



**Cover Sheet for In-State Institutions  
New Program or Substantial Modification to Existing Program**

Institution Submitting Proposal	
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*Each action below requires a separate proposal and cover sheet.*

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|-----------------------------|---|
| New Academic Program        | Substantial Change to a Degree Program            |
| New Area of Concentration   | Substantial Change to an Area of Concentration    |
| New Degree Level Approval   | Substantial Change to a Certificate Program       |
| New Stand-Alone Certificate | Cooperative Degree Program                        |
| Off Campus Program          | Offer Program at Regional Higher Education Center |

Payment Submitted:	Yes No	Payment Type:	R*STARS # Check #	Payment Amount:	Date Submitted:
Department Proposing Program					
Degree Level and Degree Type					
Title of Proposed Program					
Total Number of Credits					
Suggested Codes			HEGIS:	CIP:	
Program Modality			On-campus	Distance Education (fully online)	Both
Program Resources			Using Existing Resources	Requiring New Resources	
Projected Implementation Date <small>(must be 60 days from proposal submission as per COMAR 13B.02.03.03)</small>			Fall	Spring	Summer Year:
Provide Link to Most Recent Academic Catalog			URL:		

Preferred Contact for this Proposal	Name:
	Title:
	Phone:
	Email:

President/Chief Executive	Type Name:
	Signature:  _____ Date:

	Date of Approval/Endorsement by Governing Board:
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**UNIVERSITY OF MARYLAND  
GLOBAL CAMPUS**

OFFICE OF THE CHIEF ACADEMIC OFFICER

November 1, 2022

James D. Fielder, Jr., PhD  
Secretary of Higher Education  
Maryland Higher Education Commission  
6 N. Liberty St.  
Baltimore, MD 21201

Dear Secretary Fielder:

On behalf of the University of Maryland Global Campus (UMGC), this letter serves as an official request for a new bachelor's degree program in Applied Technology. (HEGIS:070102 CIP: 11.0101). In accordance with COMAR 13B.02.03, the following proposal is submitted for your review.

Payment for review of this new academic program has been made to MHEC via R\*STARS interagency fund transfer, transaction number JF100478, in the amount of \$850 in accordance with the MHEC fee schedule.

We appreciate your review of this request and look forward to your response. If you have any questions or require additional information, please contact me at [blakely.pomietto@umgc.edu](mailto:blakely.pomietto@umgc.edu).

Sincerely,

A handwritten signature in black ink, appearing to read "Blakely R. Pomietto".

Blakely R. Pomietto, MPH  
Senior Vice President and Chief Academic Officer

CC: Darlene Brannigan Smith, Interim Associate Vice Chancellor for Academic Affairs,  
University System of Maryland

**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 programs the university offers and how those programs are designed and delivered. By mission and state mandate, every aspect of the UMGC student experience is designed from its origins for working-adult and military-affiliated students to access online education and built to leverage our unique and longstanding expertise in designing online learning – whether fully online or in hybrid formats, which mix online learning with face-to-face instruction. The learning resources, the selection, training, and evaluation of faculty, the non-academic supports, the success-coach advising model, the virtual classroom, the academic resources, the term and session structure, and course length are all deliberately derived from adult-learning science in distributed, online modalities, and the learning ecosystem is designed for a learner experience taking place anywhere in the world. These students' demographic profile drives the design and delivery of our learning model: The average age of UMGC's undergraduate student is 31 years old, 79% of them work full-time, and 44% have 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 and from UMGC's more than 75 years meeting working-adult and military affiliated students where they are to transform their lives through education.

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 of Maryland.

Our history and expertise have allowed us to build strong relationships with the military community which is nothing less than part of UMGC's institutional identity. As of Fall 2021, 64% of UMGC's undergraduate 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 America's soldiers on military installations in Europe. The relationship

between UMGC and the military has grown ever stronger in the decades since as a result of our intentional program design and delivery model that meets adult learners *where they are*, whether through asynchronous online courses or on military bases in Germany, Italy, Japan, Korea, Guam, Colorado, Virginia, and many other military facilities 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 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. Recognition as one of the Best Military Friendly Online Colleges (GuideToOnlineSchools.com) and as the Military Times No. 4 Best Cybersecurity Program for 2018, among other accolades, are evidence of UMGC's successful commitment to serving our nation's troops. Most recently, in 2019 UMGC was competitively selected as one of five partner institutions to the emergent U.S. Naval Community College to serve the Navy and Marines.

All of these considerations are reflected in UMGC's proposal herein to offer a new Bachelor of Science in Applied Technology degree. The proposed B.S. in Applied Technology is designed to meet the educational needs of a growing number of learners who have either not attended college at all, or who are near completers – having attained some college credit without completing a degree. Taken together, this so-called “degree completer” population makes up 60% of adults in the U.S.,<sup>1</sup> skewing older (average age 43) and toward racial and ethnic minorities (Black and Latinx learners represent 42.8%).<sup>2</sup>

The value of a college degree is difficult to overstate. An April 2022 report<sup>2</sup> from the Bureau of Labor Statistics (BLS) found that of the 1.3 million 20-to-29-year-olds who graduated with a bachelor's degree in the period from January to October 2021, almost 75% were employed, and the unemployment rate overall for recent graduates with a bachelor's degree is relatively low (13.1%). The degree completer population is also rising. A recent study<sup>3</sup> reported that the degree completer population reached 39 million in 2020 (representing one in five adults in the U.S). The degree completer population has risen in all but two states (Nebraska, Connecticut). Nearly half (46%) of degree completers believe that they need additional education to attain their career goals and over 53% of them stated that they are likely to pursue further education in the next five years. Though a sizeable fraction of the large population of degree completers is interested in returning to college, they are seeking pathways to degree completion other than traditional degrees and conventional delivery methods. The three most important factors are career impact, affordability, and flexibility.<sup>4</sup> Other factors include courses and programs of study that fit their schedule, that employers value, and that offer access to quality online education. Providing pathways to degree completion that respond to this large and growing sector of the U.S. workforce is critical to meet the job demand for

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<sup>1</sup> <https://stradaeducation.org/report/back-to-school/>

<sup>2</sup> <https://www.bls.gov/news.release/hsgcec.htm>

<sup>3</sup> <https://nscresearchcenter.org/some-college-no-credential/>

<sup>4</sup> <https://stradaeducation.org/report/back-to-school/>

skilled technology workers central to the socioeconomic strength of Maryland and the nation (see Section C below for more on job demand).

The State of Maryland has made college completion a critical priority for post-secondary learning. The Maryland State Plan for Higher Education<sup>5</sup> sets the goal that 55% of Maryland's adults aged 25 to 64 will have completed some form of postsecondary education by the year 2025. Achieving this goal will require Maryland post-secondary education providers to offer a diverse array of degree-completion pathways aligned to institutional mission. As the largest online, global public university in the U.S. and an established leader in offering high-quality and affordable online education, UMGC is strategically positioned by mission and mandate to offer a degree-completion pathway for college completers that maximizes the application of prior learning credit toward the degree attainment. Our global, distributed, online and hybrid modalities allow us to provide an option for degree completers with a high degree of flexibility in the number and types of prior learning and credits that are applicable toward a college degree.

