the University of Maryland Eastern Shore supports a OneSearch query with an advanced search option, Catalog search, and Databases according to articles and by subject. The library also allows retrieving Open Education Resource (OER) Textbooks and resources to be used as course material at no cost to students. The library is also linked to the library inter-institutional loan program, which provides access to more reference resources at other University System of Maryland campuses.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined **in COMAR 13B.02.03.13)**

1. **Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.**

The Department of Mathematics is housed in the Engineering and Aviation Science Complex within a 166,000-square-foot facility. The building was designed to expand cross-disciplinary research to address the world's critical problems and workforce demands in emerging areas. The building contains 20 classrooms, tutoring labs, and six dedicated computer laboratories (where students program and code using C++, COBOL, Assembly, Java, Python, Networking, SAS, etc.)

The Department of Mathematics faculty and staff have individual offices that will facilitate student advising, office hours, etc. Sufficient classrooms are also available in the same building, which makes it very convenient for students to take classes and conduct laboratory experiments.
Infrastructure Equipment: The program does not need any additional infrastructure equipment.
All faculty and staff in the School of Education, Social Sciences, and the Arts have individual offices facilitating student advising, office hours, etc. Sufficient classrooms are also available in the same building, which makes it very convenient for students to take classes and conduct laboratory experiments.

2. **Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:**

    a) An institutional electronic mailing system, and

All students who are admitted and enrolled at UMES are assigned a Microsoft Outlook email address and have access to the Microsoft Teams video conferencing system.

    b) A learning management system that provides the necessary technological support for distance education

The Information Technology Department, the Center for Instructional Technology and Online Learning (CITOL), and the Academic Computing Unit professionals provide faculty with support for development and instruction. The Canvas learning management system (LMS) is available for instructional design, software development, educational research, etc. These technologies and opportunities ensure that students enrolled in courses and faculty development for teaching have adequate access to the learning resources.
In addition, the Center for Instructional Technology and Online Learning (CITOL) at UMES assists faculty and students in all aspects of e-learning, including hosting, training, developing, and supporting the Canvas Learning Management System, Microsoft Office 365, Canva, and Yuja Verity. The UMES' web portal is a single sign-on allowing students, faculty, and staff access to:

- HawkWeb - a student information system where student enrollments and registrations, class rosters, and administrative functions related to academics are located.
- Canvas is the learning management system where course content can be published, and the entire online course experience can be managed for students.

- Web Help Desk - the Information Technology Help Desk system, where you can create a ticket to request assistance for your computer, networking, and telephone needs.

The UMES campus has wireless networking access points to allow network access from a wireless-enabled device like a laptop, smartphone, or tablet.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

1. Complete Table 1: Resources and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.

TABLE 1: RESOURCES					
Resources Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Reallocated Funds[1]	$0	$0	$0	$0	$0
2. Tuition/Fee Revenue[2] (c+g below)	$70,775	$122,700	$178,635	$238,860	$303,590
a. # FT Students	5	10	15	20	25
b. # Annual Tuition/Fee Rate	$9,439	$9,816	$10,209	$10,617	$11,042
c. Annual / Full Time Revenue (a x b)	$47,195	$98,160	$153,135	$212,340	$276,050
d. # PT Students	5	5	5	5	5
e. Credit Hour Rate	$393	$409	$425	$442	$459
f. Annual Credit Hours	12	12	12	12	12
g. Total Part Time Revenue (d x e x f)	$23,580	$24,540	$25,500	$26,520	$27,540
3. Grants, Contracts &	$0	$0	$0	$0	$0

Other External Sources[3]					
4. Other Sources	$0.00	$0.00	$0.00	$0.00	$0.00
TOTAL (Add 1 - 4)	$70,775	$122,700	$178,635	$238,860	$303,590

2. **Complete <u>Table 2: Program Expenditures and Narrative Rationale</u>. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.**

TABLE 2: EXPENDITURES					
Expenditure Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Total Faculty Expenses (b + c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits (37%)	0	0	0	0	0
2. Total Administrative Staff Expenses (b + c) below	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits	0	0	0	0	0
3. Total Support Staff Expenses (b + c below)	0	0	0	0	0
a. # FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0

c. Total Benefits	0	0	0	0	0
4. Equipment	$0	$0	$0	$0	$0
5. Library	0	0	0	0	0
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	$0	$0	$0	$0	$0
TOTAL (Add 1 - 7)	0	0	0	0	0

Narrative Rationale for Table 1: Resources

1. Reallocated Funds
   No funds will be reallocated from existing programs.

2. Tuition and Fee Revenue
   We assume that tuition and fees will increase by approximately 4% each year for the next five years. The annual in-state tuition rate is $9439 for full-time students. For part-time students, the credit hour rate is $237/credit. The two values were used in calculating the revenue for full-time students and 6 credits per semester (i.e., 12 credits per year) for part-time students.

3. Grants and Contracts
   No additional sources of funding are expected currently.

4. Other Sources
   No additional sources of funding are expected currently.

5. Total Year: 5-year estimate is provided.

Narrative Rationale for Table 2: Expenditures

1. Faculty (# FTE, Salary and Benefits)
   No additional faculty lines are requested. Two (2) new full-time tenure-track faculty members in EE joined UMES in Fall 2024. Four (4) existing faculty members in EE will jointly support the proposed Bachelor of Science in Electrical Engineering Program.

2. Support Staff (# FTE, Salary and Benefits)
   There will be no need for additional administrative staff. The existing department and school administrative staff will be sufficient to run the program.

3. Equipment

Not requested.

4. Library
   Minimal funds are needed to purchase additional engineering textbooks.

5. New and/or Renovated Space
   Not needed

6. Other Expenses
   None

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1. Discuss procedures for evaluating courses, faculty and student learning outcomes.

Course Evaluation

The University of Maryland Eastern Shore has a comprehensive course and program evaluation process. Each course syllabus has a set of written student learning outcomes. The course learning outcomes are assessed through embedded questions on tests, assignments, and portfolios that address specific course outcomes. Data is collected and the analyzed results are used to improve course curriculum and pedagogy.

Once the program is launched, the courses will enter the course evaluation system. Teaching evaluation asks students to reflect on the course structure, the course content, and the instructor's performance. Summary data will be reviewed by faculty members, the program chair, and the school administration to determine whether revision or improvement actions are necessary.

Achievement of the program outcomes will be assessed using direct and indirect methods as described in the proposed Assessment Plan developed by the School of Education, Social Sciences, and the Arts faculty at UMES for the proposed modified mathematics undergraduate program. The assessment procedure is currently being developed to evaluate the proposed program's courses will be designed to be in line with the continuous program improvement as required by other accreditation bodies that review other degree programs in the School of Education, Social Sciences and the Arts at UMES including the National Council for Accreditation of Teacher Education (NCATE) now called Council for the Accreditation of Educator Preparation (CAEP).

Faculty Evaluations

Faculty evaluations are conducted with an initial meeting at the start of each academic year, a mid-year meeting typically in January of each academic year, and a final evaluation meeting in April of each academic year. The faculty evaluation process at UMES is as follows:

At the beginning of the academic year, the faculty is required to meet with the department chair to discuss goals and objectives for the academic year. The individual faculty objectives must reflect the following:

- Departmental, school, and university goals,
- Faculty assignment (defined as % time allocated for each category based on appointment and release time awarded for that year),

- Note: Faculty who are on 100% teaching lines with no approved release time are expected to have the following % breakdown: 50% teaching, 35 % scholarship, 15% service, and

- Faculty member's professional development.

During the academic year, the department chair would be informed of any major changes made to the objectives. If necessary, the department chair will share information with the faculty member regarding the areas of concern.
In January, the faculty will meet with the chair to review progress toward the objectives.
In April, each faculty member will submit the faculty evaluation document to the department chair. The Department Chair will review the information and discuss their evaluation with the faculty member. Students' evaluations of instruction will be utilized in this discussion between the Chair and faculty members. Copies of the summary evaluations should be attached, as they become available. Note: Peer review of teaching will be included if done.

Student Learning Outcome Evaluation
Based on established school standards, we will establish an ongoing program evaluation where we,

- Assess samples of student performance on computer-based problems and projects.
- Assess samples of the use of technology in student presentations.
- Assess samples of the group and individual case studies.
- Assess written and oral student presentations, written assignments, and research projects.
- Track analytical performance in courses.
- Evaluate student performance in exams, quizzes, and assignments in elective courses.
- Assess comprehensive final exams in core courses.

Assessment instruments include graded student work and the evaluation of written project papers and presentations. The achievement levels are determined using the rubrics developed separately for each outcome.

2. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.

In addition, every faculty is evaluated each year. The evaluation process includes an assessment of faculty teaching, faculty research record and productivity, and school-wide and department service. To receive a high evaluation, a faculty member must demonstrate effective teaching, active scholarly activities, publications, etc. There is also a provision for the administration to set out an improvement plan for faculty members who have not done well in the area of teaching. Tenured faculty will undergo a five-year post-tenure review.
Program assessment takes place in a six-year cycle. Data regarding program enrollment, retention, and graduation rates are collected by the Office of Decision Sciences and Visualization in

conjunction with the program coordinator. The data is analyzed against program outcomes, and results are used to improve the program.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05).

1. Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

The University of Maryland Eastern Shore's mission is compatible with the State of Maryland's minority achievement goals. The University of Maryland Eastern Shore is an 1890 land grant HBCU. Our programs attract a diverse set of students, with the majority of the student population being African-American and those who are multiethnic and multicultural. The University actively recruits a minority population for all undergraduate and graduate-level degrees. Special attention is also provided to recruit diverse groups into the STEM and multidisciplinary programs at all degree levels, including undergraduate, master's, and doctoral levels.

As part of the UMES Strategic Plan Subgoal 3.3, diversify and strengthen Maryland's knowledge workforce by expanding the pipeline of underrepresented minority students entering critical workforce fields (STEAM, cyber, health care, education, social work, human services, technology), UMES takes pride in the diversity of its faculty, staff, and students with representation from 37 states and 47 countries. UMES values people of different ethnicities, orientations, cultures, and perspectives.

The University of Maryland Eastern Shore has one of the most racially and ethnically diverse student populations in the University System of Maryland. Based on fall 2023 data, UMES faculty were 36% African American, 37% White, 5% Asian, 1% American Indian, and 5% international. Student race and ethnicity statistics from fall 2017 reflect a student population that was 70.4% African American, 12.4% White, 4.9% two or more races, 4.5% Hispanic, 1.2% Asian, and 3.8% international.

O. Relationship to Low Productivity Programs Identified by the Commission:

1. If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.

When considering the impact that a strong mathematics degree program has on all majors, the effect is always positive, no matter whether the low-productivity program is in a related field or not. When there is a strong mathematics program at any university, there are many mathematics majors that can serve on campus to assist in the mathematics struggles of the students who need more assistance. Many of these students can then become tutors on campus at different tutoring centers that any university would contain to foster a learning environment for the more challenged students. When students are struggling at the university level, many students fail mathematics courses, which impacts the university's retention rate. This loss of students can severely harm any low-productivity program because when enrollment is low, each and every student that is lost

changes the degree completion percentage significantly. In programs that have very few students outside of the STEM programs, a strong mathematics department will also have a strong faculty that can help students master the basic mathematical concepts needed throughout different career fields.

In addition to retaining more students in the non-STEM programs, when applied to low enrollment programs in STEM, the advantage of a strong mathematics degree program increases significantly. All science-focused programs need multiple mathematics courses of study. While some, for example, Engineering, require more mathematics courses, even other STEM degree programs that may not need as many mathematics courses would benefit. Like all other degree programs, low-productive STEM major degree programs would take advantage of the additional resources on campus to assist students in mastering the essential mathematical concepts along with a strong faulty base to assist the programs throughout the STEM programs. These other programs could also take advantage of the mathematics courses offered through a healthy and strong mathematics program and infuse those courses of study into their own degree programs.

When we consider the program's financial impact, a healthy and strong mathematics degree program can contribute in a meaningful way to the health of the university. The loss of students impacts university finances, so if these students pass the courses and graduate, many become a positive influence on recruitment. Even if an alumnus of any university is not actively donating, if they are giving positive statements about the university to students considering going to a specific university, it may increase the likelihood of the student choosing that university. This will have a positive impact all over the campus. Since mathematics is required for all university students to complete their degree program, having a healthy mathematics department is one of the best investments any university can make.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.

At UMES, we are committed to continually improving our online courses and our distance education program. UMES participates in "*The State Authorization Reciprocity Agreement*." Some benefits for students of our institutional participation in the National Council for State Authorization Reciprocity Agreements (NC-SARA) include greater access to online programs, better quality of distance education, and reduced institutional costs. Currently, 47 states and the District of Columbia participate in NC-SARA. "*The State Authorization Reciprocity Agreement* is a voluntary agreement among its member states and U.S. territories. It establishes comparable national standards for interstate offering of postsecondary distance-education courses and programs. It is intended to make it easier for students to take online courses offered by postsecondary institutions based in another state" (NC-SARA.org).

The proposed program will be offered primarily in the traditional format. In some instances, including those similar to the recent COVID-19 pandemic, some courses may be offered in the online format. All faculty teaching online courses will be required to complete the UMES Online Learning Training through the Center for Instruction Technology and Online Learning. Any new instructors recruited to teach online would be required to meet the same qualifications as the current faculty.

2. **Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.**

UMES established the Center for Instructional Technology and Online Learning (CITOL) in 2006 to oversee and ensure compliance and high quality in its distance education offerings. The center provides course development, instructional, and technical support to new and current faculty. The Center for Instructional Technology and Online Learning (CITOL) at UMES supports developing, designing, and delivering online and hybrid programs, classes, and workshops focusing on flexibility, resiliency, equity, accessibility, privacy, and safety (FREAPS). CITOL assists faculty, staff, and students in all digital teaching and learning aspects concerning pedagogy and technology. This includes using the Canvas Learning Management System, Echo360, Google Workspace, Respondus 4.0, and Respondus LockDown Browser. C-RAC 2021 requires programs to provide details about practices to engage and assist distance education students. CITOL facilitates student-centered training and workshops, provides student mentoring and help desk support, and hosts a repository of student-centered LMS and online learning resources. In addition, CITOL assures that the degree programs adhere to C-RAC Guidelines for the Evaluation of Distance Education.

Outlook

Re: [EXTERNAL] Provisional Articulation Agreements – Section H: Adequacy of Articulation (Confirmation)

From Lukens, Rhoda <rlukens@worwic.edu>
Date Fri 4/25/2025 8:16 AM
To Brown, Willie L <wlbrown@umes.edu>
Cc Thomas-Banks, Leesa P <lpthomasbanks@umes.edu>; Johnson, Etahe <ejohnson2@umes.edu>

Good morning,

We are happy to partner with you on these agreements and look forward to continuing work on these pathways for our students' success.

Thank you!

Rhoda Lukens, M.A.
Registrar
Wor-Wic Community College | rlukens@worwic.edu
Phone: 410-334-2908
Office: BH 109C
Pronouns: she/her

From: Brown, Willie L <wlbrown@umes.edu>
Sent: Thursday, April 24, 2025 2:52 PM
To: Lukens, Rhoda <rlukens@worwic.edu>
Cc: Thomas-Banks, Leesa P <lpthomasbanks@umes.edu>; Johnson, Etahe <ejohnson2@umes.edu>
Subject: [EXTERNAL] Provisional Articulation Agreements – Section H: Adequacy of Articulation (Confirmation)

Ms. Lukens,

In our efforts to advance the University of Maryland Eastern Shore's response to the anticipated proposal submissions, specifically Section H: Adequacy of Articulation, we are sending this message to formally include Wor-Wic Community College in confirming provisional agreement(s) for the program transfer pathways that have previously been shared.

This step aligns with MHEC's guidance to demonstrate institutional collaboration while we await final approval to fully execute the articulation agreements. The provisional agreements under discussion include the following transfer pathways:

- Associate in Science in STEM, Engineering Concentration to Bachelor of Science in Mathematics
- Associate of Science in STEM, Engineering Concentration to Bachelor of Science in Electrical Engineering
- Associate of Science in STEM, Engineering Concentration to Bachelor of Science in Mechanical Engineering
- Associate of Applied Science in Hospitality Management to Bachelor of Science in Private Club and Resort Management

Please let us know if you are in agreement with this provisional submission. We deeply value your partnership and look forward to continuing our collaborative work in alignment with MHEC's requirements.

V/r
Willie L. Brown, Jr., Ph.D.
Vice Provost for Faculty Affairs
University of Maryland Eastern Shore
Division of Academic Affairs
11868 Academic Oval
John T. Williams Hall Suite 3111
Princess Anne, MD 21853-1299
Tel: (410) 651-6038
Email: wlbrown@umes.edu

Cc:
Lessa Thomas-Banks, JD, Interim Vice Provost for Academic Affairs
Etahe Johnson, Ed.D, Articulation/Transfer Liaison

☐ **New Agreement** ☐ **Revised Agreement** ☒ **Provisional Agreement**
☐**Effective Date:** ☐**Next Review Date:**

ACADEMIC PROGRAM ARTICULATION AGREEMENT BETWEEN WOR-WIC COMMUNITY COLLEGE AND UNIVERSITY OF MARYLAND EASTERN SHORE REGARDING THE TRANSFER FROM ASSOCIATE IN SCIENCE STEM, MATHEMATICS CONCENTRATION BACHELOR OF SCIENCE IN MATHEMATICS

This Academic Program Articulation Agreement ("Agreement") is entered into by and between Wor-Wic Community College (the "Sending Institution") and the University of Maryland Eastern Shore (the "Receiving Institution") (collectively, the "Institutions") to facilitate the transfer of academic credits from the STEM, Mathematics Concentration, Associate degree, for the completion of Mathematics, Bachelor's degree (the "Program(s)"):

Institution	Program ID/Title	Award Type	Statewide CIP
Wor-Wic Community College	490200 – STEM, Mathematics Concentration	Associate's Degree	419999
University of Maryland Eastern Shore	170100 - Mathematics	Bachelor's Degree	270101

A. Qualifying Students

This Agreement pertains to the transfer of "Qualifying Students", *i.e.*, those students who:
1. Have completed the STEM, Mathematics Concentration at Wor-Wic Community College in good standing and with a minimum CGPA of 2.0/4.0;
2. Are accepted for admission to the University of Maryland Eastern Shore; and
3. Are enrolled in Mathematics.

B. Responsibilities of the Institutions

The Institutions agree to implement the transfer of Qualifying Students in accordance with applicable law and the following requirements and protocols:

1. A Qualifying Student may transfer from Wor-Wic Community College into the University of Maryland Eastern Shore for the completion of the Bachelor of Science in Mathematics.

2. Courses that the University of Maryland Eastern Shore will accept credits for towards completion of the Bachelor of Science in Mathematics include:

PROGRAM ARTICULATION TABLE

	Wor-Wic Community College	University of Maryland Eastern Shore
Program name	STEM, Mathematics Concentration	Mathematics
Award Type (e.g., AAS)	AS	BS
Credit Length	60	120

SECTION A - General Education

Wor-Wic Community College				University of Maryland Eastern Shore		
Course Prefix & Number	Course Name	Credits	Course Prefix & Number	Course Name	Credits Applied	Credits Elective Applied
SDV 100	Fundamentals if College Study	1	MATH 100 or GNST 100	First Year Experience	1	
MTH 122	Pre-Calculus II	4	MATH 110	Trigonometry and Analytical Geometry	4	
ENG 101	Fundamentals of English I	3	ENGL 101	Principles of Basic Composition I	3	
	General Elective (*See Wor-Wic advisor)*	6	Elective	Elective	6	
ENG 151	Fundamentals of English II	3	ENGL 102	Principles of Basic Composition II	3	
ECO 151 ***or*** ECO 201 ***or*** PSY 101 ***or*** SOC 101	Principles of Macroeconomics ***or*** Principles of Microeconomics ***or*** Introduction to Psychology ***or*** Introduction to Sociology	3	ECON 201 ***or*** ECON 202 ***or*** PYSC 100 ***or*** SOCI 101	Principles of Economics (Macro) ***or*** Principles of Economics (Micro) ***or*** Introduction to Psychology ***or*** Introduction to Sociology	3	
MTH 201	Calculus I	4	MATH 112	Calculus I	4	
PHY 141	Principles of Physics I	4	PHYS 161/163	General Physics I (Mechanics & Particle Dynamics)	4	
ART, MUS, ASL, FRN, or SPN	Arts and Humanities Requirement	3	ART, MUS, ASL, FRN, or SPN	Arts and Humanities Requirement	3	
ECO 151 ***or*** ECO 201 ***or*** PSY 101 ***or*** SOC 101	Principles of Macroeconomics ***or*** Principles of Microeconomics ***or*** Introduction to Psychology ***or*** Introduction to Sociology	3	ECON 201 ***or*** ECON 202 ***or*** PYSC 100 ***or*** SOCI 101	Principles of Economics (Macro) ***or*** Principles of Economics (Micro) ***or*** Introduction to Psychology ***or*** Introduction to Sociology	3	
General Education Total		**34**		**Section A Subtotal**	**34**	

Special Notes, if any:

SECTION B – Program Core / Major Requirement

Course Prefix & Number	Course Name	Credits	Course Prefix & Number	Course Name	Credits Applied	Credits Elective Applied
MTH 152	Statistics	3	MATH 210	Statistics for Scientist	2	1
CMP 135	Introduction Programming	4	CSDP 120	Introduction to Computer Programming	3	1
MTH 202	Calculus II	4	MATH 211	Calculus I	4	
CMP 120	Computer Science I	4	CSDP 150	Advanced Programming	3	1
MTH 203	Calculus III	4	MATH 212	Calculus III	4	
MTH 205	Differential Equations	3	MATH 241	Differential Equations	2	1
PHY 142	Principles of Physics II	4	PHYS 262/264	General Physics II (Waves, Heat, Electricity)	4	
Program / Major Requirement Total		26		**Section A Subtotal**	**22**	
				Total College Credits Applied (sum of sections A and B)	**56**	

Special Notes, if any: ~MATH 210 and MATH 241 will satisfy the free elective requirement. The credit hours for CSDP 120 and CSDP 150 have been reduced from 4 to 3 credits each. ~

SECTION C - Remaining University of University of Maryland Eastern Shore Requirements			
	UMES (General Education)		
	ENGL 203	Fundamentals of Interpersonal Communication	3
	ENGL 305	Technical Writing	3
		Remaining General Education Subtotal	**6**
	Major Program Core Requirements		
	MATH 212	Calculus III	4
	MATH 232	Linear Algebra	3
	MATH 300	Foundations of Mathematics	3
	MATH 309	Introduction to Probability	3
	MATH 310	Mathematics Statistics I	3
	MATH 321	Differential Equations	4
	MATH 342	Advanced Engineering Mathematics	3
	MATH 411	Modern Algebra and Applications	3
	MATH 442	Complex Analysis and Applications	3
	MATH 443	Real Analysis and Applications	3
	MATH 490	Senior Capstone	1
	CSDP 341	Numerical Analysis	3
		Mathematics Program Core Subtotal	**40**
	Major Mathematics Electives		
	MATH 301	College Geometry	3
	MATH 302	Number Theory	3
	MATH 412	Linear Algebra	3
	MATH 413	Modern Algebra and Applications II	3
	MATH 440	Topology	3
	MATH 444	Real Analysis II	3
		Major Mathematics Elective Subtotal	**18**
		Remaining General Education Subtotal	**6**
		Mathematics Program Core Subtotal	**40**
		Major Mathematics Subtotal Electives	**18**
		Total Remaining UMES Credits	**60**
		Total Credit for Completion of Program	**120**
Special Notes, if any:			

*Receiving Institution must indicate if the course is applied to General Education, Program/ Major requirements, or General Elective.

3. The Receiving Institution shall designate, and shall provide to the Sending Institution, the contact information for a staff person at the Receiving Institution who is responsible for the oversight of the transfer of Qualifying Students. The Sending Institution shall designate, and shall provide to the Receiving Institution, the contact information for a staff person at the Sending Institution who is responsible for the oversight of the transfer of Qualifying Students.

	Wor-Wic Community College	**University of Maryland Eastern Shore**
Name of staff person responsible for oversight	Ms. Rhoda Lukins	Dr. Etahe Johnson
Title of staff person	Registrar	Academic Support Associate / Articulation Liaison
Email address	rlukens@worwic.edu	ejohnson2@umes.edu
Telephone Number	410-334-2800	410-651-6038

Should the staff person or position change, the institution will promptly provide new contact information to the partner institution and inform the Maryland Higher Education Commission of the change.

Additional contact information:

Direct Points of Contact for Articulation Agreement	**Wor-Wic Community College**	**University of Maryland Eastern Shore**
Other staff person responsible for oversight	Dr. Patsy Riley	Dr. Willie L. Brown, Jr.
Title of staff person	Dean of General Education	Vice Provost for Faculty Affairs
Email address	priley@worwic.edu	wlbrown@umes.edu
Telephone Number	410-334-2853	410-651-6038

4. If the Qualifying Student is using federal Title 38 VA Education Benefits (GI Bill® Education Benefits), the Institutions shall adhere to all applicable U.S. Department of Veterans Affairs' regulations, including the regulations governing the awarding prior credit, as regulated under Title 38, Code of Federal Regulations, Sections 21.4253(d)(3) and 21.4254(c)(4).

5. Each Institution shall adhere to all applicable transfer requirements set forth in the Annotated Code of Maryland and the Code of Maryland Regulations.

6. Each Institution shall advise students regarding transfer opportunities under this Agreement, and shall advise students of financial aid opportunities and implications associated with the transfer.

7. Should either Institution makes changes to program requirements, the institution will inform the partner institution immediately. The articulation agreement should be updated to reflect the changes and forwarded to the Maryland Higher Education Commission.

C. Term and Termination

1. This Agreement shall become effective on the date it is signed by the appropriate and authorized representatives of each Institution.

2. The initial term of this Agreement shall be five (5) years from the effective date. Thereafter, the Agreement shall automatically renew for successive five (5)-year terms unless either Institution provides written notice of termination at least thirty (30) days prior to the expiration of the then-current term.

3. Either Institution may, at its sole discretion, terminate this Agreement by delivering thirty (30) days' written notice to the other Institution and the Maryland Higher Education Commission. If this Agreement is terminated prior to the end of the initial five (5)-year term, it shall automatically renew unless both Institutions mutually agree in writing to forego the renewal.

4. Both Institutions agree to meet once every two (2) years to review the terms of this Agreement and assess its effectiveness.

D. Amendment

1. This Agreement constitutes the entire understanding and agreement of the Institutions with respect to their rights and obligations in carrying out the terms of the Agreement, and supersedes any prior or contemporaneous agreements or understandings.

2. This Agreement may be modified only by a written amendment executed by both Institutions.

E. Governing Law

This Agreement shall be governed by, and construed in accordance with, the laws of the State of Maryland.

F. Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

G. Notice of Agreement

1. The Institutions agree to provide a copy of this Agreement, with any amendments, to the Maryland Higher Education Commission.

2. The Institutions agree to provide copies of this Agreement to all relevant individuals and departments of the Institutions, including but not limited to students, academic department chairs participating in the transfer, offices of the president, registrar's offices, and financial aid offices.

H. No Third-Party Beneficiaries

There are no third-party beneficiaries to this Agreement.

I. Representations and Warranties of the Parties

Both Institutions represent and warrant that the following shall be true and correct as of the Effective Date of this Agreement, and shall continue to be true and correct during the term of this Agreement:

1. The Institutions are and shall remain in compliance with all applicable federal, state, and local statutes, laws, ordinances, and regulations relating to this Agreement, as amended from time to time.

2. Each Institution has taken all action necessary for the approval and execution of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives.

Signatures:

University of Maryland Eastern Shore

By: _____
Dr. Rondall Allen, Provost and
Vice-President for Academic Affairs

04 / 28 / 2025
Date

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland Eastern Shore proposal for Bachelor of Science in Private Club and Resort Management

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The University of Maryland Eastern Shore (UMES) is pleased to present a proposal for establishing a Bachelor of Science in Private Club and Resort Management in the School of Business and Technology. The proposed degree provides prospective students an academic program with strong foundations and advanced knowledge in club operations, resort, and event venue management. UMES is the only post-secondary institution on the Eastern Shore of Maryland that offers a Bachelor of Science degree in Hospitality and Tourism Management. The proposed degree will expand and strengthen the capability of UMES, addressing an underserved educational niche that has significant employment potential. It will also diversify the pipeline of talent entering club and resort management leadership positions. This program will contribute to the economic growth of the State of Maryland, especially in the Eastern Shore region. The program directly supports the mission of UMES by expanding academic offerings in hospitality management and preparing graduates to lead in a growing and specialized sector of the industry. The degree specifically addresses UMES's mission to provide educational opportunities that reflect industry trends and workforce needs.

The degree requires 120-credit comprised of 38 general education courses, 52 major core course credits, 18 professional hospitality and tourism courses, and 12 additional electives that can be selected from hospitality and tourism courses as well as business management courses, allowing students to tailor their studies to their desired specialized career.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland Eastern Shore proposal for a Bachelor of Science in Private Club and Resort Management.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY OF MARYLAND EASTERN SHORE
Office of the President

May 1, 2025

Dr. Jay Perman, Chancellor
University System of Maryland
701 E. Pratt St.
Baltimore, MD 21202

RE: Bachelor of Science degree in Private Club and Resort Management

Dear Chancellor Perman:

The University of Maryland Eastern Shore hereby submits a new program proposal to begin offering a Bachelor of Science degree in Private Club and Resort Management (PCRM) within the School of Business, Engineering, Applied Sciences, Technology, and Tourism Management (School of Business and Technology).

Consistent with its mission, UMES seeks to expand its capacity to offer unique and/or critical degree programs. The creation of the bachelor's degree in Private Club and Resort Management directly supports this mission by expanding academic offerings in hospitality management and preparing graduates to lead in a growing and specialized sector of the industry. This program strengthens UMES's commitment to discovery, innovation, and engagement in fields central to its land-grant identity and institutional priorities. UMES seeks to expand its capacity to offer unique and/or critical degree programs. As such, UMES has developed a Bachelor of Science in Private Club and Resort Management (PCRM). This new program will be established in the Department of Hospitality and Tourism Management and will complement the university's current undergraduate programs in Hospitality and Tourism Management. The proposed Bachelor of Science degree will provide students with advanced knowledge in club and resort management, promote innovation and leadership development in an emerging field while contributing to the workforce in the State of Maryland.

The proposed degree specifically addresses UMES's mission to provide educational opportunities in hospitality management by expanding specialization options that reflect industry trends and workforce needs. The BS in Private Club and Resort Management will enhance UMES's academic offerings with a specialized, industry-relevant curriculum that addresses a growing segment of the hospitality industry. The program will provide accessible education in a specialized field with strong employment prospects, creating pathways to success for students from diverse backgrounds. The proposed BS directly addresses the workforce needs of club and resort management, a growing segment with documented demand for specialized education.

The program will prepare students to serve in management positions in a rapidly growing segment of the hospitality industry, particularly relevant to the Eastern Shore's tourism economy. The proposed degree program will position UMES at the forefront of educational innovation in tourism related academic programs.

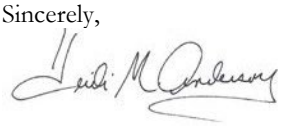
The UMES campus is in Somerset County, Maryland. The PCRM will expand the educational opportunities for educationally disadvantaged students by developing a high-quality and innovative academic program that aligns with the educational needs of the region and the state of Maryland. The mission of the proposed BS is to provide students or working professionals with advanced knowledge in club and resort management, promote innovation and leadership development in the emerging field of private club and resort operations for UMES academic enterprise and contribute to the economic growth in the State of

Maryland, especially in the Eastern Shore region, where learning opportunities in specialized hospitality management are severely lacking.

The attached proposal has undergone the established UMES curriculum approval process, and I fully support the proposed program.

Thank you for your consideration.

Sincerely,



Heidi M. Anderson, Ph.D., FAPhA
President

Copy:
Dr. Rondall Allen, Provost and Vice President for Academic Affairs
Dr. Erinn Tucker-Oluwole, Department Chair, Department of Hospitality and Tourism Management
Dr. Derrek Dunn, Dean, School of Business, Engineering, Applied Sciences, Technology, and Tourism Management

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
x	Within Existing Resources, or
	Requiring New Resources

University of Maryland Eastern Shore (UMES)
Institution Submitting Proposal

Private Club and Resort Management
Title of Proposed Program

B.S.	FALL 2025
Award to be Offered	Projected Implementation Date
50800	**52.0906**
Proposed HEGIS Code	Proposed CIP Code
Hospitality and Tourism Management	Dr. Erinn D. Tucker-Oluwole
Department in which program will be located	Department Contact
410-651-6567	edtucker@umes.edu
Contact Phone Number	Contact E-Mail Address
	05-01-2025
Signature of President or Designee	Date

Proposal for New Undergraduate Degree Program
Bachelor of Science in Private Club and Resort Management

A. Centrality to Institutional Mission and Planning Priorities:

1) Provide a description of the program, including each area of concentration (if applicable) and how it relates to the institution's approved mission.

The Department of Hospitality and Tourism proposes to establish a Bachelor of Science degree in Private Club and Resort Management within the School of Business and Technology (SBT) at the University of Maryland Eastern Shore. The proposed Bachelor of Science in Private Club and Resort Management program is comprised of 120 credits. The mission of the proposed BS is to provide students or working professionals with advanced knowledge in club and resort management, promote innovation and leadership development in the emerging field of private club and resort operations for UMES academic enterprise, and contribute to the economic growth in the State of Maryland, especially in the Eastern Shore region, where learning opportunities in specialized hospitality management are limited.

The objective of the proposed degree program aligns with UMES' mission. The UMES's mission statement states, "As a public 1890 land-grant Historically Black University that embraces diversity, UMES is committed to serving first-generation and underserved students and providing educational, research, and community engagement opportunities to transform the lives of its students who will impact the state, region, and the world." The creation of the bachelor's degree in Private Club and Resort Management directly supports this mission by expanding academic offerings in hospitality management and preparing graduates to lead in a growing and specialized sector of the industry. This program strengthens UMES's commitment to discovery, innovation, and engagement in fields central to its land-grant identity and institutional priorities.

This BS specifically addresses UMES's mission to provide educational opportunities in hospitality management by expanding specialization options that reflect industry trends and workforce needs. The program will prepare students to serve in management positions in a rapidly growing segment of the hospitality industry, particularly relevant to the Eastern Shore's tourism economy.

2) ***Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.***

Consistent with its mission, UMES seeks to expand its capacity to offer unique and/or critical certificate and degree programs. As such, the University has been working towards the development of a BS in Private Club and Resort Management to complement its undergraduate programs in Hospitality and Tourism Management, Engineering Technology with a concentration in Electrical/Electronic Engineering Technology, Computer Science, and Engineering with specializations in Electrical and Computer, and Business program which offers bachelor's degrees in accounting, Business Administration, Finance, and Marketing.

The proposed undergraduate program supports the institution's strategic goals. According to the UMES Strategic Plan (https://wwwcp.umes.edu/president/strategic-plan/), the proposed undergraduate program will support the following priorities:

- **Priority 1: Academic Excellence and Innovation** - The BS in Private Club and Resort Management will enhance UMES's academic offerings with a specialized, industry-relevant curriculum that addresses a growing segment of the hospitality industry.

- **Priority 2: Access, Affordability, and Achievement** - The program will provide accessible education in a specialized field with strong employment prospects, creating pathways to success for students from diverse backgrounds.

- **Priority 3: Workforce and Economic Development**—The proposed BS directly addresses the workforce needs of club and resort management, a growing segment with documented demand for specialized education.

- **Priority 4: Research and Community Engagement** - Students will engage with industry professionals through internships and experiential learning, strengthening UMES's ties to the hospitality sector.

- **Priority 5: Diversity, Equity, and Inclusion** - This program will help diversify leadership in club and resort management, an industry that historically has lacked diversity at upper management levels.

The proposed BS will substantially help the institution achieve its strategic goals. Additionally, Strategic Plan Goal 1.1 aims to "attract, retain and graduate more aspiring students at the undergraduate levels," which aligns perfectly with this program's goal of providing curriculum and competencies for students interested in working in the club and resort industry, regardless of athletic inclination. Goal 3.4 specifically calls for developing "new, revised, and enhanced existing academic programs" to remain current with evolving workforce demands, which this BS directly addresses.

3) ***Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.***

UMES will provide the proposed program with adequate resources, facilities, and faculty, as it currently does for its other Department of Hospitality and Tourism Management academic programs. Also, the proposed program will receive funding from the Maryland HBCU lawsuit settlement to support the hiring of new faculty. The program will leverage existing infrastructure, faculty expertise, and academic resources to minimize additional costs while ensuring program quality.

4) ***Provide a description of the institution's commitment to*:**

a) ***ongoing administrative, financial, and technical support of the proposed program.***

This degree program is created by leveraging, in part, the existing faculty and staff in the Department of Hospitality and Tourism Management and the PGA Golf Management Program at UMES. The internal approval procedure for programmatic modification indicates UMES' commitment to ongoing administrative, financial, and technical support of the proposed program. The proposed BS program in Private Club and Resort Management has been vetted by the faculty in the Department of Hospitality and Tourism Management, the faculty in the PGA Golf Management Program, the chairperson for the Department of Hospitality and Tourism Management, the Dean of the School of Business and Technology, Faculty Assembly Curriculum Committee, UMES Faculty Assembly (institution-wide shared governance body), the Provost and Vice President for Academic Affairs, as well as UMES President - indicating that the institution has affirmed the proposed program. Technical support from the UMES Office of Information Technology has been ongoing for several decades, and no change is expected in the established processes for the proposed academic programs needing IT support.

b) ***continuation of the program for a period of time sufficient to allow enrolled students to complete the program.***

UMES is committed to supporting the program with sufficient time for enrolled students to complete the BS in Private Club and Resort Management. To satisfactorily achieve strategic goals and maintain quality and excellence, the continuous support of the Private Club and Resort Management program (e.g., students) through graduation is essential to the UMES mission and goals.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan:

1) Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:

a) ***The need for the advancement and evolution of knowledge***

By working with experienced faculty, student advancement and evolution of knowledge will occur via a mentor/mentee relationship. Students can work closely with club and resort management faculty members with years of experience in business management, club operations, and hospitality leadership. The proposed BS program faculty members are committed to fostering diversity and social justice throughout the hospitality industry and society in general, and to addressing underrepresentation and issues of racism within hospitality organizations, particularly in the club management sector, which has historically lacked diversity at executive levels.

b) ***Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education***

According to the United States Census Bureau, UMES is in Maryland's Somerset County is among the poorest counties in the state (https://www.census.gov/quickfacts/somersetcountymaryland). UMES offers the only undergraduate HTM degree program on the Eastern Shore of Maryland, and there is a strong demand for undergraduate education in club and resort management in the region.

Offering the proposed BS is critical to the local economy's needs. The need for a BS in Private Club and Resort Management in the Eastern Shore region will allow students at secondary institutions to enroll in a program that will serve a fast-growing field and, hence, the societal and economic needs of the Eastern Shore of Maryland and the State of Maryland in general.

According to the Club Management Association of America (CMAA), the private club industry in the US represents a $23.5 billion market, with demand for specialized education in this field growing steadily. This BS will provide educational opportunities that prepare students for careers in this lucrative sector, with particular attention to expanding access for minority students currently underrepresented in club management leadership roles.

c) ***The need to strengthen and expand the capacity of historically black institutions to provide high-quality and unique educational programs***

UMES is the only post-secondary institution on the Eastern Shore of Maryland that offers HTM bachelor's degree programs. The proposed BS in Private Club and Resort Management will significantly strengthen and expand the capability of UMES, one of the four HBIs in the state, which provides students with high-quality and unique educational experiences.

This program addresses an underserved educational niche that has significant employment potential. Club management education has historically been concentrated at predominantly white institutions, and this program will help diversify the pipeline of talent entering club and resort management leadership positions.

2) ***Provide evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education.***

The proposed program aligns well with the 2022 Maryland State Plan for Postsecondary Education in all three areas: Access, Success, and Innovation.

Access – Ensure equitable access to affordable and quality postsecondary education for all Maryland residents.

The bachelor's program is intended to prepare highly trained club and resort managers in an emerging area that is becoming increasingly important and relevant to our society. However, club and resort management is a specialized field with many student access barriers. The proposed BS will provide equitable access and quality education to all Maryland residents, including those with disadvantaged backgrounds, to develop a robust hospitality management workforce for the state.

This program creates explicitly new educational pathways for students interested in the hospitality industry. It provides specialized training that can lead to higher-paying management positions without requiring athletic ability or prior golf experience, which has traditionally been a barrier to entry in this field.

Success – Promote and implement practices and policies that will ensure student success.

The proposed BS practices and policies align with all existing policies at the University, ensuring student success. By providing a carefully developed curriculum, sufficient facilities and equipment, and adequate faculty members for advising and teaching, the proposed BS will help ensure student graduation and successful job placement.

Specifically related to *Priority 6, which is improving systems for timely completion*, the proposed BS is designed innovatively, taking advantage of new frameworks and leveraging existing synergies. This allows the degree program to be completed in a typical four years. The timeframe is achieved through targeted curriculum design and scheduling to maximize efficiency. Additionally, the program will provide robust advising and support systems to ensure students stay on track for on-time completion. The program's student-centered design will promote practices and policies for student success and timely completion.

Innovation – Foster innovation in all aspects of Maryland higher education to improve access and student success

Specifically, the proposed BS aligns with the goal of "Innovation" of the State Plan, which aims to "foster innovation in all aspects of Maryland higher education to improve access and student success." The proposed program will help achieve the goal of "Economic Growth and Vitality," which is centered on supporting a knowledge-based economy through increased education and training and is to ensure that Historically Black Institutions are "competitive, both in terms of program and infrastructure," with Maryland's other state institutions. Ultimately, the proposed program will prepare highly qualified club and resort managers to contribute to Maryland's economic growth and vitality by providing them with new knowledge and skill sets in specialized hospitality management to maintain the skills they need to succeed in the workforce.

The proposed BS strongly aligns with *Priority 8 of promoting a risk-taking culture*. The program fosters innovation in higher education curriculum and instruction by designing an industry-aligned curriculum that prepares students for emerging roles in club and resort management. Additionally, the focus is on an in-demand field that is not the traditional domain of 4-year University programs. The proposal reflects a willingness to take calculated risks in developing a non-traditional program that leverages regulatory changes and industry trends.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

The global golf tourism market was valued at USD 21.74 billion in 2021 and is projected to expand at a compound annual growth rate (CAGR) of 7.6% from 2022 to 2030. Club and resort management has emerged as a professional, amateur, & leisure activity in recent years involving considerable business complexity. The growth of the global market is primarily driven by the rising number of international and domestic tournaments, considerable spending on the setup of enhanced sporting infrastructure, and an enormous rise in private club memberships across the globe. In addition, sports authorities and governments worldwide are arranging domestic and international tournaments and making heavy investments to attract visitors and boost the local economy.

The club and resort industry represents a significant economic sector. According to the Club Management Association of America (CMAA), the private club industry in the US alone represents a $23.5 billion market. Golf clubs and country clubs employ over 365,000 people in the US, with management positions growing at 5.2% annually, according to Bureau of Labor Statistics data from 2023-2024.

Regional Insights

North America accounted for the largest revenue share of more than 41.75% in 2021 on account of the rising number of professional tournaments and the ever-grown number of international and domestic visitors to clubs and resorts in the U.S. According to the International Association of Golf Tour Operators (IAGTO), the U.S. market has significant capacity for growth and is expected to develop as an attractive market for international visitors across the globe. To attract golfers and luxury travelers worldwide, U.S. sports authorities and associations are taking significant initiatives and considering tourism a key opportunity to rejuvenate the country's tourism industry. This is further expected to boost the regional market in the coming years.

In 2021, Maryland clubs and resorts reported a 10-fold increase in participation; therefore, the need for more qualified labor in this sector is imperative. (CBS News.com, August 31, 2021). Alternative forms of golf and recreation, such as Topgolf and similar entertainment venues, have helped push the industry's overall participant base past 41 million (up from 32 million in 2016), while the traditional, on-course visitor pool now has a higher proportion of females and people of color than any time in history.

1) ***Describe potential industry or industries, employment opportunities, and expected level of entry (ex: mid-level management) for graduates of the proposed program.***

Graduates of the Private Club and Resort Management program will be prepared for various roles across the hospitality industry, with a particular focus on:

- **Private Club Management**: Graduates can work in operations, membership services, and events management at country clubs, city clubs, yacht clubs, and athletic clubs.

- **Resort Operations**: Positions at luxury resorts, including operations management, guest services, and recreational programming.

- **Golf Facility Management**: Roles in managing golf operations, tournaments, merchandising, and facility maintenance at both private and public courses.

- **Event Venue Management**: Positions managing event spaces, coordinating functions, and overseeing catering operations.

- **Food and Beverage Management**: Specialized management roles focusing on dining operations within clubs and resorts.

According to 2024 data from the Hospitality Compensation Exchange, entry-level management positions in clubs and resorts currently offer starting salaries averaging $68,500, approximately 22% higher than comparable positions in standard hotels.

Over one million people have direct employment ties to the U.S. club and resort industry, with a total wage income of more than $80 billion. Most of these employees work in facility operations, averaging approximately 43 per facility—from management and the standard professional staff to the outside services team, food and beverage staff, and maintenance department.

Tourism is the second-biggest driver of direct employment within the industry, with the majority being resort staff, travel company operators, and associated personnel.

2) ***Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.***

The club and resort management industry are experiencing significant growth and demand for qualified professionals. According to the 2024 State of the Industry Report produced by Bobby Jones Links, roughly 2,500 of the approximately 14,000 golf properties in the United States are operated or owned by professional club management companies. The scope of opportunities is a $100 billion industry, driving 2 million jobs and $66 billion in wages and benefits.

LinkedIn's 2024 Emerging Jobs Report shows that "Resort Experience Manager" and "Club Operations Director" appeared among the top 30 fastest-growing job titles. Additionally, 72% of job postings for club management positions now list a bachelor's degree as a minimum requirement, up from 51% in 2018, according to the CMAA Industry Report.

The National Golf Foundation reports that of the 14,033 facilities in the U.S., 3,674 are private, 2,551 are municipal, and the balance, 7,808, are public courses. Each facility requires skilled management personnel with specialized club and resort operations knowledge.

According to the Industry Education Council Survey, graduates with specialized education in club management reported 91% employment rates within 6 months of graduation, compared to 82% for general hospitality graduates. The industry's economic impact is substantial. According to the 2023 American Golf Industry Coalition Economic Impact Report, in 2023, the industry generated nearly $200 billion in annual activity when tourism and other related businesses are considered.

3) ***Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.***

According to the Hospitality Executive Search Firm Survey (2024), employers are willing to pay a 28% premium for candidates with specialized education in club or resort management versus general hospitality degrees. This premium reflects the specialized knowledge and skills required for successful club and resort management.

According to the Higher Education Research Institute (2023), hospitality degree programs have seen enrollment increases of 12-15% at universities that offer specialized tracks in luxury management or club operations. This indicates growing student interest in specialized hospitality education.

According to the Club Benchmarking Survey, private club membership has increased by 18% since 2020, with younger demographics (35-45) representing the fastest-growing segment at 23% growth. This demographic shift suggests continued growth and evolution in the sector, requiring new management approaches and specialized knowledge.

The average annual spending per member at private clubs increased from $9,200 in 2019 to $12,400 in 2023, indicating a willingness to pay for premium experience and creating demand for skilled managers who can deliver such experiences.

According to STR Global, luxury resorts reported an average revenue per available room (RevPAR) growth of 15.2% in 2023, outpacing the broader hospitality sector by 8.7%. This growth drives demand for specialized management talent.

4) Provide data showing the current and projected supply of prospective graduates.

The specialized nature of club and resort management education means there is currently a limited supply of graduates with specific training in this field, particularly from HBCUs. Most existing programs are at predominantly white institutions, creating an opportunity for UMES to address an educational gap.
Based on current enrollment trends in the Department of Hospitality and Tourism Management and projections for the new BS, we anticipate the following graduate numbers:

- Year 1: 15 students
- Year 2: 20 students
- Year 3: 25 students
- Year 4: 25 students
- Year 5: 25 students

These projections are conservative and based on current department capacity, with potential for growth as the program becomes established and attracts additional students interested in this specialized field.

D. Reasonableness of Program Duplication:

1) Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.

No universities in Maryland currently offer a specific degree or concentration in Club and Resort Management or Private Club Management. Several schools in Maryland offer general Hospitality and Tourism Management degrees, but none with the specialized focus of this proposed BS.

Outside of Maryland, Florida State University offers a BS in Global Club Management & Leadership, University of South Carolina offers a BS in Hospitality Management with a private club component, and Norfolk State University offers a BS in Tourism and Hospitality Management with private clubs and golf resorts component.

The most similar academic program related to the proposed BS offered in Maryland is the existing BS in PGA Golf Management at UMES. However, the proposed Club and Resort Management BS differs significantly from the PGA Golf Management Program in several key ways:

1. The PGA Golf Management Program focuses heavily on golf instruction and playing ability, while the proposed BS focuses on business operations and club and resort facilities management.

2. The Club and Resort Management BS will be accessible to students regardless of golf playing ability, opening career paths in the industry to a broader range of students.

3. The new BS includes broader hospitality components, including event management, food and beverage operations, and resort management beyond golf facilities.
4. The proposed program emphasizes business management and leadership principles specifically tailored to private clubs and resort properties.

2) Provide justification for the proposed program.

The proposed program is justified based on several factors:

1. **Unique Offering**: This would be the only program in Maryland that fills an educational gap for students interested in club and resort management careers.

2. **Industry Demand**: The club and resort sectors are growing rapidly, and there is documented demand for specialized management talent.

3. **Higher Employment Outcomes**: Graduates with specialized education in club management achieve higher employment rates and starting salaries than general hospitality graduates.

4. **Diversity Initiative**: The program will help increase diversity in club management leadership, where minorities are currently underrepresented.

5. **Alignment with Regional Economy**: The Eastern Shore's tourism economy includes numerous clubs and resorts that would benefit from a specialized talent pipeline.

6. **Complementary to Existing Programs**: The BS complements UMES's existing hospitality programs while offering a distinct specialization that appeals to different student populations.

Through the emphasized experiential learning methods, the BS at the University of Maryland Eastern Shore will be the second hospitality-focused program on the Eastern Shore in the State of Maryland. The offerings will benefit the Eastern Shore community, the State, and the Nation as the geographical area welcomes the opportunity to promote interdisciplinary teachings, research, and service in an underserved educational niche with significant employment potential.

E. Relevance to High-Demand Programs at Historically Black Institutions (HBIs)

1) Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.

The proposed high-demand program at the University of Maryland Eastern Shore is unique in that it is the first academic program within the School of Business and Technology to have an interdisciplinary approach that directly impacts the effectiveness of educational program operational efficiency to advance innovation involving HBCUs. As a result, the multidisciplinary approach to implementing and maintaining current offerings reveals the need to explore such efforts at underrepresented minority institutions.

The program will enhance UMES's position as a leader in hospitality education among HBCUs by adding a specialized concentration in a growing field with strong employment prospects. Rather than competing with existing programs at other HBCUs, this BS complements current offerings and creates opportunities for collaboration across institutions.

The program addresses a documented educational gap in specialized club and resort management education at HBCUs, as most existing programs in this field are at predominantly white institutions. By establishing this program, UMES will be at the forefront of preparing diverse students for leadership roles in an industry historically lacking executive-level diversity.

Our findings do not present a bachelor-level program offering keyword titles including club, resort, and management within the State of Maryland at other HBCUs. This is vital to the education trend in assessing and implementing to maintain high-demand programs at HBCUs.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1) Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.

The relevance of the University of Maryland Eastern Shore as a Historically Black 1890 land-grant institution serves a distinctive identity for HBCUs in the State of Maryland. As such, the University of Maryland Eastern Shore is the State of Maryland's only Historically 1890 Land-grant with programs unique to the State as a four-year serving institution. The University of Maryland Eastern Shore mentioned the mission of a student-centered, doctoral research degree-granting university known for its nationally accredited undergraduate and graduate programs, applied research, and highly valued graduates: to prepare graduates to address challenges in a global knowledge-based economy while maintaining its commitment to meeting the workforce and economic development needs of the Eastern Shore, the state, the nation, and the world.

The proposed program enhances UMES's identity as an institution that prepares students for careers in growing industries while maintaining its commitment to accessibility and diversity. By entering the specialized field of club and resort management education where minorities are currently underrepresented in leadership positions, UMES reinforces its role in creating pathways to success for underrepresented students.

This program aligns with UMES's land-grant mission by addressing practical workforce needs while maintaining academic rigor and research opportunities. It strengthens UMES's identity as an institution that responds to evolving industry needs while maintaining its commitment to serving diverse student populations.

The proposed program is vital to meeting anticipated higher education demands. It will benefit the University of Maryland Eastern Shore by promoting research, teaching, and service.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10):

1) ***Describe how the proposed program was established, and also describe the faculty who will oversee the program.***

How Was the Proposed Program Established?

The decision to develop a BS in Private Club and Resort Management was made after thoroughly analyzing industry trends, employment opportunities, and student interest. This process involved consultation with industry professionals, examining similar programs at other institutions, and assessing the existing resources and expertise within the Department of Hospitality and Tourism Management.

The program was developed through a collaborative process involving faculty from the Department of Hospitality and Tourism Management and the PGA Golf Management Program, with input from industry professionals and alumni working in the club and resort sector. The curriculum balances theoretical knowledge with practical skills, ensuring that graduates are prepared for club and resort management challenges.

As recommended by Sumayah Arcusa, PGA, an alumna and current the manager for Student Development with the Club Management Association of America (CMAA), the program title "Private Club and Resort Management" accurately reflects the program's scope and focus, encompassing both private clubs and resort operations.

Describe the Faculty Who Will Oversee the Program

The proposed program will be overseen and supported by full-time and part-time faculty from the Department of Hospitality and Tourism Management. It will be led by Dr. Erinn Tucker-Oluwole, Department Chair and Associate Professor, with significant contributions from the faculty of the PGA

Golf Management Program and other faculty members with expertise in various aspects of hospitality and club management.

2) ***Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.***

In terms of **educational objectives**, the goal of the proposed program is to:

- Recruit diverse and talented students interested in club and resort management careers
- Develop students into committed hospitality professionals with specialized knowledge of club and resort operations
- Provide a comprehensive and progressive educational program designed to prepare students for a life-long career in club and resort management
- Help students gain valuable work experience through industry internships and experiential learning
- Foster student understanding of membership-based business models and luxury service delivery
- Develop students' financial acumen specific to club and resort operations
- Prepare graduates to be ethical leaders who understand the importance of diversity and inclusion in the club industry
- Aspire to be a premier club and resort management program that upholds the highest professional standards

<u>Learning Outcomes</u>:

Upon completion of the program, students will be able to:

1. Apply specialized knowledge of club and resort operations to real-world management scenarios
2. Demonstrate competency in financial management practices specific to membership-based organizations
3. Implement effective marketing and member relations strategies for private clubs and resorts
4. Design and execute successful events and programming in club and resort settings
5. Apply leadership and management principles to supervise staff in a hospitality environment effectively
6. Analyze and resolve ethical dilemmas in club and resort management contexts
7. Integrate technology solutions to improve club and resort operations and member experiences
8. Demonstrate an understanding of the legal and governance structures unique to private clubs and resorts

3) ***Explain how the institution will*:**

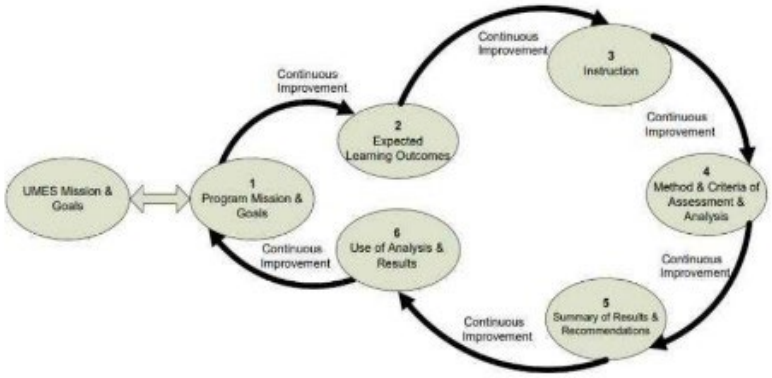
a) ***provide for assessment of student achievement of learning outcomes in the program***

Periodic assessment of the impact of the proposed program will be monitored as part of the institutional assessment process, and an evaluation program operation against budget and enrollment projects will be included, with primary benchmarks dictated by the parameters of the semester and academic year. Data on the program's processes (enrollment, student-credit-hour production, expenses, and revenue), included in an annual assessment report, will be used to improve the quality and relevance of educational opportunities offered by the School of Business and Technology at UMES.

Assessment methods for student achievement and student learning outcomes will be based on established school and departmental standards and will include the following:

- Assess written and oral student presentations, written assignments, and research projects
- Evaluate student performance on exams, quizzes, and assignments in required major courses
- Assess internship performance through supervisor evaluations and student reflections
- Evaluate student capstone projects or business plans related to club and resort management
- Track student participation in professional development activities and industry events
- Collect and analyze data from graduating student exit interviews and alumni surveys

The Student Learning Outcomes Assessment Process (SLOAP) is the degree program's procedure for determining whether the program's mission, objectives, and learning outcomes are being met. It explains the required assessment data to be collected, the frequency of collection, and the evaluation methods to be used to examine whether the performance criteria, which have been discussed previously and below, are being met.



b) ***document student achievement of learning outcomes in the program***

The proposed program will document student achievement of the learning outcomes similarly to other currently accredited School of Business and Technology programs. Assessment Methods based on

previously established educational objectives and learning outcomes for the proposed program would include the following:

- Maintain a portfolio of student work demonstrating achievement of each learning outcome
- Track internship placement rates and supervisor evaluations
- Document student participation in industry events and professional organization activities
- Maintain records of student certifications and additional credentials earned
- Track employment placement rates and starting salaries of graduates
- Conduct regular alumni surveys to assess career progression and program relevance
- Maintain records of student capstone projects and their evaluation

4) **Provide *a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements***

Program Core Courses (55 credits):

BUAD 132: Introduction to Business (3 credits) *Foundational course providing an overview of the business environment, including key functions such as management, marketing, finance, and operations.*

HMGT 101: Introduction to Hospitality Industry (3 credits) *Overview of the hospitality industry including hotels, restaurants, clubs, and tourism; contemporary issues and career opportunities in the global hospitality business environment.*

HMGT 197: Professional Development I (1 credit) *First in a series of professional development courses focusing on industry exposure, resume building, and professional etiquette.*

HMGT 297: Professional Development II (1 credit) *Continuation of professional development focusing on industry networking and professional organization involvement.*

HMGT 397: Professional Development III (1 credit) *Advanced professional development focusing on leadership skills and career planning.*

HMGT 497: Professional Development IV (1 credit) *Capstone professional development course focusing on job search strategies and interview preparation.*

HMGT 398: Hospitality Internship (3 credits) *Supervised work experience in the hospitality industry with emphasis on training and application of management principles.*

PGMT 222: PGM I: Facilities Management I (3 credits) *Introduction to club and recreation facilities management with emphasis on operations, maintenance, and safety.*

TMGT 130: Analysis of Travel/Tourism (3 credits) *Study of the travel and tourism industry, including components, supply, demand, and marketing; emphasis on the economic and social impacts of tourism.*

HMGT 220: Hospitality Technology (3 credits) *Introduction to technology systems used in the hospitality industry with emphasis on reservation systems, point-of-sale, and club management software.*

HMGT 308: Events Planning & Management (3 credits) *Principles and practices of planning, implementing, and evaluating special events in hospitality settings.*

HMGT 305: Entrepreneurship (3 credits) *Study of entrepreneurship concepts, strategies, and business plan development with application to hospitality ventures.*

PGMT 322: PGM II: Facilities Management II (3 credits) *Advanced study of facilities management with emphasis on budgeting, capital improvements, and long-term planning.*

HMGT 340: Hospitality Accounting (3 credits) *Accounting principles and practices specific to the hospitality industry, with emphasis on club and resort accounting methods.*

HMGT 360: Hospitality Leadership & Ethics (3 credits) *Examination of leadership theories, styles, and ethical considerations specific to hospitality management.*

FMGT 301: Food & Beverage Management (3 credits) *Management of food and beverage operations in various hospitality settings with emphasis on menu planning, purchasing, cost control, and service delivery.*

HMGT 350: Hospitality Marketing (3 credits) *Principles and practices of marketing as applied to the hospitality industry with special emphasis on membership marketing and retention strategies for clubs.*

HMGT 440: Financial Analysis Hospitality (3 credits) *Analysis of financial statements, investment decisions, and working capital management specific to hospitality enterprises with a focus on membership models.*

HMGT 441: Resort and Hotel Operations Management (3 credits) *Management of daily operations within resorts and hotels, including front office, housekeeping, and guest services.*

HMGT 411: Supervision and Leadership (3 credits) *Principles of supervising and leading hospitality staff with emphasis on motivation, performance evaluation, and team building.*

HMGT 401: Hospitality Law (3 credits) *Legal aspects of operating hospitality businesses with emphasis on private club governance, liability issues, and regulatory compliance.*

Professional Courses (18 credits):

FMGT 322: Foodservice Operations (3 credits) *Advanced food service operations with emphasis on fine dining service standards and implementation.*

HMGT 310: Festival and Special Events (3 credits) *Specialized study of festival and special event planning, promotion, and execution with application to club settings.*

HMGT 420: Event Management Practicum (3 credits) *Hands-on application of event management principles through the planning and execution of a real event.*

HMGT 321: Food and Beverage Management (3 credits) *Advanced food and beverage management with emphasis on wine programs, specialty dining, and high-end service delivery.*

HMGT 460: Private Club Management (3 credits) *Comprehensive study of private club operations emphasizing membership structures, service standards, and strategic club management.*

HMGT 470: Global Club Operations & Governance (3 credits) *Examination of international private club models, governance practices, and cultural considerations impacting global club operations.*

Electives (9 credits - Students take 3 courses from the list below):

BUAD 422: Principles of Supply Chain Management (3 credits) *Management of the flow of goods and services in hospitality operations, including procurement strategies.*

BUAD 420: International Business (3 credits) *Study of international business practices in global hospitality operations and multicultural management.*

HMGT 410: Revenue Management (3 credits) *Strategies to optimize revenue in hospitality operations with application to membership pricing and tiered access models.*

BUAD 410: Production Management (3 credits) *Production and operations management techniques applied to service environments.*

BUAD 411: Operations Research/Decision (3 credits) *Quantitative approaches to management decision-making with application to hospitality scenarios.*

BUAD 364: Managerial Economics (3 credits) *Application of economic theory and methods to business and administrative decision-making.*

Program Requirements:

1. Complete 120 credit hours, including general education requirements (38 credits), program core requirements (55 credits), professional courses (18 credits), and electives (9 credits).

2. Maintain a minimum GPA of 2.0 in all major coursework.

3. Complete at least one industry-relevant internship (HMGT 398).

4. Participate in required professional development activities throughout the program, including industry events and networking opportunities.

5. Complete a capstone project or comprehensive business plan for club or resort management in the senior year.

5) Discuss *how general education requirements will be met, if applicable.*

Students enrolled in the Bachelor of Science in Private Club and Resort Management will fulfill general education requirements as part of the degree program following UMES guidelines. (GEP 38 credits. https://wwwcp.umes.edu/gep/

Curriculum Area 1: Arts and Humanities (6 credits)
Students take 1 course from any of the courses within Arts, Languages, and Literature. Students take Speech.

1.1 Arts, Languages, and Literature

- ARTS 101 Exploration of Visual Arts (3 credits)
- ARTS 310 African American Art History (3 credits)
- ARAB 101 Fundamentals of Arabic I (3 credits)
- ARAB 102 Fundamentals of Arabic II (3 credits)
- ASLS 203 American Sign Language I (3 credits)
- ASLS 204 American Sign Language II (3 credits)
- CHIN 101 Fundamentals of Chinese I (3 credits)
- CHIN 102 Fundamentals of Chinese II (3 credits)
- ENGL 204 Introduction to Fiction (3 credits)
- ENGL 205 Introduction to Drama (3 credits)
- ENGL 206 Introduction to Poetry (3 credits)
- ENGL 207 Introduction to Creative Writing (3 credits)
- FREN 101 Fundamentals of French I (3 credits)
- FREN 102 Fundamentals of French II (3 credits)
- HIND 101 Fundamentals of Hindi I (3 credits)
- HIND 102 Fundamentals of Hindi II (3 credits)
- HONR 101 Honors Freshman Seminar: Selves and Others
- JAPN 101 Fundamentals of Japanese I (3 credits)
- JAPN 102 Fundamentals of Japanese II (3 credits)
- PORT 101 Fundamentals of Portuguese I (3 credits)
- PORT 102 Fundamentals of Portuguese II (3 credits)
- SPAN 101 Fundamentals of Spanish I (3 credits)
- SPAN 102 Fundamentals of Spanish II (3 credits)

1.2 Speech

Students must pass ENGL 101 and ENGL 102 with grade of "C" or above before taking ENGL 203.