The new program in Applied Technology allows students to focus on a primary area of study drawn from among the current undergraduate computing and technology programs offered by UMGC's School of Cybersecurity and Information Technology, while also providing flexibility to apply other technology-related credits toward the degree from coursework and prior learning that does not apply exclusively to the primary focus area. These programs are aligned to the workforce demands in the cyber and IT marketplace. The increasing ubiquity of cybersecurity, data and computer science, and information technology skills required to power a global, increasingly digital and networked economy makes technology degrees a tremendous multiplier in enhancing job prospects in all domains of the technology workplace. By allowing learners to choose one computing area to focus on, based on their particular interests, abilities, and credits earned in prior learning, this program also gives graduates of the program an opportunity to gain entry-level positions in that area, while bringing a diverse background enriched by actual work experience and existing college-level courses. The degree is intentionally positioned as a B.S. in Applied Technology to distinguish it from more generalized degree-completion pathways offered by credentials in interdisciplinary studies, liberal studies, or general studies. This positioning helps employers more readily identify those applicants with a specific focus in technology learning and skills that may be overlooked when the same learning is packaged in one of the more generalist credentials.

The proposal aligns with UMGC's mission by providing a learner-focused program based on leading-edge adult learning theory and curriculum design that accommodates the needs of students and the community. In addition, this Applied Technology program 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, federally employed, and military affiliated students. The fully online, asynchronous program model offers flexibility, continuing education, and social opportunities to adults interested in refreshing and reshaping their career opportunities. Detailed descriptions of the program and courses within the major are in section G.

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

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<sup>5</sup> College and Career Readiness and College Completion Act of 2013 (CCRCCA) referenced in <http://www.tinyurl.com/studentssuccesswithlessdebt>

As the public state and national leader in distance and distributed education, UMGC awards associate, bachelor's, master's, and doctoral degrees, as well as undergraduate and post- baccalaureate certificates. The university's academic inventory offers programs that are core to any public university, but UMGC's mission to serve adult students results in a sustained academic emphasis on career-relevant and workforce-aligned programs. Consequently, the university awards degrees and certificates in the arts and humanities, behavioral and social sciences, business and management, health-related fields, computing, education, and technology. As part of its emphasis on career-relevant education, UMGC offers non-credit professional development programs and hosts professional conferences and meetings supporting economic and societal needs of the State.

The B.S. in Applied Technology is constructed using UMGC's institutional learning goals that help students master academic and professional content and include an emphasis on technology and information literacy. Applied Technology, as the name itself indicates, is a cross-disciplinary field, requiring synthesis and application of technical knowledge in computing with skills in other technology and technology-adjacent areas, chosen by the student, such as Health Care, Medical Research, Criminal Justice, Environmental Science, and Marketing. The program builds upon UMGC's general education requirements and a solid understanding of scientific and quantitative reasoning through required coursework in mathematics and computing.

Although IT professionals must possess a certain level of quantitative and technical expertise, it is also critical for them to develop the ability to gather and analyze requirements in order to respond to specific business problems of non-technical users and units in the workplace. Accordingly, critical thinking and problem-solving, communication, teamwork, and the ability to incorporate and collaborate with diverse perspectives are as critical as technical knowledge and skills in this domain, and so are assessed as part of the new program's outcomes.

The B.S. in Applied Technology requires students to complete nine credits (including 3 upper-level credits) within a specific computing discipline offered by the School of Cybersecurity and Information Technology.<sup>6</sup> Students take an additional 18 credits in areas that are distinct from the specific discipline. Students complete the degree with a capstone course that requires the integration and application of the knowledge from the secondary area(s) to the computing skills acquired from the primary (computing) discipline. This structure gives students a high degree of flexibility to maximize the application of prior learning and college credits, while also ensuring that they have meaningful learning in the application of technology skills to real world business problems across the diverse range of careers and fields that rely on technology.

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<sup>6</sup> The following bachelor's programs are currently offered by the School: Computer Science, Cybersecurity Management and Policy, Cybersecurity Technology, Data Science, Management Information Systems, Software Development and Security, and Web and Digital Design.

Certificate programs include the following: Augmented and Virtual Reality Design, Computer Networking, Cyber Threat hunting, Digital Design, Machine Learning, Management Information Systems, Vulnerability Assessment, and Web Design

This program is strongly aligned to the Maryland State Plan for Postsecondary Education, which calls for universities to create greater opportunities and pathways for near completers to return to higher education and finish their degrees. UMGC's commitment to advancing the State Plan puts this proposed program in direct alignment with UMGC's statutory mandate and mission to provide career-relevant programs for adult learners (see Section 4B for more on the proposed program's alignment to the Plan).

**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.)**

No new general funds are required for the implementation of this program. With the exception of the capstone course, the courses within the primary discipline are drawn from existing courses; no new funds are needed for course development or faculty (see Tables 5 and 7). Selected courses within the School of Cybersecurity & Information Technology's existing offerings are projected to increase in enrollments because of new entrants to the proposed program, and each of the School's existing programs impacted by this proposal have adequate and built-in capacity to grow. The proposed program requires development of a new capstone course, which will be created and resourced through regular course development budgeting processes within the School's FY 2023 budget process. The financial table in section L is based only on students projected to enter the new program.

The success and effectiveness of degree-completion credentials like the proposed program is less about the ability to create new courses, since the proposed program draws from existing offerings. Instead, these types of degrees pivot on the institution's ability to comprehensively evaluate a range of prior learning and transfer credit and to expertly coach and mentor students in identifying the best pathway to completion based on their educational history, interests, and experience. UMGC's admissions and advising teams include experts in transfer credit evaluation and prior learning, including both college and applicable college-level learning completed outside an educational institution that UMGC is approved to evaluate and apply toward a degree (see Appendix E). Similarly, our admissions advisors provide personalized consultation to new and prospective students to help them choose the best degree option and plan.

**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 who may not be physically in Maryland or who would simply prefer to access support remotely. 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:

- Success Coaches and Admissions Advisors assist students with mapping out degree plans, selecting and scheduling courses, and generally navigating the administrative and academic landscape of earning a degree or certificate.
- Help@UMGC provides support services for the learning management system (LMS). A specialized technical support team for LMS questions and problems is

available 24 hours a day, seven days a week, 365 days a year. In addition, UMGC trains faculty to handle some LMS troubleshooting, publishes LMS FAQs, provides chat, phone, and e-mail access to a Help Center with a comprehensive knowledge base and includes a peer-to-peer feature in the online classroom to encourage students to help each other with LMS issues.