- ENGL 203 Fundamentals of Contemporary Speech

Curriculum Area 2: Social and Behavioral Sciences (6 credits)

Students take 2 courses from any of the courses within Social and Behavioral Sciences.

- AGEC 213 Introduction to Agricultural Economics (3 credits)
- CRJS 101 Introduction to Criminal Justice (3 credits)
- ECON 201 Principles of Economics (Macro) (3 credits)
- ECON 202 Principles of Economics (Micro) (3 credits)
- GEOG 201 The World Geography I (3 credits)
- GEOG 202 The World Geography II (3 credits)
- HIST 101 History of World Civilization I (3 credits)
- HIST 102 History of World Civilization II (3 credits)
- HIST 201 History of American Civilization I (3 credits)
- HIST 202 History of American Civilization II (3 credits)
- HONR 201 Honors Sophomore Seminar: Leadership: From Theory to Practice (3 credits)
- HUEC 203 Human Development: A Lifespan Perspective (3 credits)
- HUEC 220 Perspectives on Aging (3 credits)
- HUEC 361 Contemporary Family Issues (3 credits)
- PHIL 201 Introduction to Logic (3 credits)
- POLI 200 Introduction to American Government (3 credits)
- POLI 220 Introduction to Political Behavior (3 credits)
- POLI 342 Urban Politics (3 credits)
- PSYC 100 Introduction to Psychology (3 credits)
- SOCI 101 Introduction to Sociology (3 credits)
- SOCI 201 Social Problems (3 credits)

Curriculum Area 3: Biological and Physical Sciences (7 credits)

Students take 2 science courses and 1 science laboratory course within Biological and Physical Sciences.

- ANPT 114 Introduction to Animal Science (4 credits includes lab)
- BIOL 101 Theories and Applicaitons of Biological Sciences (3 credits)
- BIOL 103 Biological Science Laboratory (1 credit)
- CHEM 101 General Chemistry I (3 credits)
- CHEM 103 General Chemistry I Laboratory (1 credit)
- ENVS 101 Introduction to Environmental Sciences (3 credits)
- NUDT 210 Elements of Nutrition (3 credits)
- PLSC 184 Introduction to Plant Science (3 credits)
- PLSC 185 Introduction to Plant Science Laboratory (1 credit)

Majors in the STEM disciplines often require students take courses from the following list. Check the Curriculum 3 section for your STEM major to determine the science courses to take.

- BIOL 111 Principles of Biology I Credit: (3 credits)
- BIOL 113 Principles of Biology I Laboratory (1 credit)
- BIOL 112 Principles of Biology II (3 credits)

- BIOL 114 Principles of Biology II Laboratory (1 credit)
- BIOL 118 Introduction to Biology for Allied Health Programs (3 credits)
- BIOL 120 Introduction to Biology for Allied Health Laboratory (1 credit)
- CHEM 111 Principles of Chemistry I (3 credits)
- CHEM 113 Principles of Chemistry I Laboratory (1 credit)
- PHYS 121 General College Physics I (3 credits)
- PHYS 123 General College Physics I Laboratory (1 credit)
- PHYS 122 General College Physics II (3 credits)
- PHYS 124 General College Physics II Laboratory (1 credit)
- PHYS 161 General Physics I Mechanics and Particle Dynamics (3 credits)
- PHYS 163 General Physics I Laboratory (1 credit)
- PHYS 181 Introductory Physics I (3 credits)
- PHYS 183 Introductory Physics I Laboratory (1 credit)
- PHYS 182 Introductory Physics II (3 credits)
- PHYS 184 Introductory Physics Laboratory II (1 credit)

Curriculum Area 4: Mathematics (3-4 credits)
Students in non-STEM Humanities majors that do not require a College Algebra (or higher) math course, and a separate Statistics course do not have to take Math placement testing. These students take MATH 103. English, Digital Media Studies, Applied Design, and Art Education are examples.

- MATH 103 Topics for Mathematical Literacy

Students in most majors have to take the math placement testing and are placed into MATH 099 or a credit math course based on the score. Students who place into MATH 099 must take it before taking the credit math course and must pass with a grade of "C" or above before taking the credit math course. Math 099 does not meet the GEP requirement and does not apply toward graduation requirements.

- MATH 102 Applications of College Mathematics Credit (3 credits)
- MATH 109 College Algebra Credit: (3 credits)
- MATH 110 Trigonometry and Analytic Geometry (3 credits)
- MATH 111 Honors Elementary - Mathematical Analysis (4 credits)
- MATH 112 Calculus I (4 credits)

Curriculum Area 5: English Composition (9 credits)
Students take 3 composition courses.

- ENGL 101 Principles of Composition I (3 credits)
- ENGL 102 Principles of Composition II (3 credits)
- ENGL 305 Technical Writing (3 credits) **or**
- ENGL 310 Advanced Composition (3 credits)

Curriculum Area 6: Institution-Specific Courses (7 credits)
These courses are identified by the University as being essential to a full GEP for UMES students. One course from each of the 3 areas is required of all students.
6.1 Freshman Experience

- GNST 100 Freshman Experience or departmental first-year experience course (1 credit)

Examples of departmental courses that should be included are AGNR 111, ARTS 100, AVSC 100, BUED 100, CRJS 100, EDCI 100, ENGE 100, ENGL 100, EXSC 100, HUEC 100, REHA 100, SOSC 100, DNSC 100, GNST 100, PGMT 122 (3 credits), CSDP 100.

6.2 Computer Literacy

- BUAD 213 Business Software Applications
- BUED 212 Computer Concepts/ Applications 1
- ETGE 111 Technology and Society

6.3 JEDI (Justice, Equity, Diversity, Inclusion): UMES Signature Course

- BUAD 311 Justice and Diversity in Organizations
- DMST 440 African American Cinema
- ENGL 300-level number requested Afrofuturism
- ENGL 359 Writing by Women
- HUEC 230 Multicultural Perspectives on Families in the US
- HUEC 463 Food, Clothing and Culture

6) Identify *any specialized accreditation or graduate certification requirements for this program and its students.*

The proposed Bachelor of Science will not pursue specialized accreditation or graduate certification.

7) If *contracting with another institution or non-collegiate organization, provide a copy of the written contract.*

This section is not applicable.

8) Provide *assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.*

The Bachelor of Science in Private Club and Resort Management program will ensure that students receive clear, complete, and timely information through multiple channels, including the university catalog, program website, advising sessions, and orientation materials. Detailed curriculum outlines, course descriptions, and degree requirements will be published and regularly updated to reflect changes. Faculty will engage students through scheduled office hours, email, discussion boards, and in-person or virtual meetings, ensuring meaningful faculty/student interaction throughout the program.

Expectations for technological competence and required technical skills will be clearly communicated in course syllabi and advising sessions. Support will be available through campus resources such as IT help desks and academic support centers. Any specific technical equipment needs (e.g., laptops,

software) will be outlined before the start of each semester. The university's learning management system, Canvas, will deliver course materials, manage assignments, and facilitate communication.

Academic advising, tutoring, career services, and library resources will be accessible to all program students. Information about financial aid resources, costs, and payment policies will be provided during admission and orientation and will remain accessible via the university's financial aid and student accounts offices. These assurances align with the university's commitment to transparency, student success, and high-quality educational experiences.

9) Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.

As with other academic programs offered by the University of Maryland Eastern Shore, the proposed program will ensure that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available. In addition, the program will be advertised alongside other academic graduate programs within the School of Business and Technology at UMES. Proper venues include Public Radio, WESM 91.3, and social media such as the UMES Facebook page, the University Key, the UMES alumni association, and other professional societies.

H. Adequacy of Articulation (as outlined in COMAR 13B.02.03.19)

1) If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements. More information for Articulation Agreements may be found here.

The Hospitality and Tourism Management Department has articulation agreements with various community colleges. The proposed BS has articulation agreements with Wor-Wic Community College and more information regarding the agreement may be found HERE.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

1) Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faculty member will teach in the proposed program.

Faculty	Rank	Degree	Title/Rank	Status	Classes
Dr. Erinn Tucker-Oluwole	Assoc. Prof	Ph.D.	Department Chair, Interim PGA Golf Mngt Director	FT	HMGT 101, 197, 297, 398

Dr. Katherine Quinn	Assoc. Prof	Ph.D.	Faculty	FT	FMGT 301, HMGT 220, 321, 340, 440, 410, 441, 4XX
Dr. George Ojie-Ahamiojie	Assoc. Prof	Ph.D.	Faculty	FT	FMGT 322, HMGT 308, 411, 397, 497, 4XX
Chef Paul Suplee	Lecturer	Masters	Faculty	FT	Optional Electives
Mrs. Kathleen Davis-Bierman	Lecturer	Masters, Current PhD. Student, ORLD	Faculty	FT	HMGT 305, 3XX, 310, 340, 350, 420, 440, 410 TMGT130
Mr. Hyppolite Mouaffo Teumo	Lecturer	Masters, Current PhD. Student, ORLD	Faculty	FT	HMGT 397, 497, 308, 401, 4XX
Ms. Jamila Johnson	PGA Golf Mngt Internship Coordinator / Lecturer	Masters, Current DBA Candidate, UMGC	Faculty	FT	PGMT 222, 322
Coach Jerel Walker	Lecturer / Coach	ABD	Faculty	FT	Optional electives as needed
Open Position: Director of PGM	Professor	Ph.D.	Faculty	FT	PGMT 222, 322
Mr. Sunny Aqualambeng	Lecturer	Masters, Current PhD. Student, ORLD	Faculty	FT	BUAD 132
Dr. Ayodele Alade	Professor	Ph.D.	Faculty	FT	BUAD 410
Dr. Dinesh Sharma	Professor	Ph.D.	Faculty	FT	BUAD 411
Dr. Mohammad Ali	Professor	Ph.D.	Faculty	FT	BUAD 364, 420
Dr. Bryant Mitchell	Associate Professor	Ph.D.	Faculty	FT	BUAD 422

2) ***Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:***

a) ***Pedagogy that meets the needs of the students***

The Center for Teaching Excellence (CTE) provides ongoing pedagogy training for faculty in evidence-based best practices to support high-impact pedagogy practices to meet the needs of UMES students. To accomplish its mission of ensuring expanding and enhancing faculty pedagogy training, CTE has developed three broad program areas to support faculty teaching success, including evaluation of teaching techniques, professional development of faculty as it relates to pedagogy, and recognition of faculty who have demonstrated outstanding pedagogy methodology.

The evaluation of the teaching techniques program includes using student experience of learning surveys, peer observation of teaching, and open classroom week. The professional development of the faculty program provides funding to attend pedagogy conferences, faculty workshops, FACTE working groups, seminar series for new faculty, and innovation in teaching & learning conferences. Lastly, CTE's faculty recognition program includes student choice for teaching excellence e-badge, CTE website – faculty spotlights, and SOTL publication opportunities.

b) ***The learning management system***

The Center for Instructional Technology and Online Learning (CITOL) at UMES supports developing, designing, and delivering online and hybrid programs, classes, and workshops focusing on flexibility, resiliency, equity, accessibility, privacy, and safety (FREAPS). CITOL assists faculty, staff, and students in all digital teaching and learning aspects concerning pedagogy and technology. This includes using the Canvas Learning Management System, Starfish, Microsoft Office 365, YuJa, YuJa Engage, and YuJa Verity.

c) ***Evidenced-based best practices for distance education, if distance education is offered.***

The Center for Instructional Technology and Online Learning (CITOL) at UMES supports developing, designing, and delivering online and hybrid programs, classes, and workshops focusing on flexibility, resiliency, equity, accessibility, privacy, and safety (FREAPS). CITOL assists faculty, staff, and students in all digital teaching and learning aspects concerning pedagogy and technology. This includes using the Canvas Learning Management System, Starfish, Microsoft Office 365, YuJa, YuJa Engage, and YuJa Verity Other services offered by the Center for Instructional Technology and Online Learning include supporting Canvas Learning Management System (LMS) and other instructional software, which can be found on the CITOL website; new resources; providing ongoing professional development through virtual workshops; conducting Course Quality Review; developing interactive and assessment materials for classes; and helping troubleshoot student problems on LMS.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12).

1) Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

The Frederick Douglass Library is the only library on the University of Maryland Eastern Shore (UMES) campus. As a member of the University System of Maryland and Affiliated Institutions (USMAI) consortium, it is affiliated with 17 public universities and colleges in Maryland. The integrated library system ALEPH allows patrons 24/7 access to USMAI library collections and electronic resources. In-person visits to the library are available 91.5 hours per week, including weekends.

The Frederick Douglass Library has the following resources available and/or the measures to be taken to ensure resources are adequate to support the proposed programs:

Books, periodicals, and other reference materials may be located and obtained for patron usage online via the library catalog, online databases, interlibrary loan, inter-campus loan, or by visiting the library.

The ILLIAD (Interlibrary Loan) service allows students, faculty, and staff to access millions of items from other universities that are unavailable at the Frederick Douglass Library.

Interlibrary Loan allows the borrower to request items (books and articles) from non-University of Maryland System libraries. The average time to receive an article is two weeks, and the average time to receive a book is three weeks. Rapid Interlibrary Loan (Rapid ILL) is where most articles may be received within 24 hours.

The FDL staff emails borrowers to remind them to pick up items from the Interlibrary Loan service desk. Many articles requested will be received electronically and available to be accessed within ILLIAD.

Inter-campus loans may be requested from another University of Maryland System Library and delivered to the FDL for patron pick-up. The average time to receive a book is 3-5 days.

Databases, e-books, and e-journals are available electronically via the Frederick Douglass webpage. Open Education Resource Textbooks is a search interface that allows faculty to retrieve OER resources for course materials at no cost to students.

There are over 140 research databases in 17 subject areas.

Databases By Subject

Agriculture	Health & Medicine
Business Management & Accounting	History
Computer Science & Engineering Technology	Hospitality & Tourism Management
Criminal Justice & Government	Human Ecology
Education	Life Sciences

Engineering & Aviation Science & Built Environment	Pharmacy
English & Modern Languages	Physical Sciences
Fine Arts	Physician Assistant
	Social Sciences

Print books and periodicals are on the Frederick Douglass Library's three floors. Periodicals are housed on the Lower Level. Reference books are on the first floor, and circulation and Special Collections books are on the second floor.

To ensure that resources are adequate to support the proposed programs, the library director and library liaisons will network and collaborate with program faculty to select resources to be housed in the library. A one-credit Library Information Literacy class is taught each semester in winter and summer sessions. Individual classroom library sessions are also taught upon request by the instructor. This instruction can range from basic research and knowledge of the library to the highest level of research for those seeking graduate degrees.

The University assures that institutional library resources meet the new program's needs. Library resources for the proposed degree program typically include textbooks, reference books, and technical papers. Although UMES does not have the IEEE Digital Library IEEE Xplore, technical papers could be accessed through Interlibrary Loan (ILL) services.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

1) ***Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.***

The Department of Hospitality and Tourism Management is in the Richard A. Henson Conference Center and Hotel. The building houses all the specialized spaces dedicated to the proposed BS program. Five **private faculty offices** are allocated to the HTM Department on the second floor of the Richard A. Henson Conference Center. The **HTM Computer Lab,** located on the first floor near the kitchen area, was redesigned to enhance student learning in 2023. The lab accommodates 20 student workstations, six tables with chairs seating 10 students for tutoring or other study requirements, and two large whiteboards. All the computers were replaced in the fall of 2021 with updated software and hardware. **Henson Culinary Labs** are full-scale banquet kitchens designed to support banquet production in the banquet rooms. Ninety percent of the kitchen equipment was replaced in the summer of 2022, creating a state-of-the-art modern cooking facility. The kitchen facilities include a Cold Kitchen, Hot Kitchen, and Bake Shop.

The **Bailey-Thomas Banquet Room** is a separate self-contained room with a non-stocked bar, seating up to 50 guests. This room is used for current Hospitality and Tourism Management classes and will be used for the proposed degree. This room is also used for more significant events requiring

a full-service bar, carving stations, and Hors D'oeuvre stations. The **Henson Center Hotel** includes twenty-four guest rooms, standard double or king, one executive suite, a wet bar, and a full kitchen with a dining area. Current HTM students have worked as clerks or night auditors at the front desk which has provided experiential learning opportunities for many students in the proposed new degree program.

UMES provides access to physical and learning resources for all program students and faculty. These include computer labs in Waters Hall, the Frederick Douglas Library, the Center for Access and Success, and the Foreign Language labs. There are four computer labs in Waters Hall. The labs are available for walk-in use and can be reserved through the Helpdesk. The campus-wide university Wi-Fi (HawkNet) and a separate Visitor log-in are available for students, faculty, and staff. (There are over 20 Wireless Everywhere Print Anywhere (WEPA) locations on campus for students to print documents, including the Henson Center. The IT department hosts a 24/7 Public Knowledge Database to assist UMES students with technology-related issues.

The campus-wide university Wi-Fi (HawkNet) is available for students, faculty, and staff, along with a separate Visitor log-in. (There are over 20 Wireless Everywhere Print Anywhere (WEPA) locations on campus for students to print documents, including the Henson Center. The IT department hosts a 24/7 Public Knowledge Database to assist UMES students with technology-related issues.

The library renders academic support, shared resources, and multiple services to students, faculty, staff, and the university community for teaching, research, scholarship, and lifelong learning in a diverse, equitable, and inclusive environment. As a member of the University System of Maryland and Affiliated Institutions (USMAI) consortium, the library is affiliated with seventeen academic libraries to share library resources. The integrated library system, ALEPH, allows our patrons 24/7 access to the library catalog, USMAI collections, and electronic resources. These digital resources from the library's website include over 100 research databases that provide access to e-books and full-text coverage of thousands of scholarly journals, magazines, and newspapers.

2) Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:

a) ***An institutional electronic mailing system, and***

All students admitted and enrolled at UMES are assigned a Microsoft email and have access to the Microsoft Teams video conferencing systems

b) ***A learning management system that provides the necessary technological support for distance education***

The Information Technology Department, Center for Instructional Technology and Online Learning (CITOL), and Academic Computing Unit professionals provide faculty support for development and instructions. The learning management system (LMS) is available for instructional design, software development, educational research, Canvas Learning Management System (LSM), etc. These technologies and opportunities ensure that students are enrolled in courses and faculty development for teaching, which includes adequate access to learning resources.

In addition, the Center for Instructional Technology and Online Learning (CITOL) at UMES assists faculty and students in all aspects of e-learning, including hosting, training, development, and support of the Canvas Learning Management System, Microsoft Office 365, and Yuja. UMES' web portal is a single sign-on allowing students, faculty, and staff access to:

- HawkWeb is a system where student enrollments and registrations, class rosters, and administrative functions related to academics are located.

- Canvas - the learning management system where course content can be published, and students' entire online course experience is managed.

- Web Help Desk: This is the Information Technology Help Desk system where you can create a ticket to request assistance for your computer, networking, and telephone needs.

The UMES campus has wireless networking access points to allow network access from a wireless-enabled device like a laptop, smartphone, or tablet.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

1) Complete Table 1: Resources and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.

TABLE 1: RESOURCES					
Resources Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Reallocated Funds[1]	$0	$0	$0	$0	$0
2. Tuition/Fee Revenue[2] (c+g below)	$169,020	$220,680	$274,390	$280,835	$287,495
a. # FT Students	15	20	25	25	25
b. # Annual Tuition/Fee Rate	$9,300	$9,486	$9,676	$9,869	$10,067
c. Annual / Full Time Revenue (a x b)	$139,500	$189,720	$241,900	$246,725	$251,675

d. # PT Students	5	5	5	5	5
e. Credit Hour Rate	$328	$344	$361	$379	$398
f. Annual Credit Hours	18	18	18	18	18
g. Total Part Time Revenue (d x e x f)	$29,520	$30,960	$32,490	$34,110	$35,820
3. Grants, Contracts & Other External Sources[3]	$0	$0	$0	$0	$0
4. Other Sources	$0	$0	$0	$0	$0
TOTAL (Add 1 - 4)	$169,020	$220,680	$274,390	$280,835	$287,495

Narrative Rationale for Resources

Reallocated Funds
An FTE faculty position will not be reallocated from existing programs.

Tuition and Fee Revenue
We assumed that in-state tuition and fees would increase for the next five years ($9,300, $9,486, $9,676, $9,869, and $10,067). The in-state part-time tuition rate per credit hour is currently $328 per credit. This value was used in calculating the revenue, assuming 15 credits per semester for full-time students and 18 credits per academic year for part-time students.

Grants and Contracts
No additional sources of funding are expected at this time.

Other Sources
No additional sources of funding are expected at this time.

Total Year: A 5-year estimate is provided.

2) ***Complete Table 2: Program Expenditures and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.***

TABLE 2: EXPENDITURES					
Expenditure Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)

1. Total Faculty Expenses (b + c below)	$95,900	$191,800	$191,800	$191,800	$191,800
a. # FTE	1	2	2	2	2
b. Total Salary	$70,000	$140,000	$140,000	$140,000	$140,000
c. Total Benefits (37%)	$25,900	$51,800	$51,800	$51,800	$51,800
2. Total Administrative Staff Expenses (b + c) below	$0	$0	$0	$0	$0
a. # FTE	$0	$0	$0	$0	$0
b. Total Salary	$0	$0	$0	$0	$0
c. Total Benefits	$0	$0	$0	$0	$0
3. Total Support Staff Expenses (b + c below)	$0	$0	$0	$0	$0
a. # FTE	$0	$0	$0	$0	$0
b. Total Salary	$0	$0	$0	$0	$0
c. Total Benefits	$0	$0	$0	$0	$0
4. Equipment	$0	$0	$0	$0	$0
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7. Other Expenses	$0	$0	$0	$0	$0
TOTAL (Add 1 - 7)	$95,900	$191,800	$191,800	$191,800	$191,800

Narrative Rationale for Expenditure

Faculty (FTE, Salary, and Benefits)

Over the next five years, the program will employ 2 FTE faculty members (with backgrounds in the proposed program course) to operate the program. The proposed program will receive funding from the Maryland HBCU settlement funds to support the hiring of new faculty. There will be no need for

additional administrative staff. The existing departments and school administrative staff will be sufficient to run the program.

Support Staff (FTE, Salary and Benefits)
None

Equipment
None.

Library
None.

New and/or Renovated Space
Not needed

Other Expenses
None.

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1) Discuss procedures for evaluating courses, faculty, and student learning outcomes.

Course Evaluation

The University of Maryland Eastern Shore has a comprehensive course and program evaluation process. Each course syllabus has a set of written student learning outcomes. The course learning outcomes are assessed through embedded questions on tests, assignments, and portfolios that address specific course outcomes. Data is collected to analyze results and improve course curriculum and pedagogy.

Periodic assessment of the impact of the proposed program will be monitored as part of the institutional assessment process, and an evaluation program operation against budget and enrollment projects will be included, with primary benchmarks dictated by the parameters of the semester and academic year. Data on the program's processes (enrollment, student-credit-hour production, expenses, and revenue), included in an annual assessment report, will be used to improve the quality and relevance of educational opportunities offered by the School of Business and Technology at UMES.

Assessment methods for student achievement and student learning outcomes will be based on established school and departmental standards and will include the following:

- Assess written and oral student presentations, written assignments, and research projects
- Evaluate student performance on exams, quizzes, and assignments in required major courses
- Assess internship performance through supervisor evaluations and student reflections

- Evaluate student capstone projects or business plans related to club and resort management
- Track student participation in professional development activities and industry events
- Collect and analyze data from graduating student exit interviews and alumni surveys

Faculty Evaluations

Faculty evaluations are conducted with an initial meeting at the start of each academic year, a mid-year meeting typically in January, and a final evaluation meeting in April of each academic year. The faculty evaluation process at UMES is as follows:

At the beginning of the academic year, the faculty must meet with the department chair to discuss goals and objectives for the academic year. The individual faculty objectives must reflect the following:

- Departmental, school, and university goals.
- Faculty assignment (defined as % time allocated for each category based on appointment and release time awarded for that year).
  - Note: Faculty who are on 100% teaching lines with no approved release time are expected to have the following % breakdown: 50% teaching, 35 % scholarship, and 15% service; and
- Faculty members' professional development.

During the academic year, the department chair is informed of any major changes made to the objectives. If necessary, the department chair shares information with the faculty members regarding the areas of concern. In January, the faculty will meet with the chair to review progress toward the objectives.

Each faculty member will submit the evaluation document to the department chair in April. The Department Chair will review the information and discuss his/her evaluation with the faculty member. Students' evaluations of instruction will be utilized in this discussion between the Chair and faculty members. Copies of the summary evaluations should be attached as they become available. Note: Peer review of teaching will be included if done.

Student Learning Outcome Evaluation

Based on established school standards, we will establish an ongoing program evaluation where we,

- Assess samples of student performance on computer-based problems and projects.
- Assess samples of the use of technology in student presentations.
- Assess samples of the group and individual case studies.
- Assess written and oral student presentations, written assignments, and research projects.
- Track analytical performance in courses.

- Evaluate student performance in exams, quizzes, and assignments in elective courses.
- Assess comprehensive final exams in core courses.

Assessment instruments include graded student work, the evaluation of written project papers, and presentations. The achievement levels are determined using the rubrics developed separately for each outcome.

2) ***Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.***

Assessment of Student Learning Outcomes:

The Student Learning Outcomes Assessment Process (SLOAP) is the degree program's procedure for determining whether the program's mission, objectives, and learning outcomes are being met. It explains the required assessment data to be collected, the frequency of collection, and the evaluation methods to be used to examine whether the performance criteria, which have been discussed previously and below, are being met. Due to this, academic programs that have program-level accreditation have undergone rigorous reviews of their processes of assessing student learning outcomes. These processes and standards will be extended to the proposed educational program. The school departments conduct an annual assessment of student learning outcomes and faculty evaluations. The departments have developed and implemented a comprehensive assessment plan that contains all the components required for this intent. All faculty members in the school's departments participate in the student learning outcomes assessment process and the faculty evaluation process.

In addition to previously discussed learning outcomes, the proposed program will have three (3) additional Program-level Learning Outcomes. All Faculty reviewed and agreed upon the outcomes. The Program Learning Outcomes are:

1. Students will demonstrate foundation knowledge and skills in their program areas (concentrations).

2. Students will demonstrate problem-solving, critical thinking, oral and written communication, and leadership skills.

3. Students will integrate theory, discovery, and technology into practice.

The School of Business and Technology departments use assessment data to make informed curriculum decisions regarding improving teaching and learning processes. The school departments are intensely engaged in the assessment of student learning outcomes. The school faculty has a well-developed assessment plan to ensure that we use the data to improve student learning. In addition, academic program assessment takes place on a six-year cycle. Data regarding program enrollment, retention, and graduation rates are collected by the Office of Decision Sciences and Visualization in conjunction with the program faculty. The data are analyzed against program outcomes, and results are used to improve the program.

Student Retention:

The University of Maryland Eastern Shore is committed to student retention. The Center for Access and Academic Success (CAAS) provides dedicated advisors for first-year students and works with academic programs to ensure adequate academic advising. CAAS also provides support to students at all levels of enrollment. The educational programs in the school have well-established advising processes and have developed a handbook for faculty advisors. Another important aspect of student retention is ensuring the high quality of the program. Excellent programs will be attained through hiring highly qualified and experienced faculty members. The curriculum will be regularly updated to ensure relevance to current and future trends. The learning environment will be positive and supportive of students. The academic programs will ensure that all the resources needed are provided promptly. Student engagement activities will be conducted to increase cohesion and pride in belonging to the degree program.

Student and Faculty Satisfaction:

Student satisfaction will be measured using course evaluation and exit interview surveys. Faculty satisfaction will be measured through the annual evaluation process, including a planning and goal-setting session in the fall, a mid-year review in February, and a final evaluation session at the end of the spring semester. An academic climate survey will also assist in assessing faculty satisfaction. Additionally, informal feedback from faculty will be used to determine faculty and student satisfaction, and adjustments will be made accordingly.

Cost-Effectiveness:

The proposed academic program will build upon existing undergraduate and graduate programs offered by the School of Business and Technology. The foundational resources, faculty, and facilities needed to start the program are already in place. The new program's visibility will attract more students and ensure sustainability and cost-effectiveness. Based on projected program enrollment, the new degree will produce enough revenue to be self-sustaining.

Faculty Evaluation:

In addition, every faculty member is evaluated each year. The evaluation process includes an assessment of faculty teaching, faculty research record and productivity, and school-wide and department service. To receive a high evaluation, a faculty member must demonstrate effective teaching, active scholarly activities, publications, etc. There is also a provision for the administration to set out an improvement plan for faculty members who have not done well in teaching. Tenured faculty will undergo a five-year post-tenure review.

Program assessment takes place in a six-year cycle. The Office of Decision Sciences and Visualization collects data regarding program enrollment, retention, and graduation rates in conjunction with the program coordinator. The data are analyzed against program outcomes, which are used to improve the program.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05).

1) ***Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.***

The University of Maryland's Eastern Shore mission is compatible with the State of Maryland's minority achievement goals. The University of Maryland Eastern Shore is an 1890 land grant HBCU. Our programs attract diverse students, with most of the student population being African American, multiethnic, and multicultural. The University actively recruits a minority population for all undergraduate and graduate-level degrees. Special attention is also provided to recruit diverse groups into the STEM and multidisciplinary programs at all degree levels, including undergraduate, master's, and doctoral. The same attention will be given to the proposed program.

As part of UMES Strategic Plan Subgoal 4.1: Improve structure for attracting, developing, and retaining high-quality and diverse students, UMES takes pride in the diversity of its faculty, staff, and students with representation from 37 states and 47 countries. UMES values people of different ethnicities, orientations, cultures, and perspectives. The University of Maryland Eastern Shore has one of the most racially and ethnically diverse student populations in the University System of Maryland. Based on fall 2017 data, UMES faculty were 56% African American, 27% White, 5% Asian, 1% American Indian, and 5% international. Student race and ethnicity statistics from fall 2017 reflect a student population of 69.7% African American, 12.3% White, 8.8% two or more races, 3.6% Hispanic, 1.2% Asian, and 3.8% international.

UMES offers the most competitive tuition rates in Maryland compared to other institutions, which improves minority student access. Our program appeals to minority students, as evidenced by the high proportion of minority student enrollment in UMES degree programs. We support educationally disadvantaged minority students by offering remediation and mentoring relationships.

O. Relationship to Low Productivity Programs Identified by the Commission:

1) ***If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.***

The proposed Bachelor of Science is unrelated to a low-productivity program identified at UMES.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1) ***Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.***

At UMES, we are committed to continually improving our online courses and distance education programs. UMES participates in the State Authorization Reciprocity Agreement. Some benefits for students of our institutional participation in SARA include greater access to online programs, improved quality of distance education, and reduced institutional costs (which keep everyone's costs lower). Currently, 47 states and the District of Columbia participate in SARA. "The State

Authorization Reciprocity Agreement is voluntary among its member states and U.S. territories. It establishes comparable national standards for interstate offering postsecondary distance-education courses and programs. It is intended to make it easier for students to take online courses offered by postsecondary institutions based in another state" (NC-SARA.org).

Any new instructors recruited to teach online must meet the same qualifications as the current faculty. All faculty teaching in the online version of the program will be required to complete UMES Online Learning Training, and the School of Business and Technology recommends Quality Matters training, Online Learning Consortium, or other comparable training for its instructors.

2) ***Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.***

UMES' commitment to online teaching is demonstrated by the resources of its Center for Instructional Technology and Online Learning (CITOL), founded in 2006, which provides a faculty computer lab, course development, and instructional and technical support to new and current faculty. The Center for Instructional Technology and Online Learning (CITOL) at UMES supports developing, designing, and delivering online and hybrid programs, classes, and workshops focusing on flexibility, resiliency, equity, accessibility, privacy, and safety (FREAPS). CITOL assists faculty, staff, and students in all digital teaching and learning aspects concerning pedagogy and technology. This includes using the Canvas Learning Management System, Starfish, Microsoft Office 365, Yuja, YuJa Engage, and YuJa Verity. C-RAC 2021 requires programs to provide details about practices to engage and assist distance education students. CITOL facilitates student-centered training and workshops, provides student mentoring and help desk support, and hosts a repository of student-centered LMS and online learning resources. The School of Business and Technology and the Center for Instructional Technology and Online Learning will ensure the degree program adheres to C-RAC Guidelines for Evaluating Distance Education.

For the club and resort management online components specifically, we will ensure:

- Regular and substantive interaction between instructors and students
- Technology support specific to specialized club management software
- Virtual networking opportunities with industry professionals
- Integration of industry case studies and simulations appropriate for online learning
- Training for faculty on creating engaging online content related to the club and resort management

Conclusion

The proposed Bachelor of Science in Private Club and Resort Management addresses a significant need in the hospitality industry and higher education landscape. By leveraging UMES's existing strengths in hospitality education and its status as an HBCU, this program will create new opportunities for students, particularly those from underrepresented backgrounds, to enter leadership positions in the growing club and resort management field.

The program is designed to be financially sustainable, aligned with industry needs, and consistent with UMES's mission and strategic goals. Through a combination of specialized curriculum, experiential learning opportunities, and industry partnerships, graduates will be well-prepared for successful careers in club and resort management, an industry with strong employment prospects and growth potential.

Market data indicates significant demand for specialized professionals in this field, with employers willing to pay a premium for candidates with dedicated club and resort management education. With private club membership growing by 18% since 2020 and management positions in the field increasing at 5.2% annually, graduates will enter a robust job market with opportunities for advancement.

The University of Maryland Eastern Shore respectfully requests approval of this Bachelor of Science in Private Club and Resort Management to enhance its academic offerings and continue fulfilling its mission of providing high-quality, accessible education that prepares graduates to address challenges in a global knowledge-based economy while meeting the workforce needs of the Eastern Shore, the state, the nation, and the world.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University of Maryland Global Campus proposal for a Master of Science in Applied Artificial Intelligence

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The Master of Science (M.S.) in Applied Artificial Intelligence is a 30-credit program that provides graduate learners with both the necessary technical foundation in AI and the opportunity to study the application of AI in a selected area of specialized interest. The 30-credit, ten-course M.S. program is structured as follows:

- AI Foundations (9 credits, 3 courses): These courses provide a broad-based technical introduction to AI, discuss ethical issues in the use of AI, and explore contemporary issues in AI. Learners who complete these 9 credits will earn a badge in AI Foundations.
- Learners will then choose one of two elective areas (18 credits, 6 courses):
    - Computer Vision and Natural Language Processing; OR
    - AI and Cybersecurity

  Some of these elective courses will be taken from well-established existing UMGC programs in adjacent areas (e.g., M.S. programs In Cyber Operations, Cloud Computing Systems, or Data Analytics) when they provide the necessary background in the selected domain, or when they already provide in-depth discussion in how AI is applied to achieve better outcomes. New courses for this program will be developed as needed.
- Learners will complete a capstone course (3 credits) in the selected elective area, demonstrating their proficiency in applying AI in the chosen domain.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the UMGC proposal to offer a Master of Science in Applied Artificial Intelligence.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

UNIVERSITY OF MARYLAND
GLOBAL CAMPUS
OFFICE OF THE CHIEF ACADEMIC OFFICER

May 1, 2025

Jay A. Perman, MD
Chancellor
University System of Maryland
3300 Metzerott Road
Adelphi, MD 20783

Dear Chancellor Perman:

On behalf of the University of Maryland Global Campus (UMGC), this letter serves as an official request for a new MS Applied Artificial Intelligence (HEGIS: 0701.XX; CIP: 11.0102). In accordance with COMAR 13B.02.03, the following proposal is submitted for your review.

We appreciate your review of this request and look forward to implementing this new program in Fall 2026. If you have any questions or require additional information about this proposal, please contact me at blakely.pomietto@umgc.edu.

Sincerely,

Blakely R. Pomietto, EdD
Senior Vice President and Chief Academic Officer

CC: Candace Caraco, PhD, Associate Vice Chancellor for Academic Affairs, University System of Maryland

UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

X	New Instructional Program
	Substantial Expansion/Major Modification
	Cooperative Degree Program
	Within Existing Resources, or
	Requiring New Resources

University of Maryland Global Campus

Institution Submitting Proposal

Applied Artificial Intelligence

Title of Proposed Program

Master of Science	**Fall 2026**
Award to be Offered	Projected Implementation Date
0701.XX	**11.0102**
Proposed HEGIS Code	Proposed CIP Code
School of Cybersecurity and Information Technology	**Dr. S. Bhaskar**
Department in which program will be located	Department Contact
+1 240 6842840	**s.bhaskar@umgc.edu**
Contact Phone Number	Contact E-Mail Address
	**5/1/25**

Academic Program Proposal
University of Maryland Global Campus

Request for a New Master of Science in Applied Artificial Intelligence

The University of Maryland Global Campus (UMGC) is proposing an MS in Applied Artificial Intelligence (AI) as a 30-credit program which is designed to equip graduate learners with both essential technical AI foundations and specialized application skills in either Computer Vision/Natural Language Processing (CV/NLP) or AI and Cybersecurity. The program's stackable credential structure allows students to earn a badge while progressing toward their full degree, culminating in a capstone project that demonstrates their ability to apply AI solutions to real-world problems.

A. Centrality to Institutional Mission and Planning Priorities

1. Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.

Consistent with the institutional purpose as stipulated by State statute (Md. Education Code Ann.§ 13-101(2013)1), the mission of UMGC is improving the lives of adult learners. UMGC will accomplish this by:

(1) Operating as Maryland's open university, serving working adults, military servicemen and servicewomen and their families, and veterans who reside in Maryland, across the United States, and around the world;
(2) Providing our students with affordable, open access to valued, quality higher education; and
(3) Serving as a recognized leader in career-relevant education, embracing innovation and change aligned with our purpose and sharing our perspectives and expertise.

Each facet of UMGC's mission has direct bearing on the academic programs the university offers and how those programs are designed and delivered. By mission and state mandate, every aspect of the UMGC learner experience is designed from its origins for working-adult and military-affiliated students, providing a learning ecosystem that can be seamlessly accessed from anywhere in the world. The selection, training, and evaluation of faculty; success coach advising model; virtual classroom; academic resources; student support services; and the term and session structure are all deliberately derived from adult-learning science in distance and distributed modalities.

In particular, the demographic profile of UMGC's students drives the design and delivery of our learning model. The average age of UMGC's undergraduate students is 31 years old, and 79% of these students work full-time. The average age of UMGC's graduate students is 37 years old, and 80% of these students work full-time. Further, 44% of all current UMGC students report having dependent children. For these students, their often-complicated life circumstances while pursuing higher education means they need and benefit most from the authentic online education that UMGC has delivered for more than two decades.

Authentic online education is fundamentally different from courses and programs originating at traditional institutions and taught remotely in the same way as face-to-face classes. Instead, authentic online education is a distinctive educational architecture intentionally designed for virtual teaching, learning, and assessment, with technology tools strategically deployed for engagement and outcomes,

as well as wraparound services that provide support throughout the online student life cycle. These features set UMGC apart in the higher education landscape.

UMGC's strong relationship with the military community is part of our institutional history and identity. Currently, approximately two-thirds of our undergraduate students and one-third of our graduate students are military affiliated, including active duty servicemembers, their families, and veterans. This dimension of UMGC's identity is a particular point of pride, beginning with the university first sending faculty overseas in 1949 to teach American soldiers on military installations in Europe. The relationship between UMGC and the military has continued to expand over the ensuing decades due to our intentional program design and delivery model that meets adult learners where they are, whether through asynchronous online courses or through innovative hybrid course delivery modes on military bases in Germany, Italy, Japan, Korea, Guam, Colorado, Virginia, and other military locations across the nation and around the world.

Today, UMGC holds competitively awarded contracts from the U.S. Department of Defense (DOD), under which we serve military servicemembers in Europe, Asia, and the Middle East, delivering specifically solicited programs of study identified by the DOD as responsive to the training, education, and upskilling needs of the military. UMGC is consistently recognized as one of the top military- and veteran-friendly schools in the country, with an unmatched expertise and established reputation as a preeminent provider of quality, affordable, career-relevant postsecondary education.

The MS in Applied AI aligns with UMGC's mission to offer high quality, workplace-relevant academic programs that expand the range of credentials and career opportunities for working-adult and military-affiliated learners. The program provides a learner-focused experience based on leading-edge adult learning theory and curriculum design. This fully online, asynchronous program model offers flexibility for students who are seeking to refresh and reshape their career opportunities. Students have the opportunity to gain new knowledge and learn and practice new skills as they progress through formative instruction. A detailed description of the proposed program requirements, curriculum, and coursework is included in Section G of this proposal.

2. Explain how the proposed program supports the institution's strategic goals and provide evidence that affirms it is an institutional priority.

As the public state and national leader in distance education, UMGC awards associate's, bachelor's, master's, and doctoral degrees, as well as undergraduate and graduate certificates. The university's academic inventory includes programs that are core to any public university, while UMGC's mission to serve adult students also results in a sustained academic emphasis on career-relevant and workforce-aligned programs.

UMGC's new *2024-2030 Strategic Plan* establishes priorities and strategies guiding the university to achieve its vision of becoming the learner-centric, data-driven, and skills-based school of choice for adults and businesses. This plan is rooted in foundational commitments reflecting UMGC's history and mission and establishes a series of strategic priorities that advance the university's vision and position us for the future. The five key priorities established in this plan are:

1) Market-responsive portfolio management that continuously adapts to learner and employer needs
2) A skills architecture that can be translated between educational and work experiences
3) Targeted expansion that strengthens and diversifies our learner population
4) A responsive, tailored, and seamless experience to maximize the success of our diverse

learners
5) Intentional study of and investment in our people's needs

This proposal contributes directly to two of the five strategic priorities in UMGC's new strategic plan, utilizing "market-responsive portfolio management that continuously adapts to learner and employer needs" and employing "a skills architecture that can be translated between educational and work experiences." Successful portfolio management requires a focus on university-wide agility, effective resource utilization, and market-responsiveness, all of which were key considerations driving UMGC's decision to develop this program.

Further, the innovative curriculum in this program will provide opportunities for learners to develop core skills in artificial intelligence, machine learning, deep learning, data engineering, computer vision, natural language processing, AI ethics, and specialized applications such as cybersecurity and software engineering that are explicitly aligned with their current needs and interests, while also transferable to a broad range of careers and professional experiences.

3. Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.)

Course development for the new program will be funded through a departmental budget allocation as part of the 2025 - 2026 budget process. The existing base of FTE faculty (full-time and adjunct), administrative staff, and support staff will support the program's initial launch. Tables 11 and 12 in Section L provide additional details and narrative explanations for anticipated resources/revenues and expenditures during the first five years of the program.

4. Provide a description of the institution's commitment to:

a) ongoing administrative, financial, and technical support of the proposed program

UMGC's support services are designed to accommodate students' access through entirely online and remote delivery. These services are, therefore, intentionally and thoughtfully built for complete online delivery rather than in the primarily face-to-face format that exists on traditional campuses. Support services include the following:

- Help@UMGC provides support services for the learning management system (online learning platform). UMGC's learning management system is Desire2Learn (D2L); its internal adaptation is called LEO. A specialized technical support team for LEO questions and problems is available 24 hours a day, 7 days a week, 365 days a year. In addition, UMGC trains faculty to handle some LEO troubleshooting; publishes LEO FAQs; and provides chat, phone, and e-mail access to a Help Center.
- MyUMGC is a self-service portal that provides access to UMGC administrative functions and student records. UMGC has designed this portal to ensure that students around the world can complete administrative tasks and view their academic records at their convenience.
- The Integrative Learning Design unit within Academic Affairs provides instructional-design support and consultation to Help Desk staff and program leadership to optimize the learning environment across delivery modes and resolve challenges or obstacles students and faculty may encounter in online classrooms.
- Success Coaches and Military Education Coordinators are committed to partnering with

students as they navigate their UMGC journey through thought provoking and supportive conversations, empowering students to make informed degree planned decisions, connecting them with the right resources at the right time, and celebrating the student's successful milestones and educational goals.

- Students receive support in educational technology from UMGC's Virtual Lab Assistants team. Team members are well-versed in the content of the courses they support and can quickly help a struggling student.
- The Effective Writing Center (EWC) offers many writing-related services to students, including resources for improving writing skills, citing and referencing resources, and supporting research activities. The EWC is directly accessible through a link within each online classroom.
- Turnitin has been integrated directly into all online courses as a developmental tool for students to assist with achieving authenticity in their writing. TII's Draft Coach is another tool available to students to help with writing and citing skills.
- UMGC's Library is directly accessible through a link within each online classroom. UMGC's librarians help educate students in the use of library and information resources and services and develop and manage UMGC's extensive online library collection.
- First Term Experience provides high engagement, mentorship, and relevant content in first-term courses, including PACE (Program and Career Exploration), to propel students into their chosen academic programs.
- Free subject matter tutoring is available in select courses. Subject matter tutors can help define and explain concepts, clarify examples from course content, and guide students toward understanding a particular topic. Students can connect with a subject matter tutor by accessing a link in their online classroom. Students can choose to connect at once or schedule a meeting with a tutor at another time. Group sessions are scheduled for certain subject areas, and every student has access to tutoring for Reading Comprehension and Technology skills.
- The Office of Accessibility Services arranges accommodations for students with medical conditions protected under the Americans with Disabilities Act. Students can register with this office via an online form and work with staff to receive appropriate accommodation for their courses.
- Free, anonymous mental health support is offered to students via an online peer-to-peer support service, a 24/7 wellness line supported by licensed clinicians, and a self-service online provider directory.
- Student Engagement and Programming offers students a chance to connect virtually via UMGC's various **clubs and organizations** (co-curricular clubs, honor societies, and affinity groups). All official student clubs have a faculty advisor to support student leaders. These groups provide professional growth opportunities, leadership development, and academic recognition. Additionally, students have the opportunity to connect with global peers with a newly acquired online social platform called InScribe.
- UMGC is invested in helping students who are facing other challenges in life that impact finances and basic needs. For example, the **SAFER Program** offers emergency funding to students demonstrating distress. We are continuously looking for ways to better serve our students and to connect them to resources that support equitable access.
- The Office of Career Services and its CareerQuest portal provide quality resources and services to assist students and alumni with their career planning and job search needs, including the Community Connect mentorship and InternPLUS programs. Career Services supports students transitioning from one career field to another or looking to advance in their current career, in addition to those entering the workforce for the first time.
- The Tuition Planning team provides students with all-inclusive consultative financial support for all UMGC payment methods, with a focus on comprehensive funding and tuition planning to

help guide students from their first class to graduation.
- The Financial Aid Office helps students understand and navigate the process of applying for financial aid. Staff members have expertise with a variety of financial aid options, as UMGC students may be using employer assistance, military or veterans' benefits, or other aid that is more common among adult student populations.

b) Continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

Not applicable as this program is new.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following:

a) The need for the advancement and evolution of knowledge
b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education
c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs

As an open-access institution, UMGC plays a pivotal role in meeting societal needs through making educational opportunities and choices available for all students within the State of Maryland, including minority students, first generation students, and military-affiliated and working-adult students. In February 2023, UMGC was designated as a Minority Serving Institution by the U.S. Department of Education Office of Postsecondary Education.

The university currently enrolls some 24,000 African American undergraduate and graduate students, 13,000 Hispanic/Latino students, 5,000 Asian students, and 15,000 students who self-identify as Native American, Hawaiian or Pacific Islander, Multiracial, or Other. Currently, more than 50% of all UMGC degrees and certificates are granted to minority students.

In the School of Cybersecurity and Information Technology, where the MS in Applied AI will be housed, the average age of all graduate students is 34. A majority of these students (54%) are enrolled at UMGC on a part-time basis. In AY 2024-2025, 21% of these students were military-affiliated, and 16% of these military-affiliated students were on active duty. Graduate students in the School of Cybersecurity and Information Technology are also geographically dispersed, with only 38% residing in Maryland. African American students constitute 38% of all current graduate students in the School of Cybersecurity and Information Technology, and 11% identify as Hispanic/Latino, 7% as Asian, and .7% as Native American, Hawaiian or Pacific Islander, Multiracial, or Other.

UMGC remains committed to serving all students who have been previously underserved in higher education. The statistics above indicate that UMGC is successfully reaching and serving these student populations.

2. Provide evidence that the perceived need is consistent with the 2022 Maryland State Plan for Higher Education.

The MS in Applied AI is designed to meet the needs of our students, the demands of employers, and to support present and future postsecondary priorities of the State, as identified in the *2022 Maryland State Plan for Higher Education*. This program supports the goals and priorities in the State Plan in the following ways:

The program will support Goal 1 (Access) – specifically Priority 4 (systems for specific student populations to access affordable and quality postsecondary education) – in the State Plan in that it is designed to support UMGC's overall mission to set a global standard for excellence and to be respected as a leader in affordable and accessible adult education programs. UMGC administers its programs to meet the University System of Maryland's goals of effectiveness and efficiency by employing data-driven decision-making that ensures that academic programs are broadly accessible and offer high quality education at an affordable cost.

UMGC's commitment to access and affordability is synonymous with our commitment to diversity and inclusion. The university's open admission approach at both the undergraduate and graduate levels is central to these commitments. The process to apply for admission is streamlined and does not require the submission of standardized test scores. Admission requirements for this new program will be aligned with this mission. UMGC remains committed to maintaining its position in serving the educational needs of historically underserved students.

Further, the program will support Goal 2 (Success) – specifically Priority 5 (commitment to high-quality postsecondary education in Maryland) and Priority 7 (postsecondary education as a platform for ongoing lifelong learning) – in the State Plan, as it is based on the principles of skills- and performance-based learning that are at the forefront of developments in adult learning in higher education. Skills-aligned learning is an outcomes-based approach to education that emphasizes what students should know and be able to do to be successful in their chosen disciplines, fields, and careers. The approach is learner-focused, and authentic assessment (the measurement of what students have learned and the competencies students master) is embedded in every step of the learning process to assist students in building real-world, job-relevant skills in real time.

Like other UMGC programs, this new program will employ authentic, project-based assessments relevant to tasks graduates will perform on the job; such projects serve as the means of instruction and assessment of learning in the program. The curriculum and content will focus on skills-aligned learning directed toward problems and issues facing practicing professionals. Retention and success focus on students' learning experiences and are improved through enhanced learning resources provided online within the learning management system. The methodology and on-demand nature of this type of student support is reflective of best practices in online learning.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State

1. Describe potential industry or industries, employment opportunities, and expected level of entry (*ex: mid-level management*) for graduates of the proposed program.

UMGC students are employed in a variety of industries such as healthcare, human resources, social services, finance, manufacturing, government, IT, cybersecurity, consulting, education, defense industries, and the military. The typical student at UMGC is a working adult with 10+ years of work experience. Almost two-thirds of undergraduate students and one-third of graduate students are in the military or are transitioning from the military to a civilian career.

The MS in Applied AI is expected to prepare graduates for growing market demand across multiple industries including cybersecurity and software engineering, with industry trends showing 34% growth in AI job postings and median salaries of $133,000, preparing graduates for mid-to-senior level roles such as AI Engineer, Machine Learning Engineer, Data Scientist, and AI Solutions Architect.

Table 1 below presents the Standard Occupational Classification (SOC) Codes that UMGC has identified, based upon the CIP-SOC crosswalk developed by Lightcast, as most closely aligned to the CIP code for UMGC's proposed program.

Table 1: Aligned Occupations for Graduates of UMGC's Proposed MS in Applied AI

SOC Code	Occupational Title
15-1299	Computer Occupations, All other
15-1252	Software Developers
15-2051	Data Scientists
15-1243	Database Architects
15-1242	Database Administrators

Using the SOC codes identified in Table 1, Table 2 below presents 2022-2032 employment projections for these target occupations from the Maryland Department of Labor.

Table 2: Maryland Occupational Projections 2022-2032

		Employment			
SOC Code	**Occupational Title**	**2022**	**2032**	**# Change**	**% Change**
15-1299	Computer Occupations, All other	22,759	26,979	4,220	18.54%
15-1252	Software Developers	34,970	45,887	10,917	31.22%
15-2051	Data Scientists	2,396	3,338	942	39.32%
15-1243	Database Architects	777	876	99	12.74%
15-1242	Database Administrators	2,119	2,373	254	11.99%
Total		63,021	79,453	16,432	26.07%

Data Source: Maryland Department of Labor Long Term Occupational Projections
https://www.dllr.state.md.us/lmi/iandoproj/

As evident from the data presented in Table 2, occupations that are at the core of the proposed program are in strong demand and are projected to grow over the next decade. An additional 16,432 employment opportunities will be created within these core occupational categories in Maryland between 2022 and 2032, a 26% increase in newly created positions. This growth outlook is also apparent in the national demand landscape for specialists within these occupations. Table 3 below presents the 2022-2032 national occupational projections for these same SOC codes from the U.S. Bureau of Labor Statistics.

Table 3: National Occupational Projections 2022-2032

SOC Code	Occupational Title	Employment 2022	Employment 2032	Employment # Change 2022-2032	Employment % Change 2022-2032	Occupational Openings 2022-2032 Annual Average
15-1221	Computer and Information Research Scientists	36.6	46	9.4	25.6%	3.4
15-1252	Software Developers	1,692.1	1,995.7	303.7	17.9%	125.1
15-2051	Data Scientists	202.9	276	73.1	36%	20.8
15-1243	Database Architects	61.4	68.0	6.6	10.8%	4.2
15-1242	Database Administrators	80.5	87.1	6.6	8.2%	5.3
Total		**2073.5**	**2472.8**	**399.4**	**19.3%**	**158.8**

Data Source: U.S. Bureau of Labor Statistics Employment Projections
https://data.bls.gov/projections/occupationProj

Table 3 illustrates strong demand nationally for occupations that match the skillset for MS in Applied AI graduates, with expected aggregate growth across these occupations of more than 19%, corresponding to over 399,400 newly created employment opportunities between 2022 and 2032.

The next section provides additional data on market demand and employment opportunities in the State of Maryland.

2. **Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.**

The labor market analysis presented in Table 4 below represents the number of job openings in Maryland and nationwide from March 2023 to March 2025, using Lightcast data for the top five program-aligned job categories. Table 5 presents an analysis from a skills perspective, rather than a job title perspective. It is evident from this analysis that the program-aligned skills desired by Maryland employers mirror the skills sought nationwide.

Further analysis of the data reveals several notable patterns. Maryland shows a significantly higher demand for Systems Engineering skills (26%) compared to the national average (11%), likely reflecting the state's concentration of defense, aerospace, and government contractors. This presents a distinctive opportunity for UMGC's Applied AI program to specifically address this regional skills gap. Additionally, while job titles show similar patterns between Maryland and national markets, Systems Engineer positions are proportionally more prevalent in Maryland, again highlighting the state's unique industry composition.

The data also demonstrates a consistent demand for core technical skills like Python programming and Computer Science fundamentals across both markets, validating UMGC's curriculum design with its strong technical foundation. The comparable percentages for Agile Methodology skills (27% MD vs. 24% nationwide) indicate employers' emphasis on practical implementation methodologies, which aligns with UMGC's focus on applied learning and real-world projects. Finally, when examining trends over the two-year period (March 2023 - March 2025), the data suggests sustained or growing demand

in all key categories, supporting the long-term viability of the proposed program.

Table 4: Top 5 Program-Aligned Job Titles in Maryland and Nationwide

Job Title	Maryland Unique Postings Mar 2023 – Mar 2025	% of Postings	Nationwide Unique Postings Mar 2023 – Mar 2025	% of Postings
Software Engineer	601	37%	23,664	36%
Data Scientist	502	55%	23,137	44%
Systems Engineer	763	36%	10,651	40%
Data Engineer	117	56%	8,554	45%
Data Analyst	125	48%	7,685	45%

Data Source: Lightcast https://lightcast.io/

Table 5: Top 5 Program-Aligned Specialized Skills in Maryland and Nationwide

Skills	Maryland Unique Postings 2022 - 2032	% of Postings	Nationwide Unique Postings 2022 - 2032	% of Postings
Computer Science	8,306	55%	345,002	54%
Python	5,332	35%	216,009	34%
Agile Methodology	4,102	27%	157,422	24%
Systems Engineering	3,914	26%	67,778	11%
Software Engineering	3,829	25%	143,326	22%
Java	3,227	21%	104,567	16%

Data Source: Lightcast https://lightcast.io/

Further market analysis of emerging AI-specific skills reveals substantial projected growth over the next five years, reinforcing the timeliness and value of the proposed MS Applied AI. Machine Learning is projected to increase by 34.7% over the next five years, supported by an overall market CAGR of 34.8% that will reach $503.40 billion by 2030 (Statista, 2025). Most notably, Deep Learning shows dramatic growth projections at 84%, while Python (21.6%), Tableau (28.2%), Artificial Intelligence (24.8%), and Natural Language Processing (22.8%) all demonstrate strong projected demand increases (Itransition, 2025). This growth is being driven by widespread AI adoption across multiple sectors, with the global AI market expected to reach $826.70 billion by 2030 (Statista, 2025).

These projections align with and extend the Lightcast data presented in Tables 4 and 5, particularly regarding the high demand for Python skills. Organizations are increasingly prioritizing AI training and upskilling initiatives, with 42% of employers planning to focus on AI training by 2027 and 36% expecting to upskill existing employees for AI adaptation (Analytics Vidhya, 2025 Dice, 2025). The percentage of job postings requiring AI skills rose to 1.8% in the United States in 2024, up from 1.4% in 2023, with Machine Learning Engineers, Data Scientists, AI Researchers, and AI Product Managers being the most sought-after roles (IEEE Spectrum, 2025; CEPR, 2024). Although Python remains the dominant programming language in this field, appearing in 78% of data scientist job postings, demand for specialized AI skills like Natural Language Processing has surged from 5% in 2023 to 19% in 2024 (365 Data Science, 2024). These trends strongly support the strategic emphasis on applied AI within the proposed program curriculum and its alignment with both current and projected labor market needs.

Table 6: Projected 5-Year Growth Rate of Key AI Skills

Skill	Projected Growth Rate
Deep Learning	84.0%
Machine Learning	34.7%
Tableau	28.2%
Artificial Intelligence	24.8%
Natural Language Processing	22.8%
Python	21.6%

Data Sources: Statista (2025), Itransition (2025), IEEE Spectrum (2025), CEPR (2024), and 365 Data Science (2024)

In Appendix A of Maryland's Workforce Needs Analysis, the closely related area of Data Science is identified as an in-demand occupation with an estimated 2,636 job openings during the period 2022 through 2032, and as an area of emerging workforce need, with 39% growth during the same period (Appendix C). Appendix B of the same report identifies AI and Data Science as academic programs which address existing high-demand job needs. Additionally, AI has the potential to enhance and affect a very large number of the current in-demand and emerging job needs, even if these jobs do not use AI at the present time.

3. **Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.**

Using projections from the Maryland Department of Labor, Table 6 factors both growth in the number of positions expected to be newly created in each program-aligned SOC category in Maryland and the number of job exits (e.g., retirement, leaving workforce) and transfers (e.g., job changes, turnover) within these SOC categories over the same period (2022-2032).

Table 7: Maryland Occupational Projections Total Openings 2022-2032, Including New Positions, Exits, and Transfers

SOC Code	Occupational Title	Position Changes	Position Exits	Position Transfers	Total Projected Openings
15-1221	Computer and Information Research Scientists	502	638	971	2,111
15-1252	Software Developers	10,917	6,938	14,461	32,316
15-2051	Data Scientists	942	651	1,043	2,636
15-1243	Database Architects	99	209	265	573
15-1242	Database Administrators	254	568	721	1,543
Total		**12,714**	**9,004**	**17,461**	**39,179**

Data Source: Maryland Department of Labor Long Term Occupational Projections
https://www.dllr.state.md.us/lmi/iandoproj/

The projections in Table 6 show that the total number of openings across all program-aligned job

categories will yield approximately 39,000 employment opportunities in Maryland alone over the next 10 years (when factoring in job growth, exits, and transfers), or an estimated 3,900 positions annually. When considering the current and projected graduate supply in these fields as presented in the next section, job demand in these occupations far exceeds Maryland's current pipeline of graduates.

4. Provide data showing the current and projected supply of prospective graduates.

Table 7 presents completion data from all MS in AI programs across all colleges and universities in the State of Maryland over the most recent four years (2020-2023) for which data are available. Given the market need described in the sections above, even if all graduates from these programs chose to work in Maryland (an improbable scenario), the existing statewide supply of graduates in this field would still be wholly insufficient to satisfy annual market demand. Through this proposed program, UMGC is well-positioned to help fill these gaps and to expand opportunities for returning adult and working students, military-affiliated and veteran students, and career changers to further expand the workforce pipeline and diversify the profession.

Table 8: MS in AI Completions at Maryland Colleges and Universities, In Rank Order of 2023 Degrees Granted

Maryland Institution	2020 Program Completions	2021 Program Completions	2022 Program Completions	2023 Program Completions
Johns Hopkins University	0	0	4	19
Capitol Technical University	0	0	0	0
Total	**0**	**0**	**4**	**19**

Data Source: TRENDS IN DEGREES AND AWARDS BY PROGRAM 2023.pdf (maryland.gov)

D. Reasonableness of Program Duplication

1. Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.