- 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 encounter.
- Students also receive 24/7 support in the use of educational technology from UMGC's Virtual Lab Assistance team, which resolves students' technical questions and issues in lab environments. Complementarily, program leadership and faculty support students in the proficiency of use with educational technology tools.
- MyUMGC is a self-service portal that provides access to administrative functions and student records. UMGC has designed this portal to ensure that students around the world can complete administrative tasks and view records at their convenience.
- UMGC's library is directly accessible through a link within each online classroom. The library helps to educate students in the use of information resources and services and develops and manages UMGC's extensive online library collection.
- The Effective Writing Center (EWC) offers an array of writing-related services to students, including review of draft papers, guest lecturers on writing skills for the classroom, a plagiarism tutorial, resources on citing and referencing, and resources to support research activities. The EWC is also directly accessible through a link within each online classroom.
- Turnitin has been integrated within courses as a developmental tool for students to assist with achieving authenticity in their writing.
- 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.
- The Office of Accessibility Services arranges accommodations for students with disabilities. Students can register with this office via an online form and then work with a staff member to receive appropriate accommodations for either online or hybrid courses. UMGC students move locations frequently and often need to adjust their course schedules because of work or family obligations so the Office of Accessibility Services is prepared to help students with transitioning their accommodations even when these changes occur.
- The Office of Career Services and its CareerQuest portal provides quality resources and services to assist students and alumni with their career planning and job search needs including Mentoring and Internship Plus programs. This office supports students who are transitioning from one career to another or are looking to climb up the corporate ladder, in addition to those who are entering the workforce for the first time. The CareerQuest portal is available 24 hours a day, seven days a week and includes an online database that allows students to connect with local and national hiring managers.
- The Alumni Association is a way for graduates to network and connect. Its online community features a career center, information on available chapters, discussion boards, photo sharing, and a resource center.

- The Financial Aid Office helps students understand and navigate the process of filing for financial aid. Extended office hours ensure that students can receive support quickly and staff members have expertise with a variety of financial aid options as UMGC students may be using employer assistance, 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.**

This is 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 makes educational opportunities and choices widely available for students within the state of Maryland, especially military affiliated, minorities, low-income, and working adults who are most often left behind by higher education. In the School of Cybersecurity and Information Technology, where the Applied Technology program will be located, approximately 66% of undergraduate students are military affiliated, of whom approximately 43% are active duty. UMGC's global reach means nearly 60% of students in the School of Cyber and IT live outside Maryland, including those enrolled overseas. The average age of the school's student population is 31, and 77% are enrolled part-time.

On average, UMGC students transfer 53 credits to the university; 40% of students transfer between 30-59 credits and approximately 43% transfer between 60-89 credits. Approximately 80% of UMGC students work full-time while enrolled in classes. UMGC is the largest educator of minorities in the cyber and IT fields in which we are invested.

Data<sup>7</sup> from the college-completer population indicates that there are nearly 613,000 of these students in Maryland: 45 % are female, 72% last enrolled in a community college, and 24% last enrolled in a public 4-year institution. Among degree-completion students, women re-enroll to complete degrees at a higher rate than men,<sup>8</sup> and ethnic and racial minorities report the greatest need for more higher education as well as the greatest likelihood of enrolling in order to complete a

<sup>7</sup> <https://nscresearchcenter.org/some-college-no-credential-dashboard/>

<sup>8</sup> <https://www.chronicle.com/article/finishing-what-they-started>

degree.<sup>9</sup> In Maryland alone, the Census Bureau<sup>10</sup> estimates that just 31% of Black residents had completed a bachelor's degree or higher.

Accordingly, we anticipate that the proposed program, which has been specifically created to meet the needs of degree completers, will serve a disproportionate number of historically marginalized or excluded populations in the state of Maryland and beyond.

2. **Provide evidence that the perceived need is consistent with the [Maryland State Plan for Postsecondary Education](#).**

The program proposal is designed to meet present and future needs of the state, as identified in 2017-2021 State Plan for Post-Secondary Education: Student Success with Less Debt (State Plan).<sup>11</sup> This program supports the three primary goals in the State Plan in the following ways:

- The program serves Goal 1 (Access: Ensure equitable access to affordable and quality postsecondary education for all Maryland residents) 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. In addition, UMGC administers its programs to meet the University System of Maryland 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. At UMGC, this commitment to affordability and access is synonymous with a commitment to diversity and inclusion. The university's open admission approach is central to this commitment. The process to apply for admission is streamlined and does not require the submission of standardized test scores. Admission requirements for the B.S. Applied Technology are aligned with this mission.
- The program serves Goal 2 (Success: Promote and implement practices and policies that will ensure student success). Students are provided with a variety of academic and administrative support structures to help them succeed. Most courses at UMGC rely on the use of Open Educational Resources, which are in most cases available at low or no cost to students. Success coaches are available to students to help support students' continuous enrollment and success to graduation. Courses in subject matters that are generally difficult for students (e.g., Mathematics, programming) are supported by tutoring services. Finally, UMGC has created a new faculty training course which will train all faculty to focus on the individual needs of each student and adopt coaching strategies to help students succeed. The program further supports Goal 2 because it is specifically based on practices and policies that recognize and optimize college-level learning experiences to allow a diverse array of transfer credit while also providing students with choices to individualize their

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<sup>9</sup> <https://www.chronicle.com/article/half-of-u-s-adults-without-degrees-want-more-education>, which cites results from a Strada-Gallup survey (<https://stradaeducation.org/report/back-to-school/> )

<sup>10</sup> <https://data.census.gov/cedsci/table?t=Educational%20Attainment&g=0400000US24>

<sup>11</sup> Source: 2017-2021 Maryland State Plan for Postsecondary Education:  
<http://www.mhec.state.md.us/About/Pages/2017StatePlanforPostsecondaryEducation.aspx>

learning and degree pathways.

- The program serves Goal 3 (Innovation: Foster innovation in all aspects of Maryland higher education to improve access and student success). The approach to learning in UMGC courses 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 competencies in real time. The Applied Technology program will employ authentic, project-based assessments in its courses. Such projects serve as both the means of instruction and assessment of learning in the program. Retention and success focus on students' learning experiences and are improved through enhanced learning resources. These resources are provided online within the learning management system. The methodology and on-demand nature of this type of student support is innovative in higher education and online learning, thus reflective of best practices in adult teaching and 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.**
- 2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.**
- 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.**

The seven bachelor's degree programs offered by the School of Cybersecurity and Information Technology are:

- Computer Science
- Software Development and Security
- Cybersecurity Technology
- Cybersecurity Management and Policy
- Management Information Systems
- Web and Digital Design
- Data Science

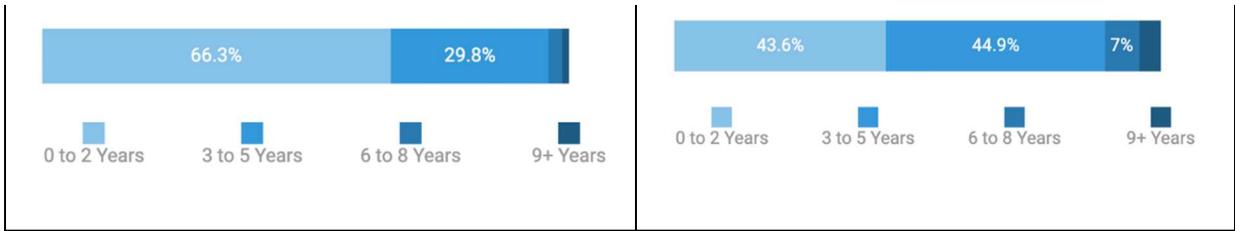
The industry demand for generalists in Applied Technology is rapidly increasing and encompasses those learners with entry-level skills in some mix of basic computer programming, information technology, technical support, network configuration, incident response, cybersecurity risk assessment, Microsoft Office and productivity tools, web content design, user interface and user experience (UI/UX) design, and data analysis techniques. These are all skills taught within the seven disciplines covered by the School. Burning Glass data project that market demand for careers in Applied Technologies as defined above will grow by an average of 25.5% over the next ten years.

The proposed program is designed so that students select their primary area of study from among the School's seven degree programs through an evaluation of their prior learning, the maximal application of transfer credit, and professional interest. Accordingly, the analysis in this section considers the job demand for each of the existing bachelor's programs from which degree completers may select a primary area of focus in the proposed Applied Technology program. Within these fields, the proposed program is designed to prepare graduates for entry-level jobs that are primarily technical, or entry- to mid-level jobs in non-technical fields that include roles that have a technical dimension to core responsibilities. Job titles include, but are not limited to: Junior Java Developer, Help Desk Technician, Network Support Technician, Risk Analyst, IT Auditor, Systems Analyst, Junior Business Analyst, Web Content Designer and Producer, entry-level Data Scientist and Analyst.

Table 1 provides job-demand data and job-growth trends for the seven bachelor's degree programs within the School, and job-demand and job-growth information for two of the most common job titles within each area, along with a breakdown of job growth across years of experience in that role. The proposed program is designed primarily for learners with 0-5 years of experience.

**Table 1: Job Demand and Growth in the Primary Areas of Study for Proposed Program**

<b>Computer Science / Software Development and Security</b>	
<p><b>Skills:</b> Basic Programming</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Job Postings Last 12 Months</p> <div style="background-color: #0056b3; color: white; padding: 10px; border-radius: 5px;"> <p>Medium Demand</p> <p style="font-size: 24px; font-weight: bold;">373,718</p> </div> </div> <div style="text-align: center;"> <p>Projected Growth 2 Years</p>  <p style="font-size: 24px; font-weight: bold;">+3.3%</p> </div> </div>	
<p><b>Occupation Analysis</b> Java Developer / Engineer</p> <p><b>Common Job Titles</b> Java Developer, Junior Java Developer, Entry-Level Java Developer, Java Engineer</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Job Postings Last 12 Months</p> <div style="background-color: #0056b3; color: white; padding: 10px; border-radius: 5px;"> <p>High Demand</p> <p style="font-size: 24px; font-weight: bold;">90,553</p> </div> </div> <div style="text-align: center;"> <p>Projected Growth 10 Years</p>  <p style="font-size: 24px; font-weight: bold;">+20.2%</p> </div> </div>	<p><b>Occupation Analysis</b> Python Developer</p> <p><b>Common Job Titles</b> Python Developer, Python Engineer</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Job Postings Last 12 Months</p> <div style="background-color: #0056b3; color: white; padding: 10px; border-radius: 5px;"> <p>Average Demand</p> <p style="font-size: 24px; font-weight: bold;">26,858</p> </div> </div> <div style="text-align: center;"> <p>Projected Growth 10 Years</p>  <p style="font-size: 24px; font-weight: bold;">+23.7%</p> </div> </div>
<p><b>Years of Experience</b></p> 	<p><b>Years of Experience</b></p> 
<b>Cybersecurity Technology</b>	
<p><b>Skill Cluster:</b> Information Technology, Basic Computer Knowledge, Information Technology: Technical Support, Information Technology: Network Configuration, Information Technology: General Networking</p> <p><b>Skill:</b> Laptop Troubleshooting</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Job Postings Last 12 Months</p> <div style="background-color: #0056b3; color: white; padding: 10px; border-radius: 5px;"> <p>High Demand</p> <p style="font-size: 24px; font-weight: bold;">2,689,972</p> </div> </div> <div style="text-align: center;"> <p>Projected Growth 2 Years</p>  <p style="font-size: 24px; font-weight: bold;">+6.5%</p> </div> </div>	
<p><b>Occupation Analysis</b> Help Desk Technician</p> <p><b>Common Job Titles</b> Help Desk Techniican, Field Service Techniician, Help Desk Analyst I, Service Desk Analyst</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Job Postings Last 12 Months</p> <div style="background-color: #0056b3; color: white; padding: 10px; border-radius: 5px;"> <p>High Demand</p> <p style="font-size: 24px; font-weight: bold;">70,159</p> </div> </div> <div style="text-align: center;"> <p>Projected Growth 10 Years</p>  <p style="font-size: 24px; font-weight: bold;">+5.1%</p> </div> </div>	<p><b>Occupation Analysis</b> Network Support Technician</p> <p><b>Common Job Titles</b> Network Technician, Noc Technician, Network Support Specialist, Communications Technician, Noc Engineer</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Job Postings Last 12 Months</p> <div style="background-color: #0056b3; color: white; padding: 10px; border-radius: 5px;"> <p>Average Demand</p> <p style="font-size: 24px; font-weight: bold;">13,216</p> </div> </div> <div style="text-align: center;"> <p>Projected Growth 10 Years</p>  <p style="font-size: 24px; font-weight: bold;">+4.2%</p> </div> </div>
<p><b>Years of Experience</b></p>	<p><b>Years of Experience</b></p>



<b>Cybersecurity Management and Policy</b>	
<b>Skill:</b> Computer Security Incident Response, Cybersecurity Assessment, Risk Assessment	
<p><b>Job Postings</b> Last 12 Months</p> <p><b>Medium Demand</b> 246,546</p>	<p><b>Projected Growth</b> 2 Years</p> <p>+3.3%</p>
<p><b>Occupation Analysis</b> Risk Analyst</p> <p><b>Common Job Titles</b> Risk Analyst, Risk Management Analyst, Risk Analyst I</p> <p><b>Job Postings</b> Last 12 Months</p> <p><b>Average Demand</b> 15,061</p> <p><b>Projected Growth</b> 10 Years</p> <p>+0.3%</p>	<p><b>Occupation Analysis</b> IT Auditor</p> <p><b>Common Job Titles</b> IT Auditor, IT Internal Auditor</p> <p><b>Job Postings</b> Last 12 Months</p> <p><b>Average Demand</b> 9,206</p> <p><b>Projected Growth</b> 10 Years</p> <p>+21.3%</p>
<p><b>Years of Experience</b></p> <p>28.9% 46.1% 15.6% 9.4%</p> <p>0 to 2 Years 3 to 5 Years 6 to 8 Years 9+ Years</p>	<p><b>Years of Experience</b></p> <p>20.7% 56.2% 16.4% 6.7%</p> <p>0 to 2 Years 3 to 5 Years 6 to 8 Years 9+ Years</p>

<b>Management Information Systems</b>	
<b>Skill Cluster:</b> Information Technology: Microsoft Office and Productivity Tools	
<b>Skill:</b> Systems Analysis	
<p><b>Job Postings</b> Last 12 Months</p> <p><b>Very High Demand</b> 8,095,271</p>	<p><b>Projected Growth</b> 2 Years</p> <p>+3.7%</p>
<p><b>Occupation Analysis</b> Systems Analyst</p> <p><b>Common Job Titles</b> Systems Analyst, Systems Support Analyst, IT Systems Analyst</p>	<p><b>Occupation Analysis</b> Junior Business Analyst</p> <p><b>Common Job Titles</b> Business Analyst, Junior Business Analyst, Entry Level Business Analyst, Planning Consultant, Business Analyst II</p>