A program title and CIP search performed on April 11, 2025, of MHEC's online Academic Program Inventory found three active programs in Maryland with potential similarities to UMGC's proposed program and three proposed programs. Six of these programs are offered by Maryland public four-year institutions. Table 8 below provides a comparative summary of major program features. Unlike other programs currently offered in Maryland, UMGC's proposed MS in Applied AI is fundamentally distinctive in the following ways:

- Stackable credential structure allowing students to earn an AI Badge (9 credits), and full MS degree (30 credits) with clear entry and exit points
- Fully online asynchronous delivery format designed specifically for working professionals with no on-campus requirements
- Affordable tuition structure at $544 per credit hour, significantly lower than competitors ($630-$1,757 per credit)
- Open enrollment approach without strict prerequisites or specific undergraduate degree requirements
- Balanced curriculum combining technical AI foundations with practical and specific applications

- Cross-disciplinary elective options in high-demand areas (Cybersecurity, Computer Vision/NLP) rather than purely technical focus
- Integration with existing UMGC programs allowing for unique industry-aligned specialization pathways
- Program design specifically targeting working adults seeking to apply AI in their existing career

Table 9: Comparison of MS in AI Programs at Maryland Colleges and Universities

Maryland Colleges and Universities	Program Attributes	Differentiation from UMGC's Proposed Program
Capitol Technical University	**Program Title**: Master of Research (MRes) in Artificial Intelligence **CIP**: 11.0102 **Total Credits**: 30 **Modality**: Online **Professional Focus/Distinctive Features**: • Research-intensive degree program • 5 core courses (6 credits each) • Culminates in a master's dissertation • Opportunity to publish original research • Dedicated thesis chair guidance • Industry-expert faculty • Preparation for both industry roles and PhD programs	• Research-oriented focus vs. UMGC's application-oriented approach • 6 credit course structure vs. UMGC's 3 credit structure • Includes dissertation component while UMGC offers project-based learning • Sequential course structure with 2 courses per semester maximum • Fixed curriculum pathway vs. UMGC's flexible options • Different tuition structure at $630 per credit hour (standard rate)
Capitol Technical University	**Program Title**: Master of Philosophy (MPhil) in Artificial Intelligence **CIP**: 11.0102 **Total Credits**: 30 **Modality**: Online **Professional Focus/Distinctive Features**: • Combines theoretical AI knowledge with hands-on implementation skills to solve real-world challenges • Emphasizes ethical considerations and societal impacts alongside technical expertise • Cultivates specialized domain knowledge while maintaining adaptability in a rapidly evolving field • Balances academic research experience with practical project management capabilities • Fosters original contributions to AI advancement through both published research and innovative	• Research-intensive, and theory-based program, vs. UMGC's focus on applications. • Program acts as a precursor to the doctoral program in AI (an AI Doctoral Defense is among the listed requirements for the MPhil program) • Mix of 3- and 6-credit classes, vs UMGC's 3-credit classes • Single-track program, vs. UMGC's flexible options • Different tuition structure at $630 per credit hour (standard rate)

Maryland Colleges and Universities	Program Attributes	Differentiation from UMGC's Proposed Program
	solutions	
Johns Hopkins University	**Program Title**: Master of Science in Artificial Intelligence **CIP**: 11.0102 **Total Credits**: 30 **Modality**: Fully online with some in-person options **Professional Focus/Distinctive Features**: • Developed with Johns Hopkins Applied Physics Lab • 4 required core courses and 6 electives • Multiple specialization options (ML, NLP, Robotics, Computer Vision, etc.) • Taught by active industry professionals and researchers • Proficiency exam options to opt-out of prerequisites • Independent study options	• Different tuition structure ($52,700 total program cost) • Focus on deep technical specialization in core AI disciplines • Emphasis on theoretical foundations and advanced research • Curriculum designed for technical depth in specialized AI fields • Includes prerequisite knowledge requirements with opt-out options • Structured for students with strong technical backgrounds
University of Baltimore	**Program Title**: Master of Science in Artificial Intelligence for Business **CIP**: 52.1399 **Total Credits**: 30 **Modality**: In-person **Professional Focus/Distinctive Features**: • Business-focused AI degree housed in School of Business • Focus on business ethics and regulatory perspectives • Emphasis on practical application across business functions • Elective options in entrepreneurship, finance, HR, marketing, operations	• Narrower focus specifically on business applications • Higher tuition at $875/credit (in-state), $1,209/credit (out-of-state) • Less technical depth in AI foundations • Limited technical specialization options • Less flexibility in curriculum choices • No stackable credential structure
Letters of Intent		
University of Maryland	**Program Title**: Master of Science in Artificial Intelligence for Drug Development	• Specialized focus on pharmaceutical industry

Maryland Colleges and Universities	Program Attributes	Differentiation from UMGC's Proposed Program
Baltimore	(LOI) **CIP**: 51.2006 **Total Credits**: 30 **Modality**: Asynchronous **Professional Focus/Distinctive Features**: • Highly specialized focus on pharmaceutical applications • 2-year program with 8 required courses • Interdisciplinary program combining AI with pharmaceutical sciences • Focus on AI-enabled Predictive Analytics for drug development • Designed for pharmaceutical industry professionals	applications • Fixed curriculum pathway with predetermined courses • Domain-specific concentration in drug development processes • Traditional degree structure without stackable options • Tailored for pharmaceutical industry workflows and methodologies • Designed specifically for professionals in pharmaceutical and regulatory sectors
University of Maryland College Park	**Program Title**: Master of Science in Artificial Intelligence **CIP**: not specified in LOI **Total Credits**: 30 **Modality**: Both in-person and online versions will be available **Professional Focus/Distinctive Features**: • Non-thesis interdisciplinary graduate program • 21 credits of required core courses and 9 elective credits • Core coursework includes probability and statistics, data science, machine learning, computing systems for AI, human-centered approaches, AI and society, and safe and trustworthy AI • Electives in specialized topics like natural language processing, robotics, AI for cybersecurity, AI for healthcare, generative AI, and AI policy • Connected to UMD's Artificial Intelligence Interdisciplinary Institute (AIM) • Focus on both technical training and understanding of societal context • Scheduled for proposal submission in Fall 2025	• Both in-person and online modality options vs. UMGC's fully online approach • Structured with 21 credits of required core courses and 9 elective credits • Connection to UMD's research institute (AIM) • UMD's program places much greater emphasis on the core (21 credits), with only 9 credits given to the electives. UMGC's program takes the reverse approach, starting with a small core (9 credits) which gives both electives the fundamental knowledge required by both, and gives a larger number of credits (21) towards developing depth within the elective area. • Different curriculum structure with specialized electives in areas like robotics, NLP, healthcare, and AI policy.
University of Maryland Baltimore County	**Program Title**: Master of Science in Artificial Intelligence **CIP**: not specified in LOI **Total Credits**: 30 (thesis option) or 33	• Exclusively in-person delivery vs. UMGC's fully online format • Different credit requirements (30-33) based on thesis/non-

Maryland Colleges and Universities	Program Attributes	Differentiation from UMGC's Proposed Program
	(non-thesis option) **Modality**: In-Person **Professional Focus/Distinctive Features**: • Housed in Computer Science and Electrical Engineering Department • Research-focused approach with thesis and non-thesis options • Core courses in AI principles and machine learning • AI-focused electives in NLP, neural networks, and robotics • Designed for students with CS, IS, or EE backgrounds • Targets future AI researchers, academics, and doctoral candidates • Anticipated submission in Fall 2025	thesis option • Stronger research orientation targeting future academics and researchers • More specific undergraduate background requirements • Different program structure with thesis option available • Focus on theoretical expertise rather than cross-domain applications • Located in Baltimore-Washington tech corridor

2. Provide justification for the proposed program.

The MS in Applied AI program addresses a critical and growing market demand, as evidenced by industry trends showing 34% growth in AI job postings and median salaries of $133,000. The program's unique stackable credential structure (9-credit AI Badge, 30-credit MS degree) provides flexible entry and exit points that specifically serve working professionals who need to upskill while maintaining employment. Unlike research-oriented programs at other institutions or those with narrower domain focus, UMGC's approach delivers a balanced combination of technical AI foundations and practical application skills, preparing graduates for mid-to-senior level roles across multiple industries.

UMGC is uniquely positioned to deliver this program through its established expertise in online education, affordable tuition structure ($544 per credit compared to competitors ranging from $630-$1,757), and flexible asynchronous format designed specifically for working adults. The program's options in areas like Cybersecurity and Computer Vision/NLP represent a significant departure from the Maryland market norm, where 83% of competitor programs focus primarily on technical specializations. While other institutions require rigid prerequisites or specific undergraduate backgrounds, UMGC's open enrollment approach expands access to AI education for professionals seeking to apply AI in their existing domains rather than only those pursuing purely technical roles.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBIs.

A program title and CIP search performed on April 11, 2025, of MHEC's online Academic Program Inventory found no MS in Applied AI programs currently offered at Historically Black Institutions in Maryland. This includes the three HBIs in the University System of Maryland (Bowie State University, Coppin State University, and University of Maryland Eastern Shore) and Morgan State University.

UMGC's proposed program will, therefore, have no impact on the implementation or maintenance of high-demand programs at Maryland's HBIs.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.

A program title and CIP search performed on April 11, 2025, of MHEC's online Academic Program Inventory found no MS in Applied AI programs currently offered at Historically Black Institutions in Maryland. This includes the three HBIs in the University System of Maryland (Bowie State University, Coppin State University, and University of Maryland Eastern Shore) and Morgan State University. UMGC's proposed program will, therefore, have no impact on the uniqueness and institutional identities and missions of Maryland's HBIs.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10)

1. Describe how the proposed program was established and also describe the faculty who will oversee the program.

The MS in Applied AI was developed in response to the growing market demand for AI professionals, with industry trends showing 34% growth in job postings and median salaries of $133,000. The program was established through a formal product management review process, beginning with a concept approval on December 4, 2024, and a recent approval from UMGC's Academic Affairs Curriculum Council. The program is scheduled for launch in Fall 2026.

The program provides comprehensive technical and strategic foundations in AI through core coursework in machine learning, deep learning, data engineering, and systems design, while emphasizing ethical AI development and practical applications. It features a stackable credential structure beginning with three foundational courses (9 credits open to any graduate learner) resulting in an AI Digital Credential ("AI Badge") and culminating in the full master's degree (30 credits, which includes the AI Badge).

The program is housed within the School of Cybersecurity & Information Technology (CIT) under the Information Technology department and will be overseen by Portfolio Director Elena Gortcheva. Faculty oversight will be provided by subject matter experts with both academic credentials and industry experience in artificial intelligence, machine learning, data engineering, and domain-specific applications. Initially, the program will require approximately 20 new faculty hires, with recruitment prioritizing professionals who can bridge theoretical foundations with practical applications across various industries.

The curriculum was developed in consultation with data science and AI industry advisors, other Schools in UMGC, and the CIT Advisory Board to ensure alignment with employer needs and industry standards. Program learning goals were developed with UMGC's Integrative Learning Design unit to ensure they meet UMGC's institutional learning goals and academic standards.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

The MS in Applied AI is designed to equip graduate learners with both essential technical AI foundations and specialized application skills. The program balances theoretical knowledge with practical implementation through its fully online asynchronous delivery modality, which is specifically designed to accommodate working professionals.

The program's objectives and learning outcomes reflect the interdisciplinary nature of AI applications across various sectors, with a particular focus on ethical considerations and practical implementation. The program has established the following learning goals:

1. Analyze the foundational concepts and principles of data-driven AI in the context of real-world applications and case studies.
2. Evaluate the potential applications and implications of AI in various industries, identifying strategic opportunities and risks.
3. Design and implement appropriate data, technology and AI-driven processes and techniques to extract insights from data, address business challenges and achieve desired outcomes.
4. Analyze the ethical, global and human-centered implications of AI technologies to promote responsible design, development and use.
5. Develop specialized knowledge, skills and capabilities regarding artificial intelligence in the chosen elective courses, with the ability to apply these AI techniques to real-world challenges.
6. Communicate clearly in various forms, meeting expectations for content, purpose, organization, audience, and format.

The curriculum is structured in two main components: a 9-credit AI foundational core (resulting in an AI Badge), and 21 credits of elective courses which address the application of AI in two proposed elective areas: Computer Vision / Natural Language Processing, and AI & Cybersecurity. The elective courses include (i) those which provide essential background knowledge of the proposed application areas, (ii) those which discuss how AI can be applied effectively in the two specialization areas, and (iii) a capstone course within each elective area, for students to demonstrate mastery in applying AI-based solutions to real-world problems.

3. **Explain how the institution will:**

    a) **provide for assessment of student achievement of learning outcomes in the program**
    b) **document student achievement of learning outcomes in the program**

UMGC approaches learning design from an “Understanding by Design” perspective, utilizing a backward design model. This approach begins with identifying the program learning goals that a student will achieve through the program of study. The program learning goals are mapped first to the Degree Qualification Program (DQP) to ensure that the goals are comprehensive and appropriate for the degree level. In addition, the program learning goals are mapped against UMGC institutional learning goals to validate that the program aligns with the university mission and institutional goals.

Once the program learning goals have been validated through mapping to the DQP and institutional learning goals, the program learning goals are mapped to the courses in the program. This step ensures that all program learning goals are addressed in the curriculum and provide guidance in the development of courses to ensure that each course contributes to the program learning goals without unnecessary duplication of outcomes across courses. Through these mappings, key assignments are

identified in courses for use in assessing student achievement of program learning goals. Periodically, a random sample of student artifacts for these identified key assignments are collected and reviewed by faculty to assess how effectively students are meeting the program learning goals.

Using student learning assessment results along with non-direct measures of student learning (including student retention and market and labor data), Portfolio Directors produce an annual review of program quality. For new programs, these annual reviews are integrated into an Academic Program Review including external review after five years. After this initial review, programs continue the annual review cycle every year with an Academic Program Review every seven years. Summaries and results from each five-year and seven-year program review are submitted to the University System of Maryland in accordance with their established review cycle.

In November 2020, UMGC licensed AEFIS as its assessment management system. AEFIS is the central repository for program learning goals, assessment maps, and student artifacts. AEFIS integrates with the LEO learning management system to allow student work to be duplicated from LEO into AEFIS for assessment purposes. This process ensures that assessment review is independent of grades and evaluation within individual courses and allows for independent review of student work apart from the classroom faculty. AEFIS also houses all annual program review reports.

4. **Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.**

1. **Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.**

The MS in Applied AI is a comprehensive 30-credit program structured as a stackable credential pathway. The program follows a carefully designed sequence that allows students to build expertise progressively while earning credentials at key milestones along their educational journey.

The curriculum begins with three foundational AI courses (9 credits), consisting of:

- Introduction to AI (ARIN 610)
- AI Ethics (ARIN 615)
- Contemporary Topics in AI (ARIN 620).

These foundational courses require no prerequisites and collectively result in an AI Badge credential, providing students with the essential knowledge needed to complete the specialization courses.

Learners will then select one of two 21-credit elective areas: Computer Vision & Natural Language Processing OR AI and Cybersecurity. Each elective area will include the following types of courses: those that provide the background needed in that area (Computer Vision & Natural Language Processing, OR Cybersecurity), those which discuss how AI can be effectively applied to that area, and a capstone course in which the student can demonstrate their mastery in the application of AI to each of the two elective areas.

The courses which comprise the elective areas are primarily existing courses, but a few courses will be newly developed for this program.

Elective Courses for Computer Vision & Natural Language Processing (21 Credits):

- DATA 605 Decision Analytics
- DATA 635 Data Management
- DATA 645 Machine Learning
- ARIN 655 Deep Learning & Neural Networks
- DATA 660 Advanced Machine Learning
- ARIN 665 Computer Vision & NLP
- ARIN 690A Natural Language Processing and Computer Vision Capstone

Elective Courses for AI & Cybersecurity (21 Credits):

- DATA 645 Machine Learning
- CYOP 605 Introduction to Cyber Operations
- CLCS 645 Cloud Infrastructure Planning and Design
- ARIN 655 Deep Learning & Neural Networks
- CYOP 655 AI-Enabled Cyber Operations
- CLCS 660 AI-Based Cloud Automation and Scripting
- ARIN 690B AI-Cyber Capstone

All courses are delivered in an 8-week, fully online asynchronous format designed to accommodate working professionals. The program can typically be completed in 10 sessions (approximately 5 semesters) if taking one course per session, with the option to accelerate completion by taking two courses simultaneously when feasible.

Table 10: Course Descriptions

ARIN 610 - Introduction to AI (3 credits)
A comprehensive introduction to the foundational principles, terminology, and concepts of artificial intelligence (AI). Designed for students from diverse backgrounds with emphasis on the knowledge and skills needed to understand, evaluate, and collaborate effectively on AI initiatives within an organization. Topics include machine learning, deep learning, foundation models, and generative AI as well as their applications in different domain areas.
ARIN 615 – AI Ethics (3 credits)
An overview of current ethical issues in artificial intelligence (AI) and data science arising throughout the analytics life cycle. The goal is to create ethically driven and responsible AI solutions that enhance human problem-solving and decision-making, identify the sources of bias and discrimination in machine learning, and build models that promote trust in data. Topics include established and emerging guiding principles for AI ethics, such as explainability, fairness, robustness, transparency, accountability, inclusiveness, and privacy.
ARIN 620 – Contemporary Topics in AI (3 credits)
A project-based study of cutting-edge concepts, tools, and techniques in the rapidly evolving field of artificial intelligence. Designed to keep pace with current developments, explores a curated set of contemporary topics that reflect the latest trends and innovations in AI. Emphasis is on hands-on projects for real-world applications, responsible development, and interdisciplinary use cases across industries. Topics include generative AI, foundation models, multimodal learning, AI ethics and governance, autonomous systems, edge AI, and advancements in natural language processing and computer vision.
ARIN 655 – Deep Learning & Neural Networks (3 credits)
Prerequisite: DATA 645. A practical exploration of the fundamental concepts, architectures, and applications of deep learning in the field of artificial intelligence. The goal is to develop deep learning

models and apply them to solve real-world problems in a wide range of domains, such as healthcare, finance, marketing, and cybersecurity. Topics include backpropagation, convolutional networks, recurrent networks, and generative adversarial networks, and their applications.
ARIN 665 Computer Vision & NLP (3 credits)
Prerequisite or corequisite: ARIN 655.A comprehensive overview of artificial intelligence with a specific focus on Natural Language Processing (NLP), Computer Vision, Recommender Systems, and Anomaly Detection. The aim is to develop AI applications relevant to real-world scenarios in multiple disciplines and domains. Topics include text and images classification, sentiment analysis, natural language and image generation, and content-based filtering. Discussions explore fraud detection, network intrusion detection, and system health monitoring.
ARIN 690A Natural Language Processing and Computer Vision Capstone (3 credits)
A project based, practical application of the knowledge, technical skills, and critical thinking skills acquired during previous study designed to showcase the student's expertise in artificial intelligence focusing on the application of natural language processing and computer vision. Topics are selected from student-affiliated organizations or employers, special government/private agency requests, or other faculty-approved sources in a wide range of domains.
ARIN 690B AI-Cyber Capstone (3 credits)
A comprehensive, project-driven exploration of artificial intelligence applications in cybersecurity. Students will integrate knowledge from across the specialization to address real-world challenges, demonstrating their ability to apply AI techniques to enhance the security of information systems and to safeguard AI-driven systems themselves. Emphasis is placed on practical implementation, critical thinking, and aligning solutions with organizational security needs and objectives
DATA 605 Decision Analytics (3 credits)
A project-driven study of the processes and technology designed to enhance data-driven decision-making, integrating artificial intelligence with human decision-making. The goal is to apply creative methods to ask better questions, identify core problems, develop models, interpret results, and convey findings to various audiences. Topics include the use of commercial software to manage, analyze, and report on data and create actionable insights across a range of contexts, including societal, business, political, intelligence, healthcare, and media/entertainment. Discussions explore best practices for the long-term success of an analytics project in terms of project management and communications, with an emphasis on the analytics life cycle.
DATA 635 Data Management (3 credits)
A project-based study of the concepts, principles, and techniques of managing data throughout its life cycle for effective data-driven decision-making. The aim is to apply best practices for data design, data integrity, data quality, and data governance. Topics include SQL and NoSQL; distributed and cloud databases; data lakes and data warehousing; extract, transform, and load (ETL) processing; and metadata management. Students may receive credit for only one of the following courses: DATA 620 or DATA 635.
DATA 645 Machine Learning (3 credits)
A project-based study of the fundamental concepts and algorithms of machine learning. The aim is to evaluate different algorithms and methods and build models that learn from past data to find underlying patterns useful for prediction, classification, and exploratory data analysis and that can be applied to make informed business decisions. Topics include supervised and unsupervised machine learning techniques, naïve Bayes classifiers, regression, decision trees, and cluster analysis. Discussion explores significant tasks in real-world applications, including handling missing data, evaluating classifiers, and measuring precision. Major software tools are used to apply machine learning methods in a wide range of domains, such as healthcare, finance, marketing, and government.
DATA 660 Advanced Machine Learning (3 credits)
Prerequisite: DATA 645. A project-based study of advanced concepts in predictive modeling and techniques to discover patterns in data. The aim is to identify variables with the most predictive power and to develop, assess, compare, and explain complex predictive models. Topics include advanced statistical and machine learning algorithms, support vector machines (SVM), ensemble models, and reinforcement learning. Discussion explores high-performance modeling and best practices for selecting methods and

tools to explore large data sets using industry-standard software and cloud applications, such as Apache Spark ML, Amazon Kinesis, and Google BigQuery.
CYOP 605 Introduction to Cyber Operations (3 credits)
A hands-on introduction to the strategies, principles, and technologies essential to defending modern networks and information systems. The objective is to evaluate and maintain systems that are resilient and trustworthy in a dynamic threat landscape and to meet specific mission security objectives. An overview of cyber defense is provided. Topics include fundamental principles of cybersecurity and vulnerabilities and risk management of information systems. Students may receive credit for only one of the following courses: COP 610 or CYOP 605.
CYOP 655 AI-Enabled Cyber Operations (3 credits)
A hands-on introduction to the integration of artificial intelligence (AI) in cyber operations to enhance both defensive and offensive cybersecurity processes. The aim is to demonstrate expertise in using AI tools and techniques to identify vulnerabilities, analyze threats, and mitigate risks. Discussion covers the technical, ethical, and legal dimensions of AI-driven cybersecurity, including the automation of threat detection, response, and anomaly analysis within a security operations center (SOC) environment. The emphasis is on the development of practical skills in implementing secure network protocols, conducting compliance checks, and utilizing AI to automate tasks, such as log analysis, threat intelligence, and risk management. Topics also include the impact of AI on cyber threat intelligence; vulnerability identification; and the development of offensive and defensive tactics, techniques, and procedures (TTPs), as well as the implications of cloud computing environments on AI-enabled cyber operations. Students may receive credit for only one of the following courses: COP 630 or CYOP 655
CLCS 645 Cloud Infrastructure Planning and Design (3 credits)
A comprehensive exploration of the principles, methodologies and best practices of planning and designing cloud-based infrastructure. Discussion covers the factors influencing cloud infrastructure decisions, including scalability, performance, cost-effectiveness, security, and reliability. Topics also include cloud architecture patterns, capacity planning, disaster recovery, and compliance frameworks. Hands-on exercises and experience with cloud infrastructure tools reinforce theoretical concepts and provide preparation for real-world challenges. Students may receive credit for only one of the following courses: CLCS 645 or CCS 630.
CLCS 660 AI-Based Cloud Automation and Scripting (3 credits)
Prerequisite: CLCS 645. A study of the automation of cloud infrastructure and processes using scripting languages. The objective is to leverage scripting to streamline tasks, improve efficiency, and reduce manual errors. Topics include popular scripting languages (e.g., Python, Bash), cloud APIs (Application Programming Interfaces), AI, and automation tools. Hands-on labs provide practical experience in automating cloud resource provisioning, configuration management, and deployment pipelines. Students may receive credit for only one of the following courses: CLCS 660 or CCS 640

5. **Discuss how general education requirements will be met, if applicable.**

Not Applicable

6. **Identify any specialized accreditation or graduate certification requirements for this program and its students.**

Not Applicable

7. **If contracting with another institution or non-collegiate organization, provide a copy of the written contract.**

Not Applicable

8. **Provide assurance and any appropriate evidence that the proposed program will provide**

students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management systems, availability of academic support services and financial aid resources, and costs and payment policies.

UMGC maintains a comprehensive public website that houses all current information about its programs. Students have online access to degree requirements, course catalogs, course schedules, and other pertinent information. The website also provides specific and clear information and resources about **technology requirements** for UMGC students, **information and training on the learning management system**, and **other ad**ditional resources to maximize each student's learning experience. A variety of online support services are available to students for academic assistance (Tutoring, Writing Center), as well as advising, accessibility accommodations, career services, tuition planning, financial aid, and technical support.

UMGC's Student Handbook is available online and serves as a general guide for all students with respect to policies, procedures, rules, regulations, and general academic requirements for all students. In addition, the annual UMGC Catalog includes extensive information about expectations and individual requirements for each academic program as well as university policies, resources, and services for students.

9. Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.

All academic program-related communications (including advertising, recruitment, and admission materials) are developed with UMGC-wide institutional communication strategies which adhere to the principle of truth in advertising. All written and electronic materials prepared for prospective students for recruitment will clearly and accurately represent the courses, programs, and services available.

H. Adequacy of Articulation

1. **If applicable, discuss how the program supports articulation with programs at partner institutions. Provide all relevant articulation agreements.**

Not Applicable

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11)

1. **Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faulty member will teach in the proposed program.**

UMGC's faculty staffing model employs full-time faculty (known as Collegiate Faculty) in faculty leadership roles, such as Department Chairs and Portfolio Directors, with responsibility for the overall intellectual coherence and integrity of the curriculum and program. Other Collegiate Faculty teach and serve in complementary roles that maintain and support the academic program, providing input into the design and content of the program and courses. This core group of full-time Collegiate Faculty also mentors and supports the adjunct faculty teaching in the program.

In keeping with UMGC's emphasis on workplace relevance, most faculty teaching in the MS in Applied AI will be credentialed, practicing professionals who teach part-time for UMGC. These adjunct faculty provide instruction for the majority of courses (which is true for all programs at all levels at UMGC). This model is responsible for one of UMGC's greatest strengths: scholar-practitioner faculty who have solid academic credentials and continue to work outside the university, providing a continuous infusion of current workplace knowledge, career relevant perspectives, and maximum flexibility for adapting to changing student demand and rapidly changing industries and technologies. In this way, UMGC supports students in a learning experience that is practical and relevant to today's competitive and evolving global marketplace.

Collegiate and adjunct faculty both hold academic rank and title, based on their academic qualifications and professional experience, including teaching experience at UMGC. Since 1996, UMGC has held an MHEC-approved waiver for the Code of Maryland (COMAR) requirements for total credit hours taught by full-time faculty (see documentation provided in Appendix A).

The centrality and appropriateness of UMGC's faculty model relative to its educational mandate and mission were reaffirmed by MHEC in its 2016 review of mission statements, as evidenced in the following excerpt from the Commission's report:

> *UMUC intentionally seeks highly-qualified full-time and adjunct faculty who have hands-on experience in the disciplines they teach and who can leverage that experience to provide a richer learning experience for students. The university's mission to serve adult students is supported by adjunct faculty who are scholar-practitioners engaged daily in their profession. The ability to employ adjunct faculty is critical to UMUC's capacity to quickly deploy academic and continuing education programs in response to workforce-related needs. This entrepreneurship and flexibility in establishing new programs is particularly important to the university: given its history of very limited state support, the university's financial model is based on tuition revenues, and all programs must be self-supporting.*[1]

Consistent with this model, the Information Technology department already has an active roster of faculty who are qualified and prepared to teach courses in this program, and the university constantly recruits additional adjunct faculty as needed. Table 10 below provides a partial list of faculty who are anticipated to teach in the program, their appointment type and rank, their graduate degree(s) and fields(s), their status (full-time or part-time), and the courses they are qualified to teach.

Table 11: Faculty Resources (see next page)

[1] Maryland Higher Education Commission. *2016 Mission Statement Review.* https://mhec.maryland.gov/institutions_training/Documents/acadaff/2016MissionStatementReview.pdf

Faculty Name	Appointment Type and Rank	Graduate Degree(s) and Field(s)	Status (FT/PT)	Course(s) to be Taught
Elena Gortcheva	Academic Portfolio Director/Collegiate Professor	PhD, Computer Engineering	FT	DATA 645 ARIN 620, 655, 665, 690A
Kate Goldberg	Collegiate Associate Professor	DBA, Doctor of Business Administration	FT	DATA 605, 635 ARIN 610, 615, 620
Christopher Schultz	Collegiate Professor	PhD, MBA, MS in Applied Computer Science	FT	DATA 605, 645 ARIN 610, 615, 620
Charles Knode	Adjunct Professor	PhD, Industrial Technology	PT	DATA 605, 660 ARIN 615, 620, 690A
Caroline Beam	Adjunct Professor	Ph.D. in Industrial Engineering	PT	DATA 635 ARIN 610, 620
Jon McKeeby	Adjunct Professor	PhD in Computer & Info Science	PT	ARIN 665, 690A/B
Edward Herranz	Adjunct Associate Professor	PhD. Computer Science	PT	DATA 645, 660 ARIN 615, 655,665
Firdu Batti	Adjunct Professor	PhD, Computer Science	PT	DATA 645 ARIN 620, 655, 665
Ami Gates	Adjunct Professor	PhD, Computer Engineering	PT	DATA 645 ARIN 615, 655, 665
Jeremy Bolton	Adjunct Professor	PhD, Computer Engineering	PT	ARIN 615, 620, 655, 665
Solomon Britto	Adjunct Assistant Professor	DBA, Doctor of Business Administration	PT	DATA 605 ARIN 610, 615
Prahlad Gopalakrishna	Adjunct Associate Professor	PhD, Biomedical Engineering	PT	DATA 645 ARIN 615, 620, 655; 690A and B
Chaojie Duan	Adjunct Professor	Doctor in Management	PT	ARIN 615, 620, 655, 665
Goran Trajkovski	Adjunct Associate Professor	PhD, Computer Science	PT	DATA 605, 635 ARIN 610, 615
Matthew Holmes	Adjunct Associate Professor	PhD in Electrical Engineering	PT	DATA 635 ARIN 610, 615
Brian Holbert	Adjunct Professor	PhD Computer Science	PT	DATA 645, ARIN 615, 620, 655
Sounak Chakraborty	Adjunct Professor	PhD Statistics	PT	DATA 660 ARIN 615, 655
Sze Wing Wong	Adjunct Associate Professor	PhD, Computer Science	PT	DATA 635, ARIN 610

Christopher Wrightson	Adjunct Assistant Professor	PhD, Education	PT	DATA 635 ARIN 615, 620
Jason Pittman	Collegiate Faculty	D.Sc. Cybersecurity	FT	ARIN 690B
Rony Thakur	Portfolio Director	PhD Computer Science	FT	ARIN 690B
Jimmy Robertson	Portfolio Director	EdD Distance Education, MS EO Engineering	FT	CYOP 605, CYOP 655, ARIN 690B, CLCS 660
Alla Webb	Adjunct Assistant Professor	PhD Systems Engineering	PT	CYOP 605, CYOP 655, ARIN 690B, CLCS 660
Jamy Klien	Adjunct Assistant Professor	MS Information Science	PT	CYOP 605, CYOP 655, ARIN 690B, CLCS 660
Patrick Appiah-Kubi	Portfolio Director	PhD Computer Science	FT	CLCS 645, ARIN 690B
Alan Carswell	Adjunct Professor	PhD Computer Science	PT	CLCS 645, ARIN 690B
Charles Heinen	Adjunct Assistant Professor	MS Cyber Policy	PT	CYOP 605, CYOP 655, CLSC 660
Jason Cohen	Adjunct Associate Professor	PhD Information Technology	PT	CYOP 605, CYOP 655, CLSC 660

2. **Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:**

a) Pedagogy that meets the needs of the students

Through Faculty Development, part of the university's Integrative Learning Design unit, UMGC supports its worldwide faculty by providing quality professional development programs and services that are accessible, responsive, comprehensive, and innovative. UMGC provides frequent faculty development workshops and webinars focused on effective online pedagogy, including topics such as providing effective feedback; scaffolding student learning; digital literacy; academic integrity; classroom assessment techniques; accessibility; and diversity, equity, and inclusion in the classroom.

UMGC is committed to providing pedagogy training in support of student learning throughout the faculty life cycle with the institution. FACDEV 411, New Faculty Academic Orientation, is a required two-week, facilitated online class that is designed to welcome new faculty to UMGC and provide information about UMGC's history, mission, values, and students, while preparing faculty to teach online. It is taught by experienced UMGC adjunct faculty. The course covers the history of UMGC, pedagogy of adult learning, facilitating online learning, accessibility, and providing additional support

and resources for students through UMGC's Library, Effective Writing Center, Office of Academic Integrity & Accountability, and Office of Accessibility Services.

b) The learning management system

UMGC provides multiple touchpoints to ensure faculty have a thorough orientation to and continued education about our learning management system, Desire2Learn (D2L). Building on the topics and materials provided in FACDEV 411, UMGC offers online faculty workshops on topics such as grading and coaching strategies; the integration of audio and video feedback to students; gradebook setup and rubrics; crafting powerful online introductions; and open education resources (OERs) used in the classroom.

c) Evidenced-based best practices for distance education, if distance education is offered.

In addition to the strategies outlined above, UMGC has recognized the need to equip faculty more comprehensively with knowledge and skills to help increase classroom engagement and support student learning, satisfaction, and retention. In 2021, UMGC launched an additional two-week facilitated training course, FACDEV 112, Coaching Learning and Academic Success Strategies. This course focuses on the development of faculty coaching skills to create an active and motivating presence in the online classroom and to establish helpful and supportive relationships with students, leading to persistence and academic success. To date, over 2,000 UMGC faculty have completed this course.

This addition to UMGC's training catalog is designed to help reduce the distance between faculty and students inherent in online courses. Developed and taught by UMGC faculty, FACDEV 112 emphasizes specific strategies for facilitating consistent and meaningful faculty-student interactions and provides guidance for implementing personalized and actionable academic coaching and feedback.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12)

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

No new library resources are needed to serve the MS in Applied AI. In partnership with faculty and program designers, the UMGC Library annually reviews and maintains a curated collection of academic and professional journal articles, reports, case studies, and books available electronically via a comprehensive set of online library databases to support academic programs. A librarian liaison is designated for each academic department at UMGC to assist faculty with resource identification and other program needs.

The UMGC Library relies on distributed technology as its primary mechanism to provide online access to resources and services to UMGC's widely dispersed adult student population. Library services to all UMGC students, faculty, and staff worldwide include 24/7 reference via live chat and document delivery for materials not otherwise available in the library databases. UMGC's expanding collection of over 75,000 electronic books (e-books) has significantly increased the ability to meet the academic needs of UMGC's global population. Additionally, UMGC students, faculty, and staff within the continental United States have access to more than 10 million volumes in print from the 17-member University System of Maryland and Affiliated Institutions (USMAI) Library Consortium.

The UMGC Library provides research assistance in developing search strategies, selecting relevant databases, and evaluating and citing sources in a variety of formats, including online webinars offered globally. A discovery tool allows simultaneous searching of scholarly articles, books, and other research resources via a single search engine of most of the databases to which the UMGC Library subscribes. Students also have access to full-text dissertations and theses via the *ProQuest Dissertations and Theses* database. Resources on the UMGC Library website provide a list of resource guides for academic subject areas and topics, including relevant databases, websites, books, and other resources along with technical and citation assistance.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

1. **Provide an assurance that physical facilities, infrastructure and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.**

The MS in Applied AI will be offered fully online using the university's distance education platform. Select courses may be taught in a hybrid format at locations where UMGC offers classroom instruction, including regional higher education centers, military bases, and overseas in Europe and Asia. Existing resources related to facilities, infrastructure, and equipment are adequate to meet the program's needs.