<p>Job Postings Last 12 Months</p> <p>Average Demand <b>27,046</b></p> <p>Projected Growth 10 Years -2.1%</p>	<p>Job Postings Last 12 Months</p> <p>Average Demand <b>27,046</b></p> <p>Projected Growth 10 Years +8.9%</p>
<p><b>Years of Experience</b></p> <p>23.9% 47.3% 17.7% 11.2%</p> <p>0 to 2 Years 3 to 5 Years 6 to 8 Years 9+ Years</p>	<p><b>Years of Experience</b></p> <p>97.1%</p> <p>0 to 2 Years 3 to 5 Years 6 to 8 Years 9+ Years</p>

<p><b>Web and Digital Design</b></p> <p><b>Skill Cluster:</b> Information Technology: Web Content, Design: User Interface and User Experience (UI/UX)</p>	
<p>Job Postings Last 12 Months</p> <p>Medium Demand <b>470,256</b></p>	<p>Projected Growth 2 Years +8%</p>
<p><b>Occupation Analysis</b> Web Designer</p> <p><b>Common Job Titles</b> Web Designer, Website Designer, Interactive Development Designer, Graphic and Web Designer</p>	<p><b>Occupation Analysis</b> Web Content Producer</p> <p><b>Common Job Titles</b> Content Producer, Web Producer, Interactive Producer, Web Production Specialist, Web Content Designer</p>
<p>Job Postings Last 12 Months</p> <p>Low Demand <b>4,766</b></p> <p>Projected Growth 10 Years +5.5%</p>	<p>Job Postings Last 12 Months</p> <p>Low Demand <b>2,012</b></p> <p>Projected Growth 10 Years +8.7%</p>
<p><b>Years of Experience</b></p> <p>27% 59.6% 10.3%</p> <p>0 to 2 Years 3 to 5 Years 6 to 8 Years 9+ Years</p>	<p><b>Years of Experience</b></p> <p>32.1% 56% 9.7%</p> <p>0 to 2 Years 3 to 5 Years 6 to 8 Years 9+ Years</p>

<p><b>Data Science</b></p> <p><b>Skill Cluster:</b> Analysis: Data Visualization, Analysis: Data Techniques</p>	
<p>Job Postings Last 12 Months</p> <p>High Demand <b>1,296,667</b></p>	<p>Projected Growth 2 Years +50.3%</p>
<p><b>Occupation Analysis</b></p>	<p><b>Occupation Analysis</b></p>

<p><b>Data Scientist</b></p> <p><b>Common Job Titles</b> Data Scientist, Associate Data Scientist, Data Scientist I</p> <p>Job Postings Last 12 Months <b>Average Demand</b> 47,252</p> <p>Projected Growth 10 Years <b>+14.0%</b></p>	<p><b>Data Analyst</b></p> <p><b>Common Job Titles</b> Data Analyst, Data Specialist, Database Analyst, Junior Data Analyst, Business Analyst</p> <p>Job Postings Last 12 Months <b>High Demand</b> 68,083</p> <p>Projected Growth 10 Years <b>+11.8%</b></p>
<p><b>Years of Experience</b></p> <p>24.2% 49.2% 16.9% 9.7%</p> <p>0 to 2 Years 3 to 5 Years 6 to 8 Years 9+ Years</p>	<p><b>Years of Experience</b></p> <p>36.1% 47.7% 10.7%</p> <p>0 to 2 Years 3 to 5 Years 6 to 8 Years 9+ Years</p>

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

One way to project enrollment rates and degree production in the Applied Technology program is to look at the enrollment trends in UMGC’s B.S. in General Studies program, a general college-completion credential that allows students to include computing and technology learning and credits, although those courses are not required to be the primary focus. The General Studies program was approved for UMGC’s academic program portfolio many years ago but was promoted more heavily beginning in AY 2018-2019 as an option for degree-completers who did not need a specific degree focus. In AY 2019-2020, the General Studies program enrolled 922 students. Last year, the program enrolled 1,566 students. These enrollment numbers show encouraging and durable prospective student demand for the B.S. in Applied Technology, especially given the proposed program’s more specific address to the technology job market, as opposed to the more diffuse “General Studies.”

A companion metric that provides potential indication of interest in the program comes from the population (1,615) of current students who have at least 6 credits in various programs affiliated with the School but no more than 36 credits total in those programs. These students likely have an interest in a technical degree but aren’t sure which program to choose. For many learners in this subpopulation, the proposed program would likely offer a faster track to degree completion by maximizing the application of technology learning credits toward graduation.

**Table 2: 5-year Headcount Enrollment Projections**

	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Projected Enrollment</b>	25	100	200	300	400

We project to award approximately 100 degrees each year after the degree is established and reaches steady state.

**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.**

## 2. Provide justification for the proposed program.

Academic programs with the “Studies” suffix are a staple of college curricula, meant to provide a program of study to students who have wide-ranging interests and prior credits that are not confined to the singular focus of one discipline-specific area. These programs are particularly important for degree completers because such programs allow a path to graduation for students who have a significant number of credits spread across multiple areas of study. Within this type of offering, academic programs often use the “Applied” prefix to indicate programs in which a subset of courses create areas of focus within certain meta-majors or career-field clusters.

The proposed program is designed in this way, with a goal of teaching students to apply computing technology skills across a range of fields and careers. Accordingly, when analyzing program duplication, we focused on related programs within the MHEC inventory that use one or more or some combination of the keywords “Studies,” “Applied,” and “Technology.”<sup>12</sup> In some cases, the MHEC inventory identifies active credentials that the institution itself does not publicly indicate as available. In those cases, our analysis excludes such programs from comparison, but we have noted such instances in Table 2 below.

The MHEC inventory documents 558 offerings of this type across all degree levels – Associates, Bachelors, Masters (see Appendix D for the full list). **This search did not reveal the existence of any bachelor's program with the name selected for this proposed program, “Applied Technology.”** MHEC’s history of approving so many credentials in the “Studies” model reinforces and aligns to the market data and job-demand trends, which point, as we have shown above, to the value of and need for a multiplicity of degree-completion credentials as an important channel of degree production and workforce supply. The proposed program is designed to serve students who have had frequent changes in major and institutional affiliation at the post-secondary level. The design and policies governing most degrees disadvantage these students by disallowing the application of transfer credit and other college-level prior learning that does not articulate directly to a single major or discipline. This degree empowers these learners to maximally leverage the application of prior learning toward degree completion.

Our analysis eliminated the following credentials from a detailed comparison:

- Associates, Masters, and all certificate programs (these are not at the same level as the proposed Bachelor’s-level program)
- Bachelor’s programs that have a very specific non-computing focus (e.g., “German Studies,” “Bio-Technology,” “Applied Psychology” etc.)
- Bachelor’s programs that have a very specific and exclusive computing focus on a single discipline or field (e.g., “Computer Engineering Technology”) and do not allow inclusion of courses from other disciplines.

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<sup>12</sup> [https://mhec.maryland.gov/institutions\\_training/Pages/searchmajor.aspx](https://mhec.maryland.gov/institutions_training/Pages/searchmajor.aspx) , Accessed Aug. 14, 2022, 4 P.M.

After eliminating the types of credentials and programs noted above, 22 existing programs were similar in enough ways to merit a specific comparison with the proposed Applied Technology program. We provide analysis of each below.

However, taken together, the large number of such approved, existing programs in the state strongly indicates that degree-completion credentials are – *prima facie* – complementary and crucial for achieving the State Plan’s goal for increasing degree attainment, especially among degree-completers. In this light, we see no harmful or unnecessary duplication of any existing program from our proposed program and anticipate approval based on the Commission’s longstanding practice of supporting and approving a diverse array of degree-completion credentials across Maryland higher education.

Across all comparison programs, there are several common points of differentiation from the proposed program.

- **The proposed program’s intentional focus on blending computing with a complementary area to which computing skills are applied.** Several of the comparison programs require in excess of 20 computing credits, which means that while they provide flexibility in the types of computing credits that can be applied toward the degree, they nevertheless tilt heavily toward an overwhelming focus on computing itself. The proposed program’s structure ensures a critical mass of skill development in computing skills (12 credits total, 6 at the upper level, including the capstone) combined with companion credits in coursework that becomes, in the capstone, the context in which students learn the effective application of those computing skills to a range of possible disciplines and fields.
- **The proposed program’s inclusion of the widest array of ways to apply transfer credit and prior learning.** UMGC is nationally recognized as a leader in awarding transfer credit, including a recent recognition by U.S. News and World Report as the No. 1 institution in the nation for transfer credit friendliness.<sup>13</sup> UMGC is also a leading higher-education innovator in the evaluation of non-ACE accredited college-level workplace learning (see Appendix E for permission from MHEC for UMGC to assess non-ACE-evaluated trainings for credit). The proposed program leverages this institutional strength in meeting students where they are in order to maximize the number of credits applied toward the Applied Technology program based on the evaluation of prior learning and transfer credit. Students can earn credit for prior learning in a variety of ways:
  - Transfer credit of articulated coursework from other accredited institutions, including community colleges (UMGC students can transfer up to 70 credits from community colleges.)
  - Credit for unexpired industry certifications aligned to UMGC courses (There are currently 54 courses in the School of Cyber and IT linked to industry certifications in this way.)
  - Portfolio evaluation
  - Challenge exams
  - Credit for non-ACE accredited college-level learning articulated to UMGC coursework

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<sup>13</sup> <https://globalmedia.umgc.edu/2022/03/09/seamless-pathway-for-transfer-students-earns-umgc-top-spot-on-u-s-news-short-list-ranking/>

- **The proposed program’s distinction as the online program for degree completers that can be completed fully asynchronously online**, with hybrid options available in many instances.

The existing programs in the comparison group of 22 programs use purposefully broad constructs (all are either “Interdisciplinary” or “General” Studies degrees). In some cases, the comparison programs do not exclude the application of computing or technology learning and credits but do not specifically require them; in other cases, the comparison program is focused more tightly on computing or technical learning and requires some amount of credit and coursework in a computing or technology area

In the analysis that follows, we focus on whether computing courses can be selected as part of the program, and if so, if any minimum number of computing credits are required. References to “computing courses” below exclude general-education courses in computing that may be required for graduation and instead refers only to courses drawn from specific computing majors.

**Table 3: Comparison Program Analysis**

	Requires primary computing area of focus	Allows pairing of computing & non-computing areas	12 or fewer credits in computing area	Fully asynchronous online	6 or fewer UL credits in Major	CIP Code	Notes
Proposed UMGC program, Applied Technology	X	X	X	X	X	11.0101	
Coppin State University, Interdisciplinary Studies		X				24.0101	Includes a 4-credit Internship. UL requirements not clear
Hood College, Interdisciplinary Studies						30.9999	Program not found on Institution's website
Johns Hopkins University, Interdisciplinary Studies						24.0101	Only allows disciplines only within School of Arts & Sciences
Loyola University Maryland, Interdisciplinary Studies		X				30.9999	Requires 12 courses from a list of Math and Computer Science courses, including 6 at the UL
Morgan University, Applied Liberal Studies		X				24.0101	Requires at least 36 UL courses, and 18 credits of external experiences
Mount St. Mary's University, General Studies/ Interdisciplinary		X	X			30.9999	UL requirements not clear
Salisbury University, Interdisciplinary Studies		X				24.0101	Requires at least 30 UL credits
Stevenson University, Interdisciplinary Studies				X		30.9999	Requires at least 18 UL credits
Towson University, Interdisciplinary Studies						30.0000	Requires a minimum of 45 credits in a single area of study; all courses must be at the UL
Univ. of Maryland Eastern Shore, General Studies		X				30.9999	Requires at least 45 upper-level credits
University of Baltimore, Interdisciplinary Studies		X				30.9999	Requires minimum of 12 upper-level credits in three specialization areas. At least one of the three specializations should be an Arts & Sciences discipline.
Washington Adventist University, General Studies						24.0102	Offered only face-to-face; students must choose one of two non-technology concentrations
Washington Bible College, General Studies							Program not found on Institution's website
Bowie State University, Computer Technology	X			X		11.9999	Requires 60 credits in computer technology and computer science
Morgan University, Interdisciplinary Engineering, Information, and Computational Sciences		X				30.7099	24 credits of LL courses, and 24 UL credits from courses offered by one of the following Schools: Liberal Arts; Business Management; Computer, Mathematical and Natural Science; or Engineering.

	Requires primary computing area of focus	Allows pairing of computing & non-computing areas	12 or fewer credits in computing area	Fully asynchronous online	6 or fewer UL credits in Major	CIP Code	Notes
							Also needs at least 1 credit of Professional Field Experience
Morgan University, Interdisciplinary Global Perspectives and Practices		X				30.2001	24 credits of LL courses, and 24 LL credits from courses offered by one of the following Schools: Liberal Arts; Architecture and Planning; Business Management; Community Health and Policy; Computer, Mathematical and Natural Science; Education and Urban Studies; Engineering; Global Journalism and Communication; or Social Work. Also needs at least 1 credit of Professional Field Experience
Morgan University, Interdisciplinary Sciences		X				30.1801	24 credits of LL coursework and the same number of UL credits courses offered by one of the following Schools: Liberal Arts; Community Health & Policy; Computer, Mathematical and Natural Sciences; or Education and Urban Studies. Also needs at least 1 credit of Professional Field Experience
Morgan University, Interdisciplinary Technology Services		X				30.0801	24 LL credits, and 24 UL credits from courses offered by these Schools: Liberal Arts; Business & Management; Computer, Mathematical, and Natural Sciences; or Engineering. Also needs at least 1 credit of Professional Field Experience
Morgan University, Interdisciplinary Organizational Administration		Unclear				30.9999	24 LL credits and 24 UL credits in courses from the following Schools: Liberal Arts; Business Management; Community Health and Policy; or Engineering. Also needs at least 1 credit of Professional Field Experience
Morgan University, Interdisciplinary Studies in Societal Equity and Urbanism		Unclear				45.1201	24 LL credits and the same number of UL credits in courses from the following Schools: Liberal Arts; Architecture and Planning; Business Management; Education and Urban Studies; or Social Work. Also needs at least 1 credit of Professional Field Experience
SANS Technology Institute, Applied Cybersecurity	X	X				11.1003	50 credits focused on cybersecurity; 70 credits transferred from accredited college
University of Baltimore, Applied Information Technology	X					11.0401	Specific focus on computer networking and developing desktop or server-based applications

Notably, no comparison program shares the proposed program's CIP code. While this analysis documents that the proposed program's most distinct features – namely, its CIP code, the requirement of a primary area of focus in computing or technology discipline, its flexible credit structure across the primary and secondary areas, and its fully online, asynchronous modality – distinguish it from the comparison programs, it is also the case that this program shares (by design) a basic curriculum architecture with all comparison programs.