2. **Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:**

    a) **An institutional electronic mailing system, and**
    b) **A learning management system that provides the necessary technological support for distance education**

UMGC has an internal email network that provides all students and faculty with consistent email domains, @student.umgc.edu and @faculty.umgc.edu, respectively. Students are encouraged but not limited to using this email address in all communications with the university. Faculty are required to use their UMGC address for teaching and all official UMGC communications.

UMGC's learning management system is Desire2Learn (D2L); the internal adaptation is called LEO. All UMGC classes are taught using this system and all students with appropriate technology and online access (referenced in Section G8) have access to this system through their learning portal. Support is available for students and faculty through a 24/7 Help Desk and a large variety of online resources on UMGC's website.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

1. **Complete Table 1: Resources and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each resource category. If resources have been or will be reallocated to support the proposed program, briefly discuss the sources of those funds.**

As shown in Table 12 below, the MS in Applied AI is expected to be self-supporting from inception. No new General Funds are required for the implementation of this program. If necessary, resources will be reallocated internally within the department during the first year.

The credit hour tuition rate listed is a weighted average of in-state, out-of-state, and military graduate tuition rates, based on the anticipated makeup of the student cohorts. Consistent with UMGC's demographics and student enrollment patterns, Table 12 assumes that all students will be enrolled part-time, completing an average of 6.76 credits per year. Enrollment and revenue projections are based on new students entering the program.

Table 12: Resources (MHEC Table 1)

Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	$0	$0	$0	$0	$0
2. Tuition/Fee Revenue (c + g below)	$254,829	$692,108	$1,187,905	$1,616,880	$1,847,336
a. Number of F/T Students	0	0	0	0	0
b. Annual Tuition/Fee Rate	$0	$0	$0	$0	$0
c. Total F/T Revenue (a x b)	$0	$0	$0	$0	$0
d. Number of P/T Students	90	196	310	439	476
e. Credit Hour Rate	$524	$524	$524	$524	$524
f. Annual Credit Hour Rate	5.4	6.7	7.3	7.0	7.4
g. Total P/T Revenue (d x e x f)	$254,829	$692,108	$1,187,905	$1,616,880	$1,847,336
3. Grants, Contracts & Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 - 4)	$254,829	$692,108	$1,187,905	$1,616,880	$1,847,336

2. **Complete Table 2: Program Expenditures and Narrative Rationale. Provide finance data for the first five years of program implementation. Enter figures into each cell and provide a total for each year. Also provide a narrative rationale for each expenditure category.**

UMGC's existing base of FTE faculty and administrative and support staff will support and serve the program. The faculty category in Table 13 includes 1 full-time Collegiate Faculty beginning in year 2

and a second full-time Collegiate Faculty beginning in year 3. Adjunct faculty will teach the remaining scheduled courses, with 1 FTE = 30 adjunct-taught credit hours. The adjunct per credit hour rate is calculated at $1,202 per credit, the rate for an associate professor with a terminal degree at longevity Step 1 in UMGC's adjunct faculty pay scale. This is the median rate for faculty anticipated to be in the pool of faculty eligible to teach courses in the program. The administrative staff category includes a portfolio director who will support this program in addition to UMGC's BS in Artificial Intelligence program, while the support staff category factors in support from the Faculty Affairs and Scheduling Team and dean's office staff. Salaries are shown with benefits at current standard rates of 37% for full-time faculty and administrative staff and 8% for adjunct faculty.

Technology services in Row 4 include UMGC's LMS platform licensing, student information system, student relationship management system, and student software and support, at a rate of $5.50/student credit hour. Library services are estimated at a cost of $2.14 per student credit hour. No new or renovated physical space (6) will be needed for this program. Other expenses (Row 7) in year 1 include $288,000 of course development and maintenance to create the new program. The remaining expenses in row 7 include academic administration, admissions, advising and student support services, and marketing and advertising, proportional to the number of credit hours anticipated to be earned by students in the program each year.

Table 13: Program Expenditures (MHEC Table 2)

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	$37,432	$135,629	$239,699	$304,295	$345,926
a. Number of FTE	1.04	3.05	5.29	7.05	8.04
b. Total Salary	$34,659	$118,926	$209,163	$268,664	$305,686
c. Total Benefits	$2,773	$16,704	$30,536	$35,631	$40,239
2. Admin. Staff (b + c below)	$48,819	$39,809	$38,213	$39,141	$43,700
a. Number of FTE	0.42	0.34	0.33	0.34	0.38
b. Total Salary	$35,634	$29,058	$27,893	$28,570	$31,898
c. Total Benefits	$13,185	$10,751	$10,320	$10,571	$11,802
3. Support Staff (b + c below)	$103,836	$105,913	$108,031	$110,192	$112,396
a. Number of FTE	0.89	0.91	0.93	0.95	0.97
b. Total Salary	$75,793	$77,309	$78,855	$80,432	$82,041
c. Total Benefits	$28,043	$28,604	$29,176	$29,760	$30,355

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
4. Technical Support and Equipment	$2,675	$7,264	$12,468	$16,971	$17,782
5. Library	$1,043	$2,832	$4,861	$6,617	$7,560
6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	$288,000	$177,105	$378,139	$551,886	$581,469
TOTAL (Add 1 – 7)	**$481,805**	**$468,553**	**$781,411**	**$1,029,101**	**$1,108,832**

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15)

1. Discuss procedures for evaluating courses, faculty and student learning outcomes.

UMGC has developed an annual program review process that includes assessment of student learning, as described earlier, along with non-direct measures of student learning including course evaluations, retention and graduation rates, and program surveys administered in all capstone courses. As part of this process, external data are collected, including enrollment in related programs at other institutions and employment trends in relevant labor markets. UMGC's mission for career relevant education requires that the curriculum and program learning goals are maintained in the context of changing needs in labor markets and required skills for graduates.

As part of UMGC's annual program review, courses within the program portfolio are evaluated for course health. This includes student success rates within each course and course reenrollment rates (i.e., how many students in the course reenroll at the university in the following term). In addition, student course evaluations are administered every term for every course. Data are aggregated in academic dashboards at the course level to let program leaders and faculty evaluate the course curriculum's effectiveness and delivery. When a course is scheduled for revision, all adjunct faculty teaching the course are surveyed to provide input to the faculty and instructional designers revising the course.

Full-time faculty are reviewed at least every two years. Adjunct faculty are reviewed on a course-by-course/term basis. Student course evaluations allow all faculty to receive quantitative and qualitative feedback on their teaching.

2. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.

UMGC's faculty, academic administrators, and Office of Academic Quality collaborate to implement assessment activities, monitor ongoing developments, review results, and make appropriate curricular or other modifications. Annually, student performance across learning demonstrations is evaluated to determine where improvements may be required. Portfolio Directors and Collegiate Faculty visit online classrooms regularly to track faculty performance and take any necessary corrective actions proactively. Class observations are documented and used in subsequent faculty staffing decisions.

Changes are also made to the curriculum and/or student support models, as needed. Additional evaluation includes tracking of student retention, grade distributions, and cost-effectiveness. Regular academic program reviews consider all factors related to academic quality, curriculum currency and relevance, student support, and adequacy of program infrastructure and resources. These processes all support a continuous cycle of improvement.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05)

1. Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

UMGC seeks to reflect the diversity of the global communities we serve. Cultural differences are recognized, valued, and considered essential to the educational process. Our welcoming of diverse perspectives differentiates us and drives innovation. UMGC provides an academic environment in which diversity is not only articulated as one of the institutional core values, but it is reflected in the university's ethnically and racially diverse student body, faculty, and staff and our proven record of providing higher education access to underrepresented students. UMGC's Integrative Learning Design unit and Office of Community Engagement and Opportunity collaborate to ensure a robustly inclusive curriculum that is built around UMGC's focus on project-, scenario-, and problem-based learning, which have been found to be the most effective learning approaches for adult students. The Integrative Learning Design team is trained and proficient in Universal Design for Learning and provides leadership on matters of inclusive design for all learning experiences, courses, and programs at UMGC.

O. Relationship to Low Productivity Programs Identified by the Commission

1. If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources and general operating expenses) may be redistributed to this program.

Not Applicable

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.

UMGC is approved to offer distance education by the Middle States Commission on Higher Education (MSCHE) and maintains compliance with COMAR 13B.02.03.22. UMGC's approval to offer distance education as an alternative delivery method is included within its scope of institutional accreditation, as evidenced in the university's MSCHE **Statement of Accreditation Status**. Further, UMGC has been an approved institutional participant in the State Authorization Reciprocity Agreement (SARA) since 2016 and is authorized to offer distance education in all SARA states. Among its many recognitions, UMGC has received five Sloan Consortium (now Online Learning Consortium) Excellence Awards for online program quality and three IMS Global Learning Consortium awards for technology integration in the classroom environment.

2. Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.

UMGC was an early provider of off-campus educational opportunities for students and one of the first universities in Maryland to develop fully online courses and programs. UMGC has been a leader among public institutions in providing quality and affordable online education and has been providing distance education to the nation's service members and their families, residents of the State of Maryland, and those who live outside of Maryland for more than 75 years. Additionally, UMGC's Europe and Asia divisions offer hybrid and onsite classes to fulfill DOD contract requirements and meet the needs of military-affiliated learners overseas. Stateside, all onsite classes, with the exception of an occasional accelerated offering, are offered in hybrid format, blending onsite and online delivery.

UMGC's distance education offerings are in full compliance with **C-RAC's 2011 Guidelines**.

Appendix A
Full-Time Faculty and Library Waiver

90.2.1.001

cc: LEL
Bob S.

MHEC
Creating a state of achievement

MEMORANDUM

Office of the Provost
UMUC
JAN 10 2005

DATE: January 6, 2005

TO: Dr. Nicholas H. Allen
Provost and Chief Academic Officer, UMUC

FROM: Michael J. Kiphart, Ph.D. MJK
Assistant Secretary for Planning and Academic Affairs

SUBJECT: UMUC Waiver of Full-Time Faculty and Library/Learning Resources Center

According to our records, UMUC's request for a waiver of full-time faculty and library/learning resource center went before the Education Policy Committee on January 16, 1996. The Education Policy Committee approved for the University a waiver of the definition of full-time faculty and library/learning resource center as provided for in the Commission's *Minimum Requirements for Degree-Granting Institutions*, and further, that the Commission instruct the Secretary of Higher Education to review the University at regular intervals to assure that the University was in compliance with the applicable provisions of the waiver to the minimum requirements.

On February 15, 1996, the matter went before the Commission and an amended recommendation was approved. The Commission approved for the University a waiver of the requirements for total credit hours taught by full-time faculty and for a waiver of the requirements for a minimum library collection for the Library/Learning Resource Center as provided for in the Commission's *Minimum Requirements for Degree-Granting Institutions*. Further, the Commission instructed the Secretary of Higher Education to review the University at regular intervals to assure that the University was in compliance with the applicable provisions of the waiver to the minimum requirements. The Commission also approved a recommendation that the Faulty Advisory Council and Student Advisory Council recommendations be referred to the University of Maryland System Board of Regents.

Enclosed are documents supporting the approval of the waiver. Should you require additional assistance, please contact David Sumler, Director of Academic Affairs – Planning and Policy, at 410-260-4533 or dsumler@mhec.state.md.us.

MJK:aaw
Enclosures

MARYLAND HIGHER EDUCATION COMMISSION
839 Bestgate Rd. • Suite 400 • Annapolis, MD 21401-3013
T 410.260.4500 • 800.974.0203 • F 410.260.3200 • TTY for the Deaf 800.735.2258 • www.mhec.state.md.us

xc: on file

Forward to Mr. Lange for appropriate action via Comm. on Ed Policy

Parris N. Glendening
Governor

Edward O. Clarke, Jr.
Chairman

Patricia S. Florestano
Secretary of Higher Education

April 23, 1996

Mr. Lance W. Billingsley, Esq.
Chairman, Board of Regents
University of Maryland System
3300 Metzerott Road
Adelphi, MD 20783

Dear Mr. Billingsley:

At its February 15, 1996 meeting, the Maryland Higher Education Commission considered a request by University of Maryland University College for a waiver of the Commission's minimum requirements in the area of full-time faculty and library resources. The Commission has granted the waiver.

In the discussion of the waiver and related issues, both the Faculty Advisory Council and the Student Advisory Council to the Commission raised issues which the Commission felt were more appropriately addressed by the University of Maryland's governing board. Therefore, I am forwarding to you the resolutions submitted to the Commission by these two advisory councils, in addition to the relevant materials considered by the Commission in granting the waivers.

Consistent with the final recommendations of the Commission on this matter, I would appreciate a review of these issues by the Board of Regents. I would also appreciate receiving the results of that review when it is completed. Since the academic year is coming to a close, I realize that any reaction on the part of the Board of Regents may be delayed until next fall. In light of that schedule, could you please supply the Commission with the Board of Regents' position by November 1, 1996.

Sincerely,

Edward O. Clarke, Jr. (CT)

Edward O. Clarke, Jr.
Chairman

EOC:PSF:JAS:ds

Enclosures

cc: Dr. Patricia S. Florestano
√Dr. Donald N. Langenberg

16 Francis St., Annapolis, MD 21401-1781 | (410) 974-2971 | FAX (410) 974-3515
TTY for the Deaf: (800) 735-2258

USM Board of Regents
Committee on Education Policy and Student Life and Safety
Minutes from Public Session
April 3, 2025
Zoom

Minutes of the Public Session

The Committee on Education Policy and Student Life and Safety (EPSLS) of the University System of Maryland (USM) Board of Regents (BOR) met virtually (via Zoom) in public session on Tuesday, April 3, 2024. The meeting was convened at 9:01 a.m. Committee members present were: Regents Gooden, Hasan, Leggett, Lewis, Mirani, Neuberger, Parker, Smarick, and Wood. Chancellor Perman and Senior Vice Chancellor Alison Wrynn were also present.

The following were also in attendance on Zoom: Dr. Allen, Dr. Alvarez, Dr. Ashby, AAG Bainbridge, Ms. Beckett, Dr. Beise, Dr. Caraco, Dr. Couch, Dr. Dunn, Dr. Esters, Dr. Flinn, Dr. Foust, Dr. Haverback, Dr. Haywood, Ms. Herbst, Dr. Jin, Dr. Khademian, Ms. Lawrence, Dr. Lee, Dr. Lynch, Dr. Marano, Dr. Masucci, Dr. Mueller, Dr. O'Neill, Dr. Owens, Dr. Patricio, Dr. Reed, Mr. Sandler, Dr. Sanford, Ms. Sule, Dr. Ward, Dr. Weill, Dr. Whitehead, and Ms. Wilkerson.

Guests also participated via the public, listen-only line.

Action Items

Academic Program Proposals

Frostburg State University: Bachelor of Science in Applied Computer Science

Dr. Larry Weill, Interim Provost and Vice President for Student Success, and Dr. Michael Flinn, Professor and Chair, Department of Computer Science and Information Technology presented Frostburg State University's proposal to offer a Bachelor of Science in Applied Computer Science at the University System of Maryland at Hagerstown (USMH).

This program is a new program, and a waiver has been requested from the Maryland Higher Education Commission to allow the program to be offered first at USMH and to be offered both in-person and online. It will be offered by faculty from the FSU Department of Computer Science and Information Technologies. The department currently offers BS degrees in Computer Science, Computer Information Technologies, Cybersecurity and Information Assurance, and Information Technology. This program has been developed with the particular needs of the region in mind, as well as the needs of working adults. Hagerstown Community College has been designated as a National Center of Academic Excellence in Cyber Defense (CAE-CD), and it has associate degree programs that can align with this new degree, and articulations are being developed.

Regent Smarick commented on the geographic need in Western Maryland for a program like this. Chair Gooden noted that it was a well written proposal and Chancellor Perman said that now is the time we need to act as a system and that FSU is responding to a need at an RHEC. Regent Hasan asked if there were any concerns about objections to the program. Dr. Flinn answered that they see no other

competitors doing a program like this in Maryland and that they would actually love to see people mimic the program in other areas.

The proposal has gone through the standard review and approval processes with USM institutions having time to submit objections. Via the USM process, there were no objections. It is noted that, via the process conducted by the Maryland Higher Education Commission, other institutions in the state will have the opportunity to object to the establishment of this program. However, the USM staff believes the institution has done its due diligence regarding a state-wide examination of programs to try to ensure there is no duplication.

The Chancellor recommends that the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the Frostburg State University proposal to offer the BS in Applied Computer Science and that it can first be offered at USMH.

The motion was moved by Regent Smarick, seconded by Regent Gooden, and unanimously approved.

Vote Count: Yeas: 8 Nays: 0 Abstentions: 0

University of Maryland Eastern Shore: Bachelor of Science in Electrical Engineering
Dr. Ronnie Allen, Provost & Vice President for Academic Affairs, Dr. Derrek Dunn, Dean, School of Business and Technology, and Dr. Yuanwei Jin, Chair, Department of Engineering presented University of Maryland Eastern Shore's proposal to offer a Bachelor of Science in Electrical Engineering. The program's curriculum includes core engineering courses, supporting science and math courses, major electives, and general education courses. It is designed to provide a strong foundation in traditional electrical engineering disciplines while also offering in-depth knowledge of electrical and electronics engineering principles, systems, and applications for real-world problem-solving.

Chancellor Perman asked about UMES's engagement with high schools. Dr. Jin noted that they have an agreement with Somerset County schools. Regent Hasan asked if there are testing facilities on campus and Dr. Jin noted that there are labs.

The proposal has gone through the standard review and approval processes with USM institutions having time to submit objections. Via the USM process, there were no objections. It is noted that, via the process conducted by the Maryland Higher Education Commission, other institutions in the state will have the opportunity to object to the establishment of this program. However, the USM staff believes the institution has done its due diligence regarding a state-wide examination of programs to try to ensure there is no duplication.

The Chancellor recommends that the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland Eastern Shore proposal to offer the Bachelor of Science (B.S.) in Electrical Engineering.

The motion was moved by Regent Smarick, seconded by Regent Leggett, and unanimously approved.

Vote Count: Yeas: 8 Nays: 0 Abstentions: 0

University of Maryland Eastern Shore: Bachelor of Science in Mechanical Engineering
Dr. Ronnie Allen, Provost & Vice President for Academic Affairs, Dr. Derrek Dunn, Dean, School of Business and Technology, and Dr. Yuanwei Jin, Chair, Department of Engineering presented University of Maryland Eastern Shore's proposal to offer a Bachelor of Science in Mechanical Engineering.

The proposed BSME program aims to provide prospective students with the opportunity to earn a Bachelor of Science in Mechanical Engineering, offering a pathway to a career that integrates engineering and technology to enhance the quality of human life. The program's curriculum includes core engineering courses, supporting science and math courses, major electives, and general education courses. Our courses emphasize both experimental and analytical learning to develop a deep understanding of mechanical engineering technology and complex robotic systems.

The proposal has gone through the standard review and approval processes with USM institutions having time to submit objections. Via the USM process, there were no objections. It is noted that, via the process conducted by the Maryland Higher Education Commission, other institutions in the state will have the opportunity to object to the establishment of this program. However, the USM staff believes the institution has done its due diligence regarding a state-wide examination of programs to try to ensure there is no duplication.

The Chancellor recommends that the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the University of Maryland Eastern Shore proposal to offer the Bachelor of Science (B.S.) in Mechanical Engineering.

The motion was moved by Regent Smarick, seconded by Regent Leggett, and unanimously approved.

Vote Count: Yeas: 8 Nays: 0 Abstentions: 0

Information Items

Results of Periodic Reviews of Academic Programs
Dr. Candace Caraco, Associate Vice Chancellor for Academic Affairs, presented the report. The Code of Maryland require that existing academic programs are reviewed, and USM policy III-7.04 delegates this review to the chancellor. A format for the reports is standardized and includes information on enrollments and degrees awarded, internal and external reviews, and institutional recommendations and actions. The periodic program review process includes an internal self-study that is conducted by the program at the departmental level and reviewed by external reviewers. The respective dean and the provost review the recommendations and draft full report prior to submission for additional review by staff in the USM Academic and Student Affairs. Comments are shared with the institutions for appropriate action prior to final submission. Institutional action plans are decided upon primarily by the provost or dean, both of whom are responsible to monitor academic quality and productive use of resources.

Dr. Caraco shared that 162 program reviews were completed. Reviews were completed at the following institutions: Frostburg State University; Towson University; University of Maryland, Baltimore; University of Maryland, Baltimore County; University of Maryland, College Park; and University of Maryland Global Campus. According to the Maryland Higher Education Commission (MHEC), the following thresholds designate programs as low productivity programs: Bachelor's: < 5 in most recent year or a total of 15 in last three years; Master's: < 2 in most recent year or a total of 6 in last three

years; Doctorate: < 1 in most recent year or a total of 3 in last three years. Dr. Caraco shared that two were considered low enrollment, but these programs support other majors. Fifty-nine of the programs reported on specialized accreditation.

Regent Smarick noted that the report reflects that we are offering programs that the state needs. Chair Gooden said that the Regents are often asked if any programs go away, and it is important to have a review process.

New Programs: 5 Year Enrollment Review

Dr. Candace Caraco, Associate Vice Chancellor for Academic Affairs, presented the five-year enrollment reviews of new programs. As part of the ongoing review process of academic programs, the data have been updated with the Fall 2024 enrollments of programs continuing in the five-year review period. The information includes the actual enrollments in new programs approved since Fall 2020, as well as the projections submitted with the initial proposal. It is important to note that not all programs are implemented in the year they are approved. Depending on the approval dates from the Board of Regents and MHEC, recruitment and admission to the program may not begin until the next academic year. In addition, admission to (and so enrollment in) an undergraduate program may not occur until the students have completed the required lower-division General Education or core courses, with the result that enrollments may not be reported two or even three years after initial approval.

With those caveats in mind, the enrollment data reflect the relative accuracy for the projected enrollment submitted with the program proposal and provide an opportunity to judge the long-term viability of a new program prior to its first seven-year periodic program review.

Regent Hasan asked if we look at the return on investment on these programs. Dr. Caraco said that the institutions look at this.

- Faculty publication and scholarship continued at high levels and at appropriate levels according to faculty type.
- Faculty secured over $1.6 billion in research funding in the 2022-2023 academic year, representing a 14.2% increase over the previous year.

Update on Teacher Preparation

Dr. Jennifer Lynch, Associate Vice Chancellor for Education and Engagement, presented an update on teacher preparation across Maryland and how the USM is addressing the teacher shortage. She started with an overview of her office and the overall goals of teacher preparation.

She discussed the current trends in teacher preparation, pathways to teaching, and the programs that USM institutions offer. She then moved on to provide information about the USM Teacher Certification Consortium, which seeks to address the teacher shortage in the state by providing pathways for conditionally certified teachers to obtain their teaching license.

Chair Gooden asked what type of license students will obtain through this program. Dr. Lynch said that students who complete the program will have dual license in elementary and special education. Regent Hasan asked where the majority of the shortages are and Dr. Lynch said that they are in Baltimore City and some of the smaller districts across the state.

Regent Wood asked about compensation for teachers and Dr. Lynch said that is key element of the Blueprint. Regents asked about federal workers and retired workers and Dr. Lynch said that they are looking at all talent pools.

Motion to Adjourn

Regent Smarick thanked all for a productive meeting. He read the required statement to go into closed session and called for a motion to adjourn and reconvene in closed session to address the USM Board of Regents Student Excellence Scholarships. The motion was moved by Regent Smarick, seconded by Regent Wood, and unanimously approved. Regent Smarick adjourned the meeting at 11:00 a.m.

Respectfully,

Regent Andy Smarick
Vice Chair

USM Board of Regents
Committee on Education Policy and Student Life and Safety
Minutes from Closed Session
April 3, 2025
Zoom

Minutes of the Closed Session

The Committee on Education Policy and Student Life and Safety (EPSLS) of the University System of Maryland (USM) Board of Regents (BOR) met virtually (via Zoom) in closed session on Friday, April 12, 2024. The meeting was convened at 11:29 a.m. Committee members present were: Regents Gourdine, Gooden, Helal, Parker, Smarick, and Wood. Chancellor Perman and Senior Vice Chancellor Wrynn were also present.

The following were also in attendance on Zoom: Ms. Bainbridge, Ms. Beckett, Ms. Herbst, Dr. Lee, Dr. Masucci, and Ms. Wilkerson.

Action Items

USM Board of Regents Student Excellence Scholarships
Dr. Zakiya Lee, Associate Vice Chancellor for Student Affairs, presented this item to the committee. In 2023, the University System of Maryland Student Council (USMSC), with guidance and advice from USM's Office of Academic and Student Affairs, established the first ever student awards to parallel the Board's awards recognizing faculty and staff. This is the third year of the awards. USM students applied for a scholarship in one of four categories: academics, scholarship, and research; innovation and creativity activity; leadership and advocacy; and outreach and engagement. Applicants had to submit an essay, letter of recommendation, resume, and transcript. This year, 254 complete applications were received from across the USM.

The Board of Regents Student Excellence Scholarships Evaluation Committee is a three-member committee that includes members of the USMSC executive board. USM Academic and Student Affairs staff advised the process. The evaluation committee recommends 12 scholarships – three in each category.

The Chancellor recommends that the Committee on Education Policy and Student Life and Safety recommend that the Board of Regents approve the recommendations of the evaluation committee to honor the twelve (12) students with Board of Regents Student Excellence Scholarships.

The motion was moved by Regent Smarick, seconded by Regent Gooden, and unanimously approved.

Vote Count: Yeas: 8 Nays: 0 Abstentions: 0

Motion to Adjourn

Regent Smarick called for a motion to adjourn. The motion was moved by Regent Wood, seconded by Regent Leggett, and unanimously approved. Regent Smarick adjourned the meeting at 12:00 p.m.

Respectfully,

Regent Andy Smarick
Vice Chair

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Request for temporary exemption from a clause in Policy on Undergraduate Admissions

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: Frostburg State University (FSU) experienced an enrollment decline over the past ten years. FSU's in-state enrollment was particularly impacted by population declines and demographic changes in Western Maryland. In addition, some out-of-state institutions in the region began offering in-state rates to Maryland residents. As part of an array of strategies to enhance enrollment and revenue, FSU developed a partnership with a Chinese institution, which has been very successful. The in-state declines and the enrollment of the two FSU programs in China have pushed FSU's undergraduate out-of-state enrollment close to the 30 percent out-of-state limit identified in Section VI of the Policy on Undergraduate Admissions (III-4.0). Frostburg remains committed to prioritizing Maryland residents, and the increase in the percentage of out-of-state undergraduate enrollment has not and will not displace qualified in-state applicants or reduce access for Maryland students.

FSU is requesting a five-year exemption from the 30 percent cap while it grows Maryland enrollment and pursues strategic out-of-state opportunities. FSU is establishing a dedicated self-sustaining cost-center model for international partnerships. Proceeds (i.e., net revenue) will support strategies to enhance "domestic" recruitment, support faculty/staff development, grow the Honors program, improve student labs and invest in other one-time initiatives to improve student success, grow enrollments and strengthen the university.

ALTERNATIVE(S): The Regents may not approve the request or may request further information.

FISCAL IMPACT: No additional funds are required to approve the exemption. There could be fiscal impacts on future net revenue should the exemption be denied.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the request to exempt Frostburg State University from the out-of-state undergraduate enrollment limit of 30 percent for five years.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

FROSTBURG
STATE UNIVERSITY

OFFICE OF THE PRESIDENT
101 BRADDOCK ROAD
FROSTBURG, MD 21532-2303
T 301.687.4111
F 301.687.7070

May 7, 2025

Chancellor Jay A. Perman, MD
University System of Maryland
3300 Metzerott Rd.
Adelphi, MD 20783

Dear Chancellor Perman,

The purpose of this proposal is to request an exception to the provisions of Section VI of the Policy on Undergraduate Admissions (III-4.00) to allow Frostburg State University to exceed the 30% cap on out-of-state undergraduate students. The increase and size of the out-of-state enrollment is due to a longstanding and successful international partnership in China. Our students in China are enrolled in two FSU programs and are taught by our faculty in China. The partnership's success and growth has had the unexpected result that FSU is at 29% out-of-state for the undergraduate student population. Approximately 53% of our out-of-state students are part of this international partnership.

Frostburg remains dedicated to prioritizing Maryland residents. The increase in the percentage of out-of-state undergraduate enrollment does not and will not displace qualified in-state applicants or reduce access for Maryland students. We are committed to increasing enrollment with Maryland students first and foremost and recognize that growth in enrollment is necessary to gain operational efficiency and better utilize campus facilities.

Our enrollment decline has been a result of the population decline and changing demographics in Western Maryland. Enrollment decreased most notably with Maryland students. Frostburg must pursue all enrollment opportunities as the competition for a reduced number of Western Maryland students intensifies and as some institutions in neighboring states adjust their tuition rates to attract more Maryland students. To combat these trends, FSU is making major investments in our admissions office and building our marketing/advertising capacity. In addition to addressing Maryland market share, Frostburg looked to diversify enrollment with out-of-state enrollment.

This request for an exception is for five years (though 2030) while Frostburg seeks to improve Maryland enrollment and simultaneously pursues strategic opportunities for out-of-state enrollment. It is the strategic goal of the university to both grow enrollment and balance it within the Board expectations. Improving enrollment from our targeted market segments will have a positive impact.

Frostburg respectfully requests approval for an exception to the 30% out-of-state student cap outlined in Policy III-4.00 while it rebuilds enrollment. We are establishing a dedicated self-sustaining cost-center model for our international partnerships. Proceeds (i.e., net revenue) will support strategies to enhance "domestic" recruitment, support faculty/staff development, grow the Honors program, improve student labs and invest in other one-time initiatives to improve student success, grow enrollments and strengthen the university.

This exception will allow the institution to address pressing financial and enrollment needs, while enhancing diversity, academic quality, and overall contributions to the University System of Maryland and the state.

Thank you once again and please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

Darlene Brannigan Smith

Darlene Brannigan Smith, PhD
Interim President

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University System of Maryland III-6.10 Policy on Course Numbers

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The University System of Maryland (USM) Policy on Course Numbers (III-6.10) aligns with State policy on the numbering of developmental non-degree courses, as well as with the expectations and practices of institutions across the country. Since the policy was written in the 1990s, student information systems (SIS) have evolved. These SIS manage course catalogs and registrations. Some institutions in the state and across the country, both two-year and four-year, have moved to SIS that require four-digit course numbers. In addition, large institutions that have very large programs that might offer many course options, some that are temporary special topics, will use many course numbers. As curricula evolve, more course numbers are used.

The attached proposed amendments to the policy allow for USM institutions to use SIS that require four digits. The amendments continue to align with State policy and practice, as well as with registrar practices across the country. At least one Maryland community college has moved to a similar system and uses the same numbering logic.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the proposal to amend the Policy on Course Numbers as indicated in the attached.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

III-6.10 - POLICY FOR THE NUMBERING OF ACADEMIC COURSES

(Approved by the Board of Regents, January 11, 1990; Technical amendments by the Board, December 12, 2014); amended [June], 2025.

Academic courses offered at institutions in the University System of Maryland shall be numbered according to one of the following schemes, depending on institutional preferences:

Option One:

000-099	Non-degree-credit Courses
100-299	Lower--Division Courses, primarily for Freshmen and Sophomores
300-499	Upper--Division Courses, primarily for Juniors and Seniors;
	400-499 courses may be available for credit toward some graduate degrees
500-899	Post-baccalaureate Courses
900-999	Post-doctoral Courses

Option Two:

0000 - 0999	Non-degree-credit Courses
1000 - 2999	Lower-Division Courses, primarily for Freshmen and Sophomores
3000 - 4999	Upper-Division Courses, primarily for Juniors and Seniors;
	4000-4999 courses may be available for credit toward some graduate degrees
5000 - 8999	Post-baccalaureate Courses
9000 - 9999	Post-doctoral Courses

~~Replacement for: BOT XI-F~~

~~**III-6.10**~~

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: University System of Maryland III-5.00 Policy on Academic Calendar

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The University System of Maryland (USM) Policy on Academic Calendar has not been updated for over 20 years. During that time, there have been federal regulatory changes that provide some additional flexibility in academic scheduling, which helps universities that have a fall commencement complete the semester before December 23 without starting in mid-August. There have also been changes in course delivery; "distributed learning" is a much broader umbrella now, and many campus-based, largely in-person courses have online components. The 2001 policy fundamentally exempted most UMGC courses by excluding distributed learning courses from the policy, but UMGC programs have much more company now in various distance education spaces.

The recommended policy amendments bring the policy in line with current technology, as well as with USM implementation practice. In some years, for example, there have been Option A and B start dates to accommodate universities' differences because they have or do not have fall commencement. While two options may not be needed, the amendment would formally allow this practice. Fall recess has been intensely discussed on USM campuses, but different campus needs have meant there is no universal desire for fall recess; however, universities would like it to be allowed by policy rather than exception. More generally, the policy as proposed balances the benefits of a common calendar with flexibility to meet university needs.