While it may appear that University of Baltimore's B.S. program in Applied Information Technology bears some superficial resemblance to the proposed program in title and CIP code, a closer look will reveal significant differences. University of Baltimore's program requires completion of a required core (30 credits) of computing courses which covers areas such as programming (6 credits), computer networks, computer security, web programming, database systems, etc. Students then need to complete 18-24 credits in a track which reflects one of the areas covered in the core. UMGC's program does not have this specific focus on the development of desktop or server-based applications. The total computing requirements for the program come to at least 48 credits (compared to 12 for the UMGC program). The upper-level requirements are different – Baltimore's program will need at least 33 upper-level computing credits (UMGC's needs only 6). Finally, it does not appear as if Baltimore's program is available online<sup>14</sup>.

That so many similarly structured degree-completion credentials have been approved attests to the size of the college-completion crisis in the U.S. As we have shown above, the market demand and learner need for college-completion degree options exceeds the ability of any single institution in Maryland or elsewhere to reasonably supply near-completers, and our evidence and analysis document the ways UMGC is well suited to offer a quality online degree-completion credential focused on technology and computing for working-adult and military-affiliated students around the world.

- 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.**

**AND**

- 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.**

As detailed above, each of the four Historically Black Institutions in Maryland (Bowie State University, Coppin State University, University of Maryland Eastern Shore, and Morgan State University) - like the majority of four-year degree-granting institutions in the state – has one or more degree-completion programs, but, as Table 2 illustrates, each of those programs differs significantly in credit-allocation allowances compared to from proposed Applied Technology program. Table 4 provides a complete list of such programs at Maryland's HBIs.

**Table 4: Interdisciplinary programs offered by HBIs**

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<sup>14</sup> <https://www.ubalt.edu/academics/online-programs.cfm>

Coppin State University	Interdisciplinary Studies
Univ. of Maryland Eastern Shore	General Studies
Bowie State University	Computer Technology
Morgan University	Applied Liberal Studies
Morgan University	Interdisciplinary Engineering, Information, and Computational Sciences
Morgan University	Interdisciplinary Global Perspectives and Practices
Morgan University	Interdisciplinary Sciences
Morgan University	Interdisciplinary Technology Services
Morgan University	Interdisciplinary Organizational Administration
Morgan University	Interdisciplinary Studies in Societal Equity and Urbanism

As has been demonstrated in Section 4.D, each of these programs differs significantly from UMGC’s program in key ways, namely in the number and nature of allowed computing credits and offering modality. Moreover, there is no publicly available information provided by these institutions to indicate that they classify these programs as high demand. For these reasons, we see no negative impact on HBIs in Maryland.

The proposed program will function as a complement to HBI offerings mainly by serving those students who stop out of traditional programs at these and other institutions and require the particular type of flexibility and distance modalities of which UMGC is the leading provider in the state.

**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.**

UMGC’s program is modeled on its existing B.S. program in General Studies (Hegis: 499901; CIP: 309999). This program allows college completers who have concentrations of courses in at least two separate areas a pathway to completing a bachelor's degree.

The new program adapts the flexibility and customization of transfer-credit application to serve learners with a primary focus on computing and technology. This adaption includes three signal attributes distinct from the B.S. in General Studies:

- The degree name specifically focuses on the application of technology skills in order to provide learners with a credential that is readily recognizable to industry employers who might otherwise deprecate, deprioritize, or overlook applicants with a “General Studies” degree in the hiring process.
- The primary area of study is anchored in computing: students must take courses (9 credits, including 3 at the upper level) required by one of the computing programs offered by the School of Cybersecurity and Information Technology.
- Only one primary area (in computing) is required. Students may distribute 18 credits from any other area (including other computing areas), avoiding overlap with the chosen primary area.

The proposed program will be taught entirely online in asynchronous mode and will allow UMGC to further support its mission to teach adult learners in Maryland, across the U.S., and around the world. This proposal aligns with UMGC’s mission to offer high quality, workplace-relevant academic programs that expand the range of career opportunities to adult students. Specifically, the addition of the B.S. Applied Technology diversifies

credential options for working adult and military-affiliated populations, responding to adult learners' need for a variety of pathways to completed credentials in higher education.

The proposed program will be hosted in the School of Cybersecurity and Information Technology's Department of Information Technology and will be managed concurrently with the Computer Science program by the Program Director, Dr. Chandra Bajracharya.

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

The major in the proposed program consists of 10 courses (30 credits, see Section G.4.). Depending on the primary discipline selected by the student, certain courses may have prerequisites, requiring students to take them in a prescribed order.

Program Learning Goals are as follows:

- PLG1: Apply critical thinking and quantitative reasoning skills while using computing technologies and methodologies
- PLG2: Combine concepts and practices in modern Information Technology (IT) and Information Systems (IS) along with fundamental concepts in other fields to develop computing-based multi-dimensional approaches to problem-solving
- PLG3: Develop oral and written communication skills, to present computing-based solutions to complex problems
- PLG4: Analyze insights about personal and professional goals

Appendix C shows the mapping of the program learning goals to the core courses in the major.

**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 set of learning 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 the courses to ensure that each course contributes to the program learning goals without unnecessary duplication of outcomes across courses.

Using the mapping of institutional learning goals to courses, 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, program 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 5 years. After this initial review, programs continue the annual review every year with an Academic Program Review every seven years.

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 UMGC's learning management system (LMS) to allow student work to be copied from the LMS into AEFIS for assessment purposes. This process ensures that assessment review is independent of grades and evaluation within the class and allows for independent review of student work apart from the classroom faculty. AEFIS also stores 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**

The proposed B.S. Applied Technology requires 120 credits of coursework with degree requirements as follows:

General Education Courses:	41 credits
Major Courses:	30 credits
Electives/Minor Courses:	49 credits
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Total:	120 credits

- Major Courses:
  - 3 courses (9 credits) that are each from the primary focus area and required courses within that area (see Section C3 for a complete list of primary focus areas). At least 3 credits (1 course) must be at the upper level.
  - 18 credits from any discipline areas (can be outside the School). Here, the credits may be earned in multiple disciplines (even more than two). It is recommended that most of the 18 credits come from courses and programs outside the primary technology discipline area (but they can come from other areas in the School).
  - 3 credits BSAT 495 Capstone (new course, to be created)
- No more than 21 credits of coursework in a single discipline
- At least 15 credits within the major must be at the upper-level. Excluding the two upper-level classes (3 credits each) already listed above (one course within the

primary focus area, and the capstone), nine of the remaining 24 credits in the major must therefore be at the upper-level.

- Students must meet the 30-credit requirement overall for coursework taken at UMGC, but those credits may be earned in any combination across major, general education, and elective courses.

Course descriptions for all current courses within UMGC's inventory can be obtained from the UMGC catalog.<sup>15</sup>

### **BSAT 495: Capstone in Applied Computing**

Prerequisites: 27 credits in the major. This course is the culminating experience within the major. A project-based application of computing knowledge and skills to solve problems. Students research, plan, and implement a computing-based solution to an approved business and disciplinary-based problem outside the primary area of technology or computing focus. Assignments include working in teams through the planning, analysis, design, implementation, testing and documentation phases. Students present their applied solutions as the final learning demonstration in the course.