ALTERNATIVE(S): The Regents may not approve the program or may request further information.

FISCAL IMPACT: No additional funds are required. The program can be supported by the projected tuition and fee revenue.

CHANCELLOR'S RECOMMENDATION: That the Education Policy and Student Life and Safety Committee recommend that the Board of Regents approve the proposal to amend the Policy on Academic Calendar as indicated in the attached.

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

III-5.00 - POLICY ON ACADEMIC CALENDAR

(Approved by the Board of Regents, January 11, 1990; Amended by the Board of Regents, June 10, 1994; amended December 1, 1995; amended April 6, 2001; amended [June, 2025])

1. All institutions of the University System of Maryland will follow a common academic calendar to assist student planning, facilitate joint and cooperative programs and appointments, simplify student and faculty movement among institutions, and facilitate use of distance education technologies throughout the System.

2. The common academic calendar will provide sufficient time for instruction and examinations as recommended by the Middle States Commission on Higher Education ~~Association~~ and as may be stipulated by state and federal regulations. ~~the Maryland Higher Education Commission.~~ Within the common framework, each president shall be authorized to adjust class time to meet instructional needs.

3. The features of the common calendar will include:

a) a fall semester that ~~which~~ begins before Labor Day~~, except in those calendar years when a start after Labor Day can also accommodate the requirements for class meeting time, interrupted by a recess for Thanksgiving~~ and that has its f~~. ~~The~~ final examination period ~~will~~ conclude ~~on~~ on or before December 23; institutions may opt to offer a brief fall recess;~~.~~

b) a minimum of fourteen instructional days over a three-week period in January available for institutions to use for an academic winter session or, for those institutions which do not plan to offer coursework, an extended winter holiday;~~.~~ and

c) a spring semester interrupted by a one-week common spring break and ~~. The~~ with a final examination period that ~~will~~ concludes prior to

Memorial Day.~~,~~

4. The particular dates for each year's common calendar will be recommended by the Presidents' Council and approved by the Chancellor for publication and dissemination. The academic calendar will be adopted at least two to ~~/~~three years in advance.

5. The Law School at the University of Baltimore, the professional programs in the schools of the University of Maryland, Baltimore, ~~and~~UMGC, ~~distributed learning~~ and cohort programs are exempted from this policy. Institutions may also exempt fully online programs from this policy. Each president shall be authorized to designate the programs to be exempted and adjust class time to meet instructional needs. However, all programs not otherwise constrained by the requirements of professional accrediting bodies or designated as an exempt distributed learning or cohort program should be on the USM common academic calendar.

6. The PresidentséCouncil and Chancellor may allow an Option A and an Option B calendar to be used so institutions have similar calendars but with slight adjustments to accommodate institutional needs.

76. By April 1~~June 1~~ of each year, each institution will provide for the ¸ les of the Of¸ ce of the Chancellor a copy of its detailed academic calendar for the upcoming academic year, including information such as registration periods, drop/add periods, and commencement dates as well as dates for summer sessions. Professional schools~~,~~ and online~~distributed learning~~ and cohort programs exempted from the common academic calendar under provision 5 will provide copies of their academic calendars to the Chancellor's of¸ ce on the same schedule.

Replacement for: BOR I-5.00 and VI-19; BOT XIII-Y

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Policy on Waiver of Tuition and Granting of Other Privileges for Senior Citizens of the State of Maryland

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: The Policy on Waiver of Tuition and Granting of Other Privileges for Senior Citizens of the State of Maryland has been unchanged since 1989. The program is popular on all campuses and has facilitated some inspiring stories. But plastic "Golden ID" cards have not been in use for some years; beneficiaries of the program receive student identification cards. Tthe section on emergency health care needed to be updated to reflect expectations of equitable treatment of students. Appropriate practices were already in place, but the policy was outdated.

Amendments were drafted in collaboration with university registrars and counsel in the Office of the Attorney General.

These proposed amendments will be presented to the Finance Committee on June 4 for consideration and action.

ALTERNATIVE(S): Information Only

FISCAL IMPACT: Information Only

CHANCELLOR'S RECOMMENDATION: Information Only

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Ellen Herbst Alison M. Wrynn	eherbst@usmd.edu awrynn@usmd.edu

UNIVERSITY SYSTEM of MARYLAND

VIII – 2.30 – POLICY ON WAIVER OF TUITION AND GRANTING OF OTHER PRIVILEGES FOR SENIOR CITIZENS OF THE STATE OF MARYLAND

Approved by the Board of Regents November 30, 1989; Amended_____

It is the policy of the University of Maryland System to extend special privileges, where practicable, to senior citizens who are residents of the State of Maryland. The term "senior citizen" includes any individual who is sixty years of age or older, who is retired and whose chief income is derived from retirement benefits, and who is not employed full time. Privileges to be extended to such individuals shall include, subject to certain conditions, waiver of tuition for undergraduate and graduate courses, use of the libraries, and such other privileges as individual institutions shall determine.

I. WAIVER OF TUITION

A. Each institution shall determine the availability of this benefit for self-support programs.

B. The exercise of this privilege shall be on a space available basis, and the institution shall be responsible for determining space availability. A senior citizen shall not be entitled to a waiver of tuition for more than three courses in a single academic semester or term.

C. For purposes of this program, "tuition" is defined as the basic instructional charge for courses and does not include fees, such as those for application, registration, or other mandatory fees. Policies on waiver of fees other than tuition for senior citizens shall be determined by the institution.

D. A senior citizen may enroll in a degree granting program under these policies only if he or she is admissible to that program.

E. The full-time equivalent enrollment of senior citizens for whom tuition is waived shall not exceed two percent of the institution's full-time equivalent undergraduate enrollment.

F. Each institution shall adopt procedures to administer the tuition waiver program under these policies.

G. Each institution shall report to the Chancellor, at the end of each semester or session, for submission to the Board of Regents, the number of senior citizens who have exercised the privilege of tuition waiver.

II. ~~GOLDEN~~ IDENTIFICATION CARD ~~PROGRAM~~ FOR GOLDEN BENEFITS

A. Eligible senior citizens may apply for a ~~Golden~~ Student Identification Card from any institution in the University System, which shall be honored throughout the System. ~~This card shall serve to identify the individual as eligible for any privileges (for example, use of the libraries) that an institution determines to be available to senior citizens. Holders of the Golden Identification Card may be entitled to admission to student events, as determined by the institution.~~

B. Health care facilities or other health care benefits at institutions where they exist shall be made available on the same basis as available to other students. ~~Except for emergencies, the health care facilities at institutions where they exist shall not be available to holders of the Golden Identification Card unless they are enrolled as regular full-time students and have paid the health fee.~~

C. Each institution shall adopt and publicize procedures for, and privileges available under, the Golden Benefits ~~Identification Card P~~program, ~~.~~ including the use and limitations of the identification card.

Replacement for: BOR VI-11.00 and BOT X-C

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Proposed Amendment to USM Policy VIII-2.70 Policy on Student Classification for Admission and Tuition Purposes

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: An amendment to the Policy on Student Classification for Admission and Tuition Purposes is recommended to reflect a change in State law based on the recently passed Educational Equality for Service Members Act (SB 276/HB 600). The new law expands State benefits now reserved for the Armed Forces of the United States to the Uniformed Services, which comprises the Armed Forces, the Public Health Service, and the National Oceanographic and Atmospheric Administration. In parallel, the law alters the definition of veteran. The law also aimed to make citations to Federal law within State law more consistent.

The USM Office of Academic and Student Affairs worked with the Office of the Attorney General to draft the proposed amendments. Legal citations and formal definitions have also been updated. Lastly, the policy has been updated to reflect UMGC policy where it is noted.

These proposed amendments will be presented to the Finance Committee on June 4 for consideration and action.

ALTERNATIVE(S): Information only

FISCAL IMPACT: Information only

CHANCELLOR'S RECOMMENDATION: Information only

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Ellen Herbst 301-445-1923 Alison Wrynn 301-445-1992	eherbst@usmd.edu awrynn@usmd.edu

VIII-2.70—POLICY ON STUDENT CLASSIFICATION FOR ADMISSION AND TUITION PURPOSES

(Approved by the Board of Regents August 28, 1990; Amended July 10, 1998; Amended November 27, 2000; Amended April 11, 2003; Amended June 23, 2006; Amended February 15, 2008; Amended October 24, 2014; Amended April 10, 2015; Amended February 17, 2017; Amended June 16, 2017; Amended April 19, 2019; Amended June 17, 2021; Amended June 17, 2022; Amended June 16, 2023; Amended June 14, 2024; Amended June 13, 2025).

I. POLICY

A. Purpose

To extend the benefits of its system of higher education while encouraging the economical use of the State's resources,[1] it is the policy of the Board of Regents of the University System of Maryland (USM) to recognize the categories of in-state and out-of-state residency for the purpose of admission and assessing tuition at USM institutions.

B. Qualification for In-State Status

Generally, to qualify for in-state status, prospective, returning, or current students must demonstrate that they are permanent Maryland residents. Under certain circumstances, as set forth in this Policy, students who are not permanent Maryland residents may qualify temporarily for in- state status. Students who do not qualify for in-state status under this Policy shall be assigned out- of-state status for admission and tuition purposes.

C. Standard of Proof

Students seeking in-state status shall have the burden of proving by clear and convincing evidence that they satisfy the requirements and standards set forth in this Policy. Assignment of in-state or out-of-state status will be made by each USM institution upon a review of the totality of facts known by the institution or presented to it by the student.

II. DETERMINATION OF RESIDENCY STATUS

A. Criteria for Determination of Residency Status

An initial determination of residency status will be made at the time of admission and readmission based upon information provided by the student with the signed application certifying that the information provided is complete and correct. Additional information may be requested by the institution to clarify facts presented. To qualify for in-state status, the student must demonstrate that for at least 12 consecutive months immediately prior to and including the last date available to register for courses for the semester/term for which the student seeks in-state status, the student had the continuous intent to reside in Maryland indefinitely and for a primary purpose other than that of attending an educational institution in Maryland. The student will demonstrate the requisite intent by satisfying all the following requirements for the 12-month period (or shorter period indicated):

[1] Annotated Code of Maryland, Educ. § 12-101.

1) Has continuously maintained primary living quarters in Maryland.

2) Has substantially all personal property, such as household effects, furniture, and pets, in Maryland.

3) Has paid Maryland income tax on all taxable income, including all taxable income earned outside Maryland, and has filed a Maryland Resident Tax Return. If the student is a dependent for tax purposes, then the person who claims the student as a dependent shall have paid Maryland income tax on all taxable income, including all taxable income earned outside Maryland, and have filed a Maryland Resident Tax Return.

4) Has registered all owned or leased motor vehicles in Maryland for at least 12 consecutive months, if previously registered in another state. Students who have lived in Maryland for at least 12 consecutive months but who have had their motor vehicle(s) registered in Maryland for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their owned or leased motor vehicle(s) was (were) registered in Maryland within 60 days after moving to the state in accordance with Maryland Motor Vehicle Administration requirements.

5) Has possessed a valid Maryland driver's license for at least 12 consecutive months, if previously licensed to drive in another state. Students who have lived in Maryland for at least 12 consecutive months but who have held a Maryland driver's license for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their driver's license was issued in Maryland within 60 days after moving to the state in accordance with Maryland Motor Vehicle Administration requirements.

6) Receives no public assistance from a state other than the State of Maryland or from a city, county, or municipal agency other than one in Maryland.

7) Has the ability under Federal and Maryland law to live permanently and without interruption in Maryland.

B. Presumption of Out-of-State Status

Either of the following circumstances raises a presumption that the student is residing in the State of Maryland primarily for the purpose of attending an educational institution and, therefore, does not qualify for in-state status under this Policy:

1) A student is attending school or living outside Maryland at the time of application for admission to a USM institution, or

2) A student is Financially Dependent on a person who is not a resident of Maryland. A student will be considered Financially Independent if the student provides 50 percent or more of the student's own living and educational expenses and has not been claimed as a dependent on another person's most recent tax returns.

III. CHANGE IN CLASSIFICATION FOR TUITION PURPOSES

A. Petition for Change in Classification for Tuition Purposes

After the initial determination is made, a student seeking a change to in-state tuition status must submit a Petition for Change in Classification for Tuition Purposes that includes all the information the student wishes the institution to consider. All information must be submitted by the institution's deadline for submitting a petition before or within the semester for which the student seeks reclassification. Only one Petition may be filed per semester.

B. Criteria for Changes in Tuition Status

A student seeking reclassification from out-of-state to in-state tuition status must demonstrate, by clear and convincing evidence, that for at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses for the semester/term for which the student seeks in-state tuition status, the student had the continuous intent to

a) make Maryland the student's permanent home;
b) abandon the student's former home state;
c) reside in Maryland indefinitely; and
d) reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

A student will demonstrate the requisite intent by satisfying all the following requirements for a period of at least twelve (12) consecutive months (or for the shorter period of time indicated) immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in-state tuition status. Evidence of intent must be clear and convincing and will be evaluated not only by how completely the criteria are addressed, but also based upon the reliability, authenticity, credibility, and relevance of the evidence and the totality of facts known to the institution. The student must demonstrate (providing appropriate documentation as necessary) that for the relevant period the student:

1) Continuously maintained primary living quarters in Maryland.

2) Has substantially all personal property, such as household effects, furniture, and pets, in Maryland.

3) Has paid Maryland income tax on all taxable income including all taxable income earned outside the state and has filed a Maryland Resident Tax Return. If the student is a dependent for tax purposes, then the person who claims the student as a dependent shall have paid Maryland income tax on all taxable income, including all taxable income earned outside Maryland, and have filed a Maryland Resident Tax Return.

4) Has registered all owned or leased motor vehicles in Maryland for at least 12 consecutive months, if previously registered in another state. Students who have lived in Maryland for at least 12 consecutive months but who have had their motor vehicle(s) registered in Maryland for less than 12 months will be deemed to have satisfied this requirement if they can show evidence that their owned or leased motor vehicle(s) was (were) registered in Maryland within 60 days after moving to the state in accordance with Maryland Motor Vehicle Administration requirements.

5) Has possessed a valid Maryland driver's license for at least 12 consecutive months, if previously licensed to drive in another state. Students who have lived in Maryland for at least 12 consecutive months but who have held a Maryland driver's license for less than 12 months

will be deemed to have satisfied this requirement if they can show evidence that their driver's license was issued in Maryland within 60 days after moving to the state in accordance with Maryland Motor Vehicle Administration requirements.

6) Receives no public assistance from a state other than the State of Maryland or from a city, county, or municipal agency other than one in Maryland.

7) Has the ability under Federal and Maryland law to live permanently without interruption in Maryland.

8) Has either not raised the presumption set forth in Section II.B above; or alternatively, if the student's circumstances have raised the presumption set forth in Section II.B above, the student has rebutted that presumption.

C. Rebuttal Evidence to Support a Change in Tuition Status

If the information received by the institution about the student has raised the presumption set forth in Section II.B, the student bears the burden of rebutting the presumption set forth in Section II.B by presenting additional evidence of objectively verifiable conduct to rebut the presumption and show the requisite intent. Rebuttal evidence of intent must be clear and convincing and will be evaluated not only by how completely the criteria are addressed, but also based upon the reliability, authenticity, credibility and relevance of the evidence and the totality of facts known to the institution.
Evidence that does not document a period of at least twelve (12) consecutive months immediately prior to and including the last date available to register for courses in the semester/term for which the student seeks in- state tuition status is generally considered an unfavorable factor under this Policy. The absence of objective, relevant evidence is generally considered an unfavorable factor. A student's statement of intent to remain in Maryland in the future is generally not considered to be objective evidence under this Policy.
For purposes of rebutting the presumption, additional evidence that will be considered includes, but is not limited to:

1) Source of financial support:
   a. Maryland employment and earnings history through sources beyond those incident to enrollment as a student in an educational institution, e.g., beyond support provided by work study, scholarships, grants, stipends, aid, student loans, etc. (Tuition costs will be considered as a student expense only to the extent tuition exceeds the amount of any educational scholarships, grants, student loans, etc.), or
   b. Evidence the student is Financially Dependent, for the previous 12 months, upon a person who is a resident of Maryland.

2) Substantial participation as a member of a professional, social, community, civic, political, athletic, or religious organization in Maryland, including professionally related school activities that demonstrate a commitment to the student's community or to the State of Maryland.

3) Registration as a Maryland resident with the Selective Service, if applicable.

4) Evidence that the student is married to a Maryland resident.

5) Evidence that the student attended schools in Maryland for grades K-12.

6) Evidence showing the student uses the student's Maryland address as the sole address of record for all purposes, including, for example, on health and auto insurance records, bank accounts, tax records, loan and scholarship records, school records, military records, leases, etc.

7) An affidavit from a person unrelated to the student that provides objective, relevant evidence of the student's conduct demonstrating the student's intent to reside in Maryland primarily for a purpose other than that of attending an educational institution in Maryland.

8) Evidence of life and employment changes that caused the student to relocate to Maryland for reasons other than primarily educational purposes (e.g., divorce, family relocation, taking care of a sick family member, etc.)

9) Voter registration in Maryland.

D. Appeal

A student may appeal an adverse decision on a Petition for Change in Classification.

E. Change in Circumstances Altering In-State Status

A student shall notify the USM institution in writing within fifteen (15) days of any change in circumstances which may alter in-state status. Failure to do so could result in retroactive charges for each semester/term affected.

F. Incomplete, Untimely, False or Misleading Information

If necessary information is not provided by the institution's deadline, the USM institution may, at its discretion, deny or revoke in-state status. In the event incomplete, false, or misleading information is presented, the USM institution may, at its discretion, revoke in-state status and take disciplinary action provided for by the institution's policies. Such action may include suspension or expulsion. In such cases, the institution reserves the right to retroactively assess all out-of-state charges for each semester/term affected.

IV. CRITERIA FOR TEMPORARY QUALIFICATION OF NON-RESIDENTS FOR IN-STATE STATUS

Non-residents with the following status shall be accorded the benefits of in-state status for the period in which they hold such status, if they provide clear and convincing evidence through documentation, by the institution's deadline for the semester for which they seek in-state status, showing that they fall within one of the following categories:

A. A full-time or part-time (at least 50 percent) regular employee of USM or a USM institution.

B. The spouse or Financially Dependent child of a full-time or part-time (at least 50 percent) regular employee of USM or a USM institution.

C. An Active ~~duty~~ Service Member, or the spouse or financially dependent child of an Active Service member,~~members of the Uniformed Services Armed Forces of the United States as defined in 38 U.S.C. § 3319/37 USC §101 as the Commissioned Corps of the National Oceanic and Atmospheric Administration and of the Public Health Service and the Armed Forces of the United States as defined in 38 U.S. C. 101(10) 10 USC §101 as the United States Army, Navy, Marine Corps, Air Force, Space Force, and Coast Guard, including the reserve components thereof,~~ who ~~are~~ is stationed in Maryland, ~~reside~~ currently residing in Maryland, or ~~are~~ is domiciled in Maryland~~, or their spouse or financially dependent children.~~[2] ~~, as provided in § 15-106.4 of the Education Article, Annotated Code of Maryland.~~ Spouses and children who qualify for exemption~~s~~ under this provision will retain in- state status for tuition purposes as long as they are continuously enrolled, regardless of whether the ~~active duty member's~~Active Service Member's station assignment, residence, or domicile remains in Maryland.[3]

D. Veterans currently residing in or domiciled in Maryland ~~of the Armed Forces of the United States~~ who provide documentation that they were honorably discharged ~~and currently reside or are domiciled in Maryland, as provided in § 15-106.4 of the Education Article, Annotated Code of Maryland.~~.[4]

E. Veterans ~~who live in~~currently residing in Maryland and were discharged from a period of at least 90 days of service ~~in the active military, naval, space, or air service~~ and are pursuing a course of education with educational assistance under the Montgomery G.I. Bill ~~®~~[5] ~~®~~[6] (38 U.S.C. Ch. 30) or the Post-9/11 G.I. Bill® (38 U.S.C. Ch. 33), pursuant to 38 U.S.C. § 3679(c). ~~2~~ A veteran so described will continue to retain in-state status if the veteran is using educational benefits under either chapter 30 or chapter 33 of title 38, United States Code, and remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school.

F. Anyone who lives in Maryland, and:

1) Is using transferred Post-9/11 G.I. Bill® benefits (38 U.S.C. § 3319) and enrolls after the transferor's discharge or release from a period of at least 90 days of service in the active military, naval or air service; or
2) Is using transferred Post-9/11 G.I. Bill® benefits (38 U.S.C. § 3319) and the transferor is a member of the uniformed services who is serving on active duty;
3) Is using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) ;

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[2] *See* Md. Code, Education § 15-106.4.
[3] *See* Md. Code, Education § 15-106.4.
[4] *See* Md. Code, Education § 15-106.4.
[5] ~~GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by the VA is available at the official U.S. government Web site at http://www.benefits.va.gov/gibill.~~
[6] GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by the VA is available at the official U.S. government Web site at http://www.benefits.va.gov/gibill.

4) Is using benefits through the Survivors' and Dependents' Educational Assistance Program (DEA), (38 U.S.C. chapter 35) or
5) Is entitled to rehabilitation under 38 U.S.C. § 3102(a).

An individual as described in this Section IV.F will continue to retain in-state status if the individual is using educational benefits under chapter 30, 31, 33, or 35 of title 38, United States Code, and remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school.

G. A member of the Maryland National Guard, as defined in the Public Safety Article of the Annotated Code of Maryland, who joined or subsequently serves in the Maryland National Guard to: (i) provide a critical military occupational skill; or (ii) be a member of the Air Force Critical Specialty Code as determined by the National Guard. (Maryland National Guard members may also qualify if they meet the criteria in section IV.C. above.)[7]

H. For UMGC~~,~~ only, ~~a full-time active member of the Armed Forces of the United States on active duty~~any Active Service member~~,~~ or their spouse or financially dependent child.

I. A graduate assistant appointed through a USM institution for the semester/term of the appointment. Except through prior arrangement, this benefit is available only for enrollment at the institution awarding the assistantship.

J. A full-time public school teacher in the first year of employment by a Maryland local education agency, who resides in Maryland and meets the criteria for a residency waiver in § 15-106.2 of the Education Article, Annotated Code of Maryland.

K. The child of a Maryland public safety employee who is eligible for the Edward T. Conroy and Joan B. Cryor Scholarship under § 18-601(d)(3)(ii) of the Education Article, Annotated Code of Maryland.

L. A person who has completed all service hours in an AmeriCorps Program in Maryland or who has completed a service program under the Maryland Corps Program, pursuant to Title 9, subtitle 28 of the State Government Article, Annotated Code of Maryland, as provided in § 15-106.9 of the Education Article, Annotated Code of Maryland.

M. A person who has been certified by the Director of the Peace Corps as having served satisfactorily as a Peace Corps volunteer and who is domiciled in Maryland, as provided in § 15 106.11 of the Education Article, Annotated Code of Maryland.

N. Individuals, including undocumented immigrants, who do not meet the definition of nonimmigrant alien within the meaning of 8 U.S.C. § 1101(a)(15) and who meet all the criteria in § 15-106.8 of the Education Article, Annotated Code of Maryland.

O. Members of the U.S. Foreign Service who are on active duty for a period of more than 30 days and whose domicile or permanent duty station is in Maryland, and their spouses and dependents. Members and their spouses and dependents who qualify for in-state status will continue to hold

[7] *See* Md. Code, Education § 15-106.4.

in-state status while continuously enrolled at the institution, notwithstanding a subsequent change in the permanent duty station of the member to a location outside Maryland.

P. Citizens of the Federated States of Micronesia, the Republic of the Marshall Islands, or the Republic of Palau, as provided in the Consolidated Appropriations Act, 2024, Pub. L. No. 118-42, Div. G, Title II, § 209(b)(1)(E).

V. ADDITIONAL PROCEDURES

Each USM institution shall develop and publish additional procedures to implement this Policy. Procedures shall provide that upon request, the institution's President or designee has the authority to waive any of the requirements in Sections II or III if it is determined that its application creates an unjust result. These procedures shall be filed with the Office of the Chancellor. The institution may require that a student file a petition under Section III.A and complete the petition process before requesting a waiver under this section.

VI. DEFINITIONS

A. Active Duty means full-time duty in the active service of a uniformed service, and includes full-time training duty, annual training duty, full-time National Guard duty, and attendance, while in the active service, at a school designated as a service school by law or by the Secretary concerned.[8]

B. Active Service Member means an individual who is:
   1) an Active Duty member of the Uniformed Services; or
   2) serving in a Reserve Component of the Uniformed Services on Active Duty orders.[9]

C. Armed Forces means the Army, Navy, Air Force, Marine Corps, Space Force, and Coast Guard.[10]

~~A.~~D. Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the laws of Maryland.

~~B.~~E. Financially Dependent: For the purposes of this Policy, a financially dependent student is one who has been claimed as a dependent on another person's prior year tax returns or is a ward of the State of Maryland.

F. Financially Independent: For the purposes of this Policy, a financially independent student is one who provides 50 percent or more of the F. own living and educational expenses and has not been claimed as a dependent on another person's most recent tax returns.

G. Foreign Service means:

[8] 37 U.S.C. § 101.
[9] Md. Code, State Gov't §9-901.
[10] 10 USC § 101.

i. Chiefs of mission, appointed under section 3942(a)(1) of this title or assigned under section 3982(c) of this title.
ii. Ambassadors at large, appointed under section 3942(a)(1) of this title.
iii. Members of the Senior Foreign Service, appointed under section 3942(a)(1) or 3943 of this title, who are the corps of leaders and experts for the management of the Service and the performance of its functions.
iv. Foreign Service officers, appointed under section 3942(a)(1) of this title, who have general responsibility for carrying out the functions of the Service.
v. Foreign Service personnel, United States citizens appointed under section 3943 of this title, who provide skills and services required for effective performance by the Service.
vi. Foreign national employees, foreign nationals appointed under section 3943 of this title, who provide clerical, administrative, technical, fiscal, and other support at Foreign Service posts abroad.
vii. Consular agents, appointed under section 3943 of this title by the Secretary of State, who provide consular and related services as authorized by the Secretary of State at specified locations abroad where no Foreign Service posts are situated.[11]

~~Guardian: A guardian is a person so appointed by a court order recognized under the laws of the State of Maryland.~~

Regular Employee: A regular employee is a person employed by USM or a USM institution who is assigned to a State budget line or who is otherwise eligible to enroll in a State retirement system. Examples of categories NOT considered regular employees are graduate students, contingent employees, and independent contractors.

H.

I. Reserve Component means:
i. the Army National Guard of the United States;
ii. the Army Reserve;
iii. the Navy Reserve;
iv. the Marine Corps Reserve;
v. the Air National Guard of the United States;
vi. the Air Force Reserve;
vii. the Coast Guard Reserve; or
~~i.~~ the Reserve Corps of the Public Health Service.[12]

~~Parent: A parent may be a natural parent, or, if established by a court order recognized under the laws of the State of Maryland, an adoptive parent.~~

~~Guardian: A guardian is a person so appointed by a court order recognized under the laws of the State of Maryland.~~

J. Spouse: A spouse is a partner in a legally contracted marriage.

~~J.~~

[11] 22 U.S.C. § 3903.
[12] 37 U.S.C. § 101.

~~Child: A child is a natural child or a child legally adopted pursuant to a court order recognized under the laws of Maryland.~~

~~Regular Employee: A regular employee is a person employed by USM or a USM institution who is assigned to a State budget line or who is otherwise eligible to enroll in a State retirement system. Examples of categories NOT considered regular employees are graduate students, contingent employees, and independent contractors.~~

~~Continuous Enrollment for undergraduate, graduate, and professional students is defined by the institution in accordance with institutional and program requirements.~~

K.

~~K. Armed Forces of the United States: As defined in 38 U.S.C. § 101(10) , the United States Army, Navy, Marine Corps, Air Force, Space Force, and Coast Guard, including the reserve components thereof.~~

~~L.~~ Uniformed Services ~~of the United States:~~ means ~~the~~ Armed Forces and the Commissioned Corps of the National Oceanic and Atmospheric Administration and of the Public Health Service.[13]

~~J.~~

~~Foreign Service of the United States: as defined in 22 U.S.C. § 3903.~~

L.

Veteran has the meaning stated in 38 U.S.C. § 101, which is person who served in the active military naval, air, or space service, and who was discharged or released therefrom under conditions other than dishonorable. Under this Policy, "Veteran" shall also include an individual who served on Active Duty in the Uniformed Services and was honorably discharged.

[13] 37 U.S.C. § 101.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS
SUMMARY OF ITEM FOR ACTION, INFORMATION, OR DISCUSSION

TOPIC: Policy on Refunds to Students who Withdraw from All Courses or the Institution for Extenuating Circumstances

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: May 15, 2025

SUMMARY: In 2024, the General Assembly passed the Cameron Carden Act, (Education Article, Anno. Code of MD, Section 15–138). The law requires each degree-granting institution to have a policy that authorizes a student to withdraw from all courses at the institution for a certain semester, or to withdraw from the institution, under extenuating circumstances. That policy must provide, if warranted, for the student to receive a refund for tuition and fees paid by the student for the semester in which the withdrawal occurs if the extenuating circumstances inhibit the student's ability to acquire an education at the institution.

The attached draft policy conforms to the requirements of the law and provides a framework for USM institutions to have their own policies and procedures. Among other things, the policy requires that students provide documentation of the extenuating circumstances that impact the student's ability to acquire an education.

This policy received extensive feedback during the drafting process, and all language has been reviewed by counsel in the Office of the Attorney General.

This proposed policy will be presented to the Finance Committee on June 4 for consideration and action.

ALTERNATIVE(S): Information Only

FISCAL IMPACT: Information Only

CHANCELLOR'S RECOMMENDATION: Information Only

COMMITTEE RECOMMENDATION:	DATE:
BOARD ACTION:	DATE:
SUBMITTED BY: Ellen Herbst Alison M. Wrynn	eherbst@usmd.edu awrynn@usmd.edu

VIII—22.00—POLICY ON REFUNDS TO STUDENTS WHO WITHDRAW FROM ALL COURSES OR THE INSTITUTION FOR EXTENUATING CIRCUMSTANCES

(Approved by the Board of Regents _____).

I. In compliance with the Cameron Carden Act of 2024 (Education Article, Anno. Code of MD, Section 15–138), each degree-granting institution within the University System of Maryland (USM) shall have a policy that authorizes a student to withdraw from all courses at the institution for a certain semester, or withdraw from the institution, under extenuating circumstances and that provides, if warranted, for the student to receive a refund for tuition and fees paid by the student for the semester in which the withdrawal occurs if the extenuating circumstances inhibit the student's ability to acquire an education at the institution.

II. Definitions:

a. "Extenuating circumstances" include serious illness, injury, hospitalization, and impairments to the mental health or wellness of the student.

b. "Inhibit a student's ability to acquire an education at the institution" means, in the semester of withdrawal, a student is not able to complete any of the credits in which the student was enrolled because of extenuating circumstances. This does not include situations in which the student is able to complete one or more credits or courses through an incomplete.

c. "Paid by the student" means funds provided by the student or on behalf of the student from sources other than grants, scholarships, tuition remission, or other third-party student support contract payments as referenced in BOR VIII-2.20.

d. "Tuition and fees" means "tuition" as defined in BOR VIII-2.01, and "fees" means fees required to be paid by all students as described in BOR VII-2.50.

III. Each institution's policy or procedures shall ensure the following:

a. That the student who withdraws provides relevant documentation, as determined by the institution, of the extenuating circumstances that inhibit the student's ability to acquire an education at the institution;

b. Publication of the process the student must follow to initiate a withdrawal and to request a refund based on extenuating circumstances that inhibit the student's ability to acquire an education at the institution;

c. Minimization of the negative financial impact on students for withdrawing under extenuating circumstances that inhibit the student's ability to acquire an education at the institution; and

d. Provision of a mechanism for students whose tuition would have been covered by tuition remission to appeal a charge based on extenuating circumstances;

IV. Each institution shall develop an appeal process as part of policy implementation.

TOPIC: Campus Safety and Security – Report

COMMITTEE: Education Policy and Student Life and Safety

DATE OF COMMITTEE MEETING: Thursday, May 15, 2025

SUMMARY: Campus safety and security are daily concerns for students, faculty, staff, and families across the nation. The USM has recently addressed this issue during a state-wide safety summit, the BOR retreat, and safety vignettes during full Board of Regents meetings. The compiling and sharing of the following data add to our knowledge base.

The data included in this report are required by the Clery Act and the Higher Education Opportunity Act and are submitted annually by all postsecondary institutions that receive Title IV (federal student aid programs) funding. Additionally, the Department of Education requires that, by October 1 of each year, these institutions publish and distribute an annual campus security report to all current students and employees. The statistics represent alleged criminal offenses reported to campus security authorities and/or local police agencies and do not necessarily reflect prosecutions or convictions. And although the crime data reported by the institutions have not been subjected to independent verification, at this time, this is an important measure of campus safety and security.

The tables on crime reports by institution include criminal offenses, arrests, and campus disciplinary actions for violations that occurred in the following Clery geography: on-campus, noncampus, and public property. In addition to total number of reported incidents, the tables provide a rate that reflects the total number of incidents per 1,000 students. A trend table showing five years of system-wide data (total number of incidents in each category) is also included.

ALTERNATIVE(S): This is an information item.

FISCAL IMPACT: This is an information item.

CHANCELLOR'S RECOMMENDATION: This is an information item.

COMMITTEE RECOMMENDATION: Information Only	DATE: May 15, 2025
BOARD ACTION:	DATE:
SUBMITTED BY: Alison M. Wrynn 301-445-1992	awrynn@usmd.edu

2025 Campus Crime Report
May 15, 2025
Summary

Campus safety and security are perennial topics of concern for those on college and university campuses, prospective families and students, and other stakeholders. The extent to which one will be or feel safe on campus is a factor many weigh when deciding where and whether they or their loved ones will pursue a postsecondary education. Safety is also inextricably tied to student success.

The United States Department of Education provides data to help keep the public informed. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (1990) requires all postsecondary institutions that receive Title IV (federal student aid programs) funding to disclose campus crime statistics and security information. These publicly available data represent alleged criminal offenses reported to campus security authorities and/or local police agencies and do not necessarily reflect prosecutions or convictions. The Department of Education also requires that, by October 1 of each year, these institutions publish and distribute an annual campus security report to all current students and employees.

The University System of Maryland (USM) Campus Crime Report compiles and presents those data as one measure of the safety and security of our institutions. The following tables offer statistics on a variety of criminal offenses, arrests, and campus disciplinary actions for violations that occurred on-campus, as well as in noncampus settings and on public property adjacent to campus as reported under Clery. In addition to the total number of reported incidents, the tables provide rates that reflect the number of incidents per 1,000 students. The following report includes:

- A trend table showing system-wide data from 2020 through 2023
- Information by institution for the most recent three years available – 2023, 2022, and 2021

National* and USM Data Comparisons of 2023 to 2022 and Pre-Pandemic (2019) Levels

(**5,673 institutions*)

Criminal Offenses (murder/non-negligent manslaughter, negligent manslaughter, rape, fondling, incest, statutory rape, robbery, aggravated assault, burglary, motor vehicle theft, and arson)

Nationally
- Increase over 2022
- Highest since 2011
- Above pre-pandemic level

USM
- Increase over 2022
  - Specific increases over 2022: murder/non-negligent manslaughter, rape, fondling, robbery, motor vehicle theft, arson
- Highest in at least five years
- Above pre-pandemic level

Arrests and Disciplinary Actions for weapons, drug, and liquor law violations

Nationally
- Decrease from 2022; steady decreases annually since 2005
- Well below pre-pandemic level

Sources:
https://rems.ed.gov/IHECleryAct.aspx
https://ope.ed.gov/campussafety/#/

USM
- Decrease from 2022
  - Liquor law violations significant decrease; drug abuse violations slight decrease; weapons violations slight increase
- Well below pre-pandemic level

Hate Crimes

Nationally
- Significant increase over 2022 (from 2,076 to 2,676)
- Well above pre-pandemic level
- Highest since 2005 (previous high in 2016 with 1,309 hate crimes)

USM
- Increase over 2022 (from 4 to 11)
- Above pre-pandemic level; second highest in last 10 years (14 in 2016)

Violence Against Women Act Violations (VAWA; domestic violence; dating violence; stalking)

Nationally and USM
- Increase over 2022
- Above pre-pandemic level

As the Department of Education notes on its website, these crime data are reported by the institutions and have not been subjected to independent verification. However, the Department conducts audits into institutions' compliance with Clery. Reviews are initiated when a complaint is received, a media event raises concerns, a school's independent audit identifies areas of noncompliance, or for other reasons. Institutions found out-of-compliance (often after lengthy investigations) can be assessed fines and lose federal funding. Reporting requirements include, but are not limited to:

1. Collecting and sharing crime statistics and disclosing security-related policies;
2. The issuance of campus alerts (timely warmings and emergency notifications);
3. The publication of an annual security report;
   and
4. Maintenance of a daily crime log.

In addition to these federal safeguards, the USM Office of Internal Audit conducts audits to verify that our institutions are in compliance with Clery/Department of Education guidelines. Since 2021, Internal Audit has completed Jeanne Clery Act audits or follow-ups on five (5) institutions. Three (3) are currently in process, and another is planned for 2025. When conducting audits, where there are violations, the auditors conduct follow-up audits to determine the institutions' responses to recommendations and annually assess each institution's need for another full audit. This information is provided in detailed reports to the Chancellor and summarized reports for the Audit Committee of the Board of Regents.

These layers of review are important to the process. Ultimately, administrators know that Clery Act compliance is crucial, and keeping up with it is a year-round obligation. Campus officials work consistently to ensure the safety and security of our campus communities while appropriately tracking, disclosing, submitting, and publishing the information required by law and due to the public.

Sources:
https://rems.ed.gov/IHECleryAct.aspx
https://ope.ed.gov/campussafety/#/

System-Wide Attention to Campus Safety and Security

Maryland Higher Education Commission Campus Safety Grant Program

In Spring 2024, the Maryland Higher Education Commission (MHEC) announced the availability of $25,000,000 under the FY 2025 Campus Safety Grant Program for the award period of July 1, 2024 to June 30, 2025. This program was designed to provide Maryland colleges and universities with support to make security enhancements to their campuses. Application requests ranged from $100,000 to a maximum of $5,000,000 for FY 2025 for one-time funding for the purpose of implementing or enhancing campus safety and security initiatives. Applications were due in May 2024, and in August, it was announced that $18.75 million was distributed to 36 institutions, including all 12 USM institutions. A report of outputs and outcomes will be shared during the 2025-2026 academic year.

USM Stakeholder Groups

Campus safety and security are regular agenda items for many stakeholder groups convened by University System of Maryland Office staff. Those stakeholder groups include, but are not limited to university presidents, provosts, vice presidents for student affairs, chiefs of police, and enterprise risk management leadership. Formally, USM's Policy on Enterprise Risk Management requires that, "Management periodically assesses potential risks and exposures, evaluates the probability and the impact of each and where appropriate, adopts risk mitigation strategies" and expects that USM institutions, "Establish an ongoing system of risk management appropriate to the institution's mission and strategic initiatives. The policy also sets periodic reporting expectations and processes for reporting key risk items". Risks to safety and security are considered and addressed by these stakeholders.

Stop Campus Hazing Act

The Stop Campus Hazing Act amends a portion of the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act and also changes the name of the act to the "Jeanne Clery Campus Safety Act", representing the Act's evolution in addressing broad campus safety needs. The amendment requires each institution of higher education to disclose hazing incidents that were reported to campus security authorities or local police agencies in its annual security report. The act defines the term *hazing* to mean any intentional, knowing, or reckless act committed by a person (whether individually or in concert with other persons) against another person or persons regardless of the willingness of such other person or persons to participate, that (1) is committed in the course of an initiation into, an affiliation with, or the maintenance of membership in, a student organization (e.g., a club, athletic team, fraternity, or sorority); and (2) causes or creates a risk, above the reasonable risk encountered in the course of participation in the institution or the organization, of physical or psychological injury. Additionally, each institution must include in its annual security report (1) a statement of current policies relating to hazing, how to report hazing incidents, the process used to investigate hazing incidents, and information on applicable laws on hazing; and (2) a statement of policy regarding prevention and awareness programs relating to hazing that includes a description of prevention programs. Further, if an institution has a finding of a hazing violation, the institution must develop a campus hazing transparency report that summarizes findings concerning any student organization found to be in violation of the IHE's standards of conduct relating to hazing.

In place before these recent federal changes, Maryland's anti-hazing law (§3-607) makes hazing a misdemeanor punishable by up to 6 months in prison, a fine of up to $500, or both. USM institutions already had important and effective anti-hazing policies, procedure, and education in place, and they are ensuring their work complies with federal law.

Sources:
https://rems.ed.gov/IHECleryAct.aspx
https://ope.ed.gov/campussafety/#/

Crime Report Summary Data ~ 2020-2023
University System of Maryland Totals

Criminal Offenses - On-Campus, Noncampus, and Public Property

	2020		2021		2022		2023	
USM Population	**170,180**		**164,851**		**162,622**		**166,798**	
	Number and Rate per 1,000 Across the USM							
	No.	**Rate**	**No.**	**Rate**	**No.**	**Rate**	**No.**	**Rate**
Murder/Non-Negligent Manslaughter	1	0.01	0	0.00	0	0.00	2	0.01
Negligent Manslaughter	0	0.00	0	0.00	0	0.00	0	0.00
Rape*	38	0.22	54	0.32	56	0.34	67	0.40
Fondling*	21	0.12	28	0.16	33	0.20	41	0.25
Incest*	0	0.00	0	0.00	0	0.00	0	0.00
Statutory Rape*	0	0.00	0	0.00	0	0.00	0	0.00
Robbery	35	0.20	9	0.05	15	0.10	19	0.11
Aggravated Assault	37	0.21	36	0.22	70	0.43	52	0.31
Burglary	79	0.46	70	0.42	46	0.28	34	0.20
Motor Vehicle Theft	69	0.40	54	0.32	78	0.48	235	1.41
Arson	2	0.01	8	0.04	4	0.02	5	0.03
Criminal Offenses Totals	282	1.66	259	1.57	302	1.86	455	2.73
Weapons Possession Violations	24	0.14	18	0.11	24	0.15	28	0.17
Drug Abuse Violations	134	0.78	127	0.77	182	1.12	174	1.04
Liquor Law Violations	523	3.07	725	4.40	519	3.19	395	2.37
Weapons, Drug Abuse, and Liquor Law Arrests and Disciplinary Actions	681	4.00	870	5.28	725	4.46	597	3.58
Hate Crimes (All Offenses)	5	0.02	6	0.03	4	0.02	11	0.07
VAWA Offenses** (domestic violence; dating violence; stalking)	59	0.34	96	0.58	107	0.66	138	0.83

Fall HC Enrollment is statewide; All rates are in terms of total number of incidents per 1,000 students.
***Starting with 2014 statistics, these offenses replaced "forcible" and "non-forcible" sex offenses.**
****Collection of VAWA offenses began with the 2014 statistics and includes domestic violence, dating violence, and stalking.**
*****Totals include all Clery geography: on-campus, noncampus, and public property.**

Incidents Reported in Campus Crime Reports
2023***

Criminal Offenses - On-Campus, Noncampus, and Public Property

		Murder & Non-Negligent Manslaughter		Negligent Manslaughter		Rape*		Fondling*		Incest*		Statutory Rape*		Robbery		Aggravated Assault		Burglary		Motor Vehicle Theft		Arson	
Institution	Fall HC Enrollment	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
BSU	6,408	0	0.00	0	0.00	2	0.31	3	0.47	0	0.00	0	0.00	3	0.47	10	1.56	4	0.62	3	0.47	0	0.00
CSU	2,101	0	0.00	0	0.00	1	0.48	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.48	6	2.86	0	0.00
FSU	4,075	1	0.25	0	0.00	4	0.98	2	0.49	0	0.00	0	0.00	0	0.00	4	0.98	0	0.00	0	0.00	0	0.00
SU	7,030	0	0.00	0	0.00	3	0.43	6	0.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	3	0.43
TU	19,527	0	0.00	0	0.00	10	0.51	7	0.36	0	0.00	0	0.00	2	0.10	11	0.56	5	0.26	6	0.30	1	0.05
UBalt	3,101	1	0.32	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.32	2	0.64	1	0.32	14	4.51	0	0.00
UMB	6,667	0	0.14	0	0.00	3	0.45	0	0.00	0	0.00	0	0.00	3	0.45	11	1.65	0	0.00	45	6.75	0	0.00
UMBC	14,148	0	0.00	0	0.00	15	1.06	7	0.49	0	0.00	0	0.00	0	0.00	0	0.00	6	0.42	19	1.34	0	0.00
UMCP	40,813	0	0.00	0	0.00	25	0.61	15	0.37	0	0.00	0	0.00	8	0.20	9	0.22	12	0.29	141	3.45	1	0.02
UMES	2,844	0	0.00	0	0.00	4	1.41	1	0.35	0	0.00	0	0.00	1	0.35	4	1.41	5	1.76	0	0.00	0	0.00
UMGC	60,084	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.02	1	0.02	0	0.00	1	0.02	0	0.00

Arrests and Disciplinary Actions - On-Campus, Noncampus, and Public Property

		On-Campus Arrests							Disciplinary Actions					
		Weapons Possession		Drug Abuse Violations		Liquor Law Violations			Weapons Possession		Drug Abuse Violations		Liquor Law Violations	
Institution	Fall HC Enrollment	No.	Rate	No.	Rate	No.	Rate		No.	Rate	No.	Rate	No.	Rate
BSU	6,408	1	0.16	21	3.28	1	0.16		2	0.31	61	9.52	6	0.94
CSU	2,101	0	0.00	0	0.00	0	0.00		0	0.00	17	8.09	9	4.29
FSU	4,075	1	0.25	0	0.00	0	0.00		7	1.72	42	10.31	31	7.61
SU	7,030	0	0.00	0	0.00	0	0.00		3	0.43	0	0.00	117	16.6
TU	19,527	1	0.05	3	0.15	4	0.20		0	0.00	12	0.61	57	2.92
UBalt	3,101	5	1.61	1	0.32	0	0.00		0	0.00	0	0.00	0	0.00
UMB	6,667	5	0.75	2	0.30	0	0.00		0	0.00	0	0.00	0	0.00
UMBC	14,148	0	0.00	1	0.07	0	0.00		0	0.00	0	0.00	59	4.17
UMCP	40,813	3	0.07	2	0.05	1	0.02		0	0.00	6	0.15	101	2.47
UMES	2,844	0	0.00	0	0.00	0	0.00		0	0.00	6	2.11	9	3.16
UMGC	60,084	0	0.00	0	0.00	0	0.00		0	0.00	0	0.00	0	0.00

Fall HC Enrollment is statewide; All rates are in terms of total number of incidents per 1,000 students.
***Starting with 2014 statistics, these offenses replaced "forcible" and "non-forcible" sex offenses.**
****Collection of VAWA offenses began with the 2014 statistics and includes domestic violence, dating violence, and stalking.**
*****Totals include all Clery geography: on-campus, noncampus, and public property.**

Incidents Reported in Campus Crime Reports
2023 (con't)***

Hate Crimes - On-Campus, Noncampus, and Public Property

		All Offenses	
Institution	Fall HC Enrollment	No.	Rate
BSU	6,408	0	0.00
CSU	2,101	0	0.00
FSU	4,075	0	0.00
SU	7,030	0	0.00
TU	19,527	1	0.05
UBalt	3,101	0	0.00
UMB	6,667	0	0.00
UMBC	14,148	2	0.14
UMCP	40,813	8	0.20
UMES	2,844	0	0.00
UMGC	60,084	0	0.00

Hate crime offenses include murder/non-negligent manslaughter, rape, fondling, incest, statutory rape, robbery, aggravated assault, burglary, motor vehicle theft, arson, simple assault, larceny-theft, intimidation, and destruction/damage/vandalism of property.

VAWA Offenses - On-Campus, Noncampus, and Public Property

		All Offenses	
Institution	Fall HC Enrollment	No.	Rate
BSU	6,408	9	1.40
CSU	2,101	6	2.86
FSU	4,075	5	1.23
SU	7,030	10	1.42
TU	19,527	18	0.92
UBalt	3,101	1	0.32
UMB	6,667	9	1.35
UMBC	14,148	33	2.33
UMCP	40,813	38	0.93
UMES	2,844	9	3.16
UMGC	60,084	0	0.00

Fall HC Enrollment is statewide; All rates are in terms of total number of incidents per 1,000 students.
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Incidents Reported in Campus Crime Reports
2022***

Criminal Offenses - On-Campus, Noncampus, and Public Property

		Murder & Non-Negligent Manslaughter		Negligent Manslaughter		Rape*		Fondling*		Incest*		Statutory Rape*		Robbery		Aggravated Assault		Burglary		Motor Vehicle Theft		Arson	
Institution	Fall HC Enrollment	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
BSU	6,275	0	0.00	0	0.00	3	0.48	3	0.48	0	0.00	0	0.00	0	0.00	27	4.30	12	1.91	0	0.00	0	0.00
CSU	2,006	0	0.00	0	0.00	1	0.50	0	0.00	0	0.00	0	0.00	1	0.50	6	2.99	1	0.50	0	0.00	0	0.00
FSU	4,067	0	0.00	0	0.00	1	0.24	3	0.73	0	0.00	0	0.00	1	0.24	1	0.24	0	0.00	0	0.00	0	0.00
SU	7,123	0	0.00	0	0.00	7	0.48	5	0.70	0	0.00	0	0.00	0	0.00	0	0.00	2	0.28	1	0.14	0	0.00
TU	19,793	0	0.00	0	0.00	11	0.56	3	0.15	0	0.00	0	0.00	1	0.05	4	0.20	11	0.56	5	0.25	0	0.00
UBalt	3,288	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	0.61	1	0.30	0	0.00	2	0.61	0	0.00
UMB	6,931	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	0.87	9	1.30	1	0.14	12	1.73	1	0.14
UMBC	13,991	0	0.00	0	0.00	11	0.79	8	0.57	0	0.00	0	0.00	1	0.07	2	0.14	4	0.29	1	0.07	2	0.14
UMCP	40,792	0	0.00	0	0.00	19	0.47	10	0.25	0	0.00	0	0.00	2	0.05	18	0.44	11	0.27	53	1.30	1	0.02
UMES	2,518	0	0.00	0	0.00	2	0.79	1	0.40	0	0.00	0	0.00	0	0.00	0	0.00	2	0.79	0	0.00	0	0.00
UMGC	55,838	0	0.00	0	0.00	1	0.02	0	0.00	0	0.00	0	0.00	1	0.02	2	0.04	2	0.04	4	0.07	0	0.00

Arrests and Disciplinary Actions - On-Campus, Noncampus, and Public Property

		On-Campus Arrests							Disciplinary Actions					
		Weapons Possession		Drug Abuse Violations		Liquor Law Violations			Weapons Possession		Drug Abuse Violations		Liquor Law Violations	
Institution	Fall HC Enrollment	No.	Rate	No.	Rate	No.	Rate		No.	Rate	No.	Rate	No.	Rate
BSU	6,275	0	0.00	0	0.00	0	0.00		7	1.12	83	13.23	28	4.46
CSU	2,006	2	1.00	0	0.00	0	0.00		1	0.50	15	7.48	7	3.49
FSU	4,067	2	0.49	0	0.00	0	0.00		0	0.00	50	12.29	25	6.15
SU	7,123	1	0.14	0	0.00	2	0.28		1	0.14	0	0.00	137	19.23
TU	19,793	2	0.10	4	0.20	0	0.00		0	0.00	3	0.15	81	4.09
UBalt	3,288	1	0.30	0	0.00	0	0.00		0	0.00	1	0.30	0	0.00
UMB	6,931	5	0.72	2	0.29	0	0.00		0	0.00	0	0.00	0	0.00
UMBC	13,991	1	0.07	0	0.00	0	0.00		0	0.00	0	0.00	43	3.07
UMCP	40,792	1	0.02	13	0.32	0	0.00		0	0.00	1	0.02	186	4.56
UMES	2,518	0	0.00	0	0.00	0	0.00		0	0.00	10	3.97	10	3.97
UMGC	55,838	0	0.00	0	0.00	0	0.00		0	0.00	0	0.00	0	0.00

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Incidents Reported in Campus Crime Reports
2022 (con't)***

Hate Crimes - On-Campus, Noncampus, and Public Property

		All Offenses	
Institution	Fall HC Enrollment	No.	Rate
BSU	6,275	0	0.00
CSU	2,006	0	0.00
FSU	4,067	0	0.00
SU	7,123	1	0.14
TU	19,793	1	0.05
UBalt	3,288	0	0.00
UMB	6,931	0	0.00
UMBC	13,991	1	0.07
UMCP	40,792	1	0.02
UMES	2,518	0	0.00
UMGC	55,838	0	0.00

Hate crime offenses include murder/non-negligent manslaughter, rape, fondling, incest, statutory rape, robbery, aggravated assault, burglary, motor vehicle theft, arson, simple assault, larceny-theft, intimidation, and destruction/damage/vandalism of property.

VAWA Offenses - On-Campus, Noncampus, and Public Property

		All Offenses	
Institution	Fall HC Enrollment	No.	Rate
BSU	6,275	12	1.91
CSU	2,006	4	1.99
FSU	4,067	5	1.23
SU	7,123	5	0.70
TU	19,793	24	1.21
UBalt	3,288	2	0.61
UMB	6,931	7	1.01
UMBC	13,991	27	1.92
UMCP	40,792	15	0.37
UMES	2,518	6	2.38
UMGC	55,838	0	0.00

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Incidents Reported in Campus Crime Reports
2021***

Criminal Offenses - On-Campus, Noncampus, and Public Property

		Murder & Non-Negligent Manslaughter		Negligent Manslaughter		Rape*		Fondling*		Incest*		Statutory Rape*		Robbery		Aggravated Assault		Burglary		Motor Vehicle Theft		Arson	
Institution	Fall HC Enrollment	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
BSU	6,308	0	0.00	0	0.00	5	0.79	5	0.79	0	0.00	0	0.00	0	0.00	0	0.00	11	1.74	1	0.15	0	0.00
CSU	2,101	0	0.00	0	0.00	2	0.95	0	0.00	0	0.00	0	0.00	2	0.95	0	0.00	5	2.37	2	0.95	0	0.00
FSU	4,449	0	0.00	0	0.00	2	0.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
SU	7,568	0	0.00	0	0.00	2	0.26	6	0.79	0	0.00	0	0.00	1	0.13	4	0.53	8	1.01	0	0.00	0	0.00
TU	20,856	0	0.00	0	0.00	10	0.47	5	0.23	0	0.00	0	0.00	0	0.00	5	0.23	12	0.58	0	0.00	0	0.00
UBalt	3,710	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	0.53	0	0.00	0	0.00	0	0.00
UMB	7,244	0	0.00	0	0.00	1	0.13	1	0.13	0	0.00	0	0.00	5	0.69	7	0.96	1	0.13	9	1.24	0	0.00
UMBC	13,638	0	0.00	0	0.00	9	0.65	2	0.14	0	0.00	0	0.00	0	0.00	0	0.00	13	0.95	2	0.14	3	0.21
UMCP	41,271	0	0.00	0	0.00	20	0.48	8	0.19	0	0.00	0	0.00	0	0.00	2	0.04	11	0.26	34	0.82	5	0.12
UMES	2,384	0	0.00	0	0.00	3	1.25	1	0.41	0	0.00	0	0.00	0	0.00	2	0.83	3	1.25	0	0.00	0	0.00
UMGC	55,323	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.01	14	0.25	6	0.10	6	0.10	0	0.00

Arrests and Disciplinary Actions - On-Campus, Noncampus, and Public Property

		On-Campus Arrests							Disciplinary Actions					
		Weapons Possession		Drug Abuse Violations		Liquor Law Violations			Weapons Possession		Drug Abuse Violations		Liquor Law Violations	
Institution	Fall HC Enrollment	No.	Rate	No.	Rate	No.	Rate		No.	Rate	No.	Rate	No.	Rate
BSU	6,308	0	0.00	1	0.15	0	0.00		0	0.00	37	5.86	0	0.00
CSU	2,101	0	0.00	0	0.00	0	0.00		0	0.00	14	6.65	7	0.00
FSU	4,449	0	0.00	1	0.22	0	0.00		0	0.00	46	10.33	25	0.00
SU	7,568	0	0.00	0	0.00	0	0.00		3	0.39	0	0.00	271	35.8
TU	20,856	2	0.09	6	0.29	0	0.00		0	0.00	0	0.00	97	4.65
UBalt	3,710	0	0.00	0	0.00	0	0.00		0	0.00	0	0.00	0	0.00
UMB	7,244	1	0.13	0	0.00	0	0.00		0	0.00	0	0.00	0	0.00
UMBC	13,638	0	0.00	0	0.00	0	0.00		0	0.00	0	0.00	24	1.75
UMCP	41,271	5	0.12	12	0.29	0	0.00		0	0.00	0	0.00	291	20.6
UMES	2,384	0	0.00	1	0.41	0	0.00		0	0.00	4	1.67	9	3.77
UMGC	55,323	7	0.12	5	0.09	1	0.02		0	0.00	0.00	0.00	0	0.00

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Incidents Reported in Campus Crime Reports
2021 (con't)***

Hate Crimes - On-Campus, Noncampus, and Public Property

		All Offenses	
Institution	Fall HC Enrollment	No.	Rate
BSU	6,308	0	0.00
CSU	2,101	0	0.00
FSU	4,449	0	0.00
SU	7,568	0	0.00
TU	20,856	2	0.09
UBalt	3,710	0	0.00
UMB	7,244	1	0.14
UMBC	13,638	1	0.07
UMCP	41,271	4	0.09
UMES	2,384	0	0.00
UMGC	55,323	0	0.00

Hate crime offenses include murder/non-negligent manslaughter, rape, fondling, incest, statutory rape, robbery, aggravated assault, burglary, motor vehicle theft, arson, simple assault, larceny-theft, intimidation, and destruction/damage/vandalism of property.

VAWA Offenses - On-Campus, Noncampus, and Public Property

		All Offenses	
Institution	Fall HC Enrollment	No.	Rate
BSU	6,308	10	1.58
CSU	2,101	0	0.00
FSU	4,449	8	1.80
SU	7,568	10	1.32
TU	20,856	14	0.67
UBalt	3,710	0	0.00
UMB	7,244	8	1.10
UMBC	13,638	10	0.73
UMCP	41,271	20	0.48
UMES	2,384	6	2.51
UMGC	55,323	10	0.18

Fall HC Enrollment is statewide; All rates are in terms of total number of incidents per 1,000 students.
***Starting with 2014 statistics, these offenses replaced "forcible" and "non-forcible" sex offenses.**
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*****Totals include all Clery geography: on-campus, noncampus, and public property.**

2025 Campus Crime Report
May 15, 2025

Glossary

Aggravated Assault
An unlawful attack by one person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm.

Arrest
Persons processed by arrests, citation, or summons.

Arson
Any willful or malicious burning or attempt to burn, with or without intent to defraud, a dwelling house, public building, motor vehicle or aircraft, personal property of another, etc.

Burglary
The unlawful entry of a structure to commit a felony or a theft.

Dating Violence
Violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim. The existence of such a relationship shall be determined based on the reporting party's statement and with consideration of the length of the relationship, the type of relationship, and the frequency of interaction between the persons involved in the relationship. For the purposes of this definition:
• Dating violence includes, but is not limited to, sexual or physical abuse or the threat of such abuse.
• Dating violence does not include acts covered under the definition of domestic violence

Domestic Violence
A felony or misdemeanor crime of violence committed:
• By a current or former spouse or intimate partner of the victim;
• By a person with whom the victim shares a child in common;
• By a person who is or has cohabitated with the victim as a spouse or intimate partner; and
• By a person similarly situated to a spouse of the victim under the domestic or family violence laws of the jurisdiction in which the crime of violence occurred, or by any other person against an adult or youth victim who is protected from that person's acts under the domestic or family violence laws of the jurisdiction in which the crime of violence occurred.

Drug Abuse Violations
The violation of laws prohibiting the production, distribution and/or use of certain controlled substances and the equipment or devices utilized in their preparation and/or use. The unlawful cultivation, manufacture, distribution, sale, purchase, use, possession, transportation or importation of any controlled drug or narcotic substance. Arrests for violations of state and local laws, specifically those relating to the unlawful possession, sale, use, growing, manufacturing and making of narcotic drugs. The relevant substances include: opium or cocaine and their derivatives (morphine, heroin, codeine); marijuana; synthetic narcotics - manufactured narcotics which can cause true addiction (Demerol, Methadone); and dangerous nonnarcotic drugs (barbiturates, Benzedrine).

Fondling
The touching of the private body parts of another person for the purpose of sexual gratification, without the consent of the victim, including instances where the victim is incapable of giving consent because of his/her age or because of his/her temporary or permanent mental incapacity.

Hate Crime
A criminal offense that manifests evidence that the victim was intentionally selected because of the perpetrator's bias against the victim. For the purposes of Clery, the categories of bias include the victim's actual or perceived race, religion, gender, gender identify, sexual orientation, ethnicity, national origin, and disability.

Incest
Non-forcible sexual intercourse between persons who are related to each other within the degrees wherein marriage is prohibited by law.

Liquor Law Violations
The violation of state or local laws or ordinances prohibiting the manufacture, sale, purchase, transportation, possession, or use of alcoholic beverages, not including driving under the influence and drunkenness. Include in this classification: the manufacture, sale, transporting, furnishing, possessing, etc., of intoxicating liquor; maintaining unlawful drinking places; bootlegging; operating still; furnishing liquor to a minor or intemperate person; underage possession; using a vehicle for illegal transportation of liquor; drinking on train or public conveyance; and attempts to commit any of the above.

Motor Vehicle Theft
The theft or attempted theft of a motor vehicle.

Murder and Non-Negligent Manslaughter
The willful (non-negligent) killing of one human being by another.

Negligent Manslaughter
The killing of another person through gross negligence.

Noncampus Building or Property
(1) Any building or property owned or controlled by a student organization that is officially recognized by the institution; or (2) Any building or property owned or controlled by an institution that is used in direct support of, or in relation to, the institution's educational purposes, is frequently used by students, and is not within the same reasonably contiguous geographic area of the institution.

On-Campus
(1) Any building or property owned or controlled by an institution within the same reasonably contiguous geographic area and used by the institution in direct support of, or in a manner related to, the institution's educational purposes, including residence halls; and (2) Any building or property that is within or reasonably contiguous to paragraph (1) of this definition, that is owned by the institution but controlled by another person, is frequently used by students, and supports institutional purposes (such as a food or other retail vendor).

Public Property
All public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus.

Rape
The penetration, no matter how slight, of the vagina or anus, with any body part or object, or oral penetration by a sex organ of another person, without the consent of the victim.

Referred for Disciplinary Action
The referral of any person to any official who initiates a disciplinary action of which a record is kept and which may result in the imposition of a sanction.

Robbery
The taking or attempting to take anything of value from the care, custody, or control of a person or persons by force or threat of force or violence and/or by putting the victim in fear.

Statutory Rape
Non-forcible sexual intercourse with a person who is under the statutory age of consent.

VAWA (Violence Against Women Act) Offenses
Domestic violence, dating violence, and stalking.

Weapons: Carrying, Possessing, etc.
The violation of laws or ordinances prohibiting the manufacture, sale, purchase, transportation, possession, concealment, or use of firearms, cutting instruments, explosives, incendiary devices or other deadly weapons. This classification encompasses weapons offenses that are regulatory in nature. Include in this classification: manufacture, sale or possessions of deadly weapons; carrying deadly weapons, concealed or openly, using manufacturing, etc. of silencers; furnishing deadly weapons to minors; aliens possessing deadly weapons; and attempts to commit any of the above.

UNIVERSITY SYSTEM of MARYLAND

BOARD OF REGENTS

SUMMARY OF ITEM FOR ACTION,
INFORMATION OR DISCUSSION

TOPIC: 2025-2026 EPSLS Brainstorming

COMMITTEE: Committee on Education Policy and Student Life and Safety

DATE OF MEETING: May 15, 2025

SUMMARY: The annual agenda for the committee on Education Policy and Student Life and Safety includes many standard reports, new academic program proposals, and other anticipated action and information items. As we conclude the Committee's business this year and in preparation for next year, the regents have the opportunity to suggest the addition of items that may warrant particular attention by the Board.

ALTERNATIVE(S): Information item

FISCAL IMPACT: Information item

CHANCELLOR'S RECOMMENDATION: Information item

COMMITTEE ACTION:	DATE: May 15, 2025
BOARD ACTION:	DATE:

SUBMITTED BY: Alison Wrynn, awrynn@usmd.edu; 301-445-1992