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

All UMGC undergraduate students are required to complete 41 credit hours in general education requirements. These requirements include courses in writing and communications, arts and humanities, social and behavioral sciences, natural sciences, mathematics, technology, and research. See Appendix B for a list of suggested general education courses and electives.

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

N/A

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

UMGC maintains a comprehensive website that houses all updated information about its programs. Students will have access to [degree requirements](#), [course catalogs](#), course schedules, and other pertinent information about the program.

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<sup>15</sup> <https://www.umgc.edu/content/dam/umgc/documents/upload/2022-2023-catalog.pdf>

The website also provides specific and clear information about technology requirements for UMGC students, information and training on the learning management system, and other resources to maximize students' learning experience.

A variety of support services are available to students for academic assistance (Tutoring, Writing Center), as well as technical support and financial aid.

UMGC students are guided by the Student Handbook that is available online and serves as a general guide for all current and prospective 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 Applied Technology-related communications (advertising, recruiting and admission materials) are developed in conjunction with UMGC-wide institutional communication strategy, which adheres to the principle of truth in advertising. All written and electronic materials prepared for prospective students for the purpose of recruitment will accurately and clearly represent the courses, the program, 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.**

UMGC has a number of existing articulations with community colleges, both within the state of Maryland and nation-wide, in most discipline areas, including computing, reflecting the national and international reach of our service capacity. UMGC has a generous transfer policy – accepting up to 70 credits from community colleges – and as the proposed program is a completion degree, it is specifically designed to be flexible in terms of transfer credit. By design, this program does not rely on a specific set of course-by-course matches in the major; instead, the courses can come from a wide range of disciplines. Community college students with degrees in all disciplines can seamlessly transfer and apply credit. In addition, we also offer a “completion scholarship,” whereby students who complete their 2-year degree at a Maryland community college are guaranteed admission to UMGC as well as a tuition rate which will allow recipients of the scholarship to complete the four-year degree for \$12,000 or less.

#### **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.**

UMGC's model employs full-time faculty (known as collegiate faculty) in academic-program leadership roles, such as Department Chairs and Program Directors, with responsibility for the overall intellectual coherence and integrity of the program. Other collegiate faculty teach and serve in complementary roles that maintain and support the academic programs, providing input into the design and content of the program and their courses. This core group of full-time collegiate faculty support the Adjunct faculty in teaching the program courses.

In keeping with UMGC’s emphasis on workplace relevance, the B.S. Applied Technology teaching faculty will be drawn from our large, existing pool of practicing professionals who teach part-time for UMGC. These adjunct faculty already provide instruction for the majority of courses that will be used in this program (all are existing courses). Such scholar-practitioner faculty who have solid academic credentials and continue to work outside the university provide 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. Many adjuncts who teach for UMGC have considerable experience with the institution. 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 a MHEC-approved waiver of the Code of Maryland (COMAR) requirements for total credit hours taught by full-time faculty (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.<sup>16</sup>

Consistent with this model, UMGC has a substantial roster of faculty with expertise in areas related to Applied Technology. Teaching effectiveness is monitored by class observation, student course evaluations, and program-specific, student-level competency assessment. The School of Cybersecurity and Information Technology already has an active unit of faculty qualified and prepared to teach courses in the proposed program and we constantly recruit additional faculty.

The following is a partial list of existing faculty (full-time and adjunct) who will provide academic oversight and leadership for the proposed program and includes their academic title/rank, and the courses they will teach:

**Table 5: Core Roster of BSAT Faculty**

Name	Appointment Type & Rank	Graduate Degree and Field	Status	Course(s) to be Taught
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<sup>16</sup> Source: Maryland Higher Education Commission (December 2015), Mission Statement Review: [http://mhec.maryland.gov/institutions\\_training/Documents/acadaff/2016MissionStatementReview.pdf](http://mhec.maryland.gov/institutions_training/Documents/acadaff/2016MissionStatementReview.pdf)

Nicholas Duchon	Professor	Ph.D, Mathematics	Full-time	Classes in Software Development & Security, and BSAT 495
James Robertson	Professor	DSc., Education	Full-time	BSAT 495
Duane Jarc	Professor	DSc., Computer Science	Full-time	CMSC 150, CMSC 350
Jesse Varsalone	Assoc. Professor	M.A., Education	Full-time	BSAT 495
Kate Goldberg	Asst. Professor	DBA, Business	Full-time	DATA 200, DATA 320, DATA 335
Michelle Hansen	Assoc. Professor	Ph.D, Computer Science	Full-time	IFSM 201, IFSM 301, IFSM 310
Susan Madorran	Assoc. Professor	M.S. Computer Science	Full-time	IFSM 300, IFSM 304, IFSM 370
Tamie Santiago	Professor	DBA, Business	Full-time	IFSM 311, IFSM 380
Michelle Pittman	Asst. Professor	M.S., Applied Technology	Full-time	CMST 308, CMST 320, CMST 325
Mario Camilien	Assoc. Professor	M.G., Information Systems	Adjunct	Classes in Cybersecurity Management & Policy
Kenice Middleton	Assoc. Professor	M.S. Information Assurance	Adjunct	Classes in Cybersecurity Management & Policy, BSAT 495
Dorothy McClintock	Professor	Ph.D Information & Decision Support Systems	Adjunct	Classes in Cybersecurity Management & Policy, BSAT 495
Cal Lassetter	Professor	Ph.D, Urban Services	Adjunct	Classes in Cybersecurity Management & Policy
Lucas Donoho	Assoc. Professor	M.S. Computer Science	Adjunct	Classes in Software Development & Security
Reginald Haseltine	Assoc. Professor	M.S., Computer & Information Science	Adjunct	Classes in Software Development & Security
Stephen Nieberding	Assoc. Professor	M.S. Technology Management	Adjunct	Classes in Cybersecurity Technology
Jody Wilkins	Asst. Professor	M.S., Cybersecurity	Adjunct	Classes in Cybersecurity Technology
Bryce Martens	Asst. Professor	M.A. Information Technology Management	Adjunct	Classes in Cybersecurity Technology
Michael Dean	Assoc. Professor	M.S., Mathematics	Adjunct	DATA 200, DATA 320, DATA 335
Solomon Britto	Asst. Professor	DBA, Business	Adjunct	BSAT 495
Jack Sanocki	Professor	Ph.D, Information Systems	Adjunct	BSAT 495
Ian Carnahan	Assoc. Professor	DSc., Sciences & Systems	Adjunct	CMST 315, CMST 386, CMST 388
Annette Gonzales	Assoc. Professor	M.A., Publication Design	Adjunct	CMST 295, CMST 301, CMST 310

John Bono	Professor	Ph.D, Information Systems	Adjunct	BSAT 495
Soumajit Ghosh	Assoc. Professor	M.S., Industrial Engineering	Adjunct	CMIS 102, CMIS 242
Cynthia Marcello	Professor	M.S., Psychology	Adjunct	CMIS 141, CMSC 325
Janak Rajani	Asst. Professor	M.S., Computer Science	Adjunct	BSAT 495

This list does not include all of the hundreds of existing UMGC adjunct faculty who are already teaching computing and other courses from which the program will draw. Any new faculty needed will be hired by the existing program directors. Any additional adjunct faculty needed to teach the new capstone course (BSAT 495) will be hired and supervised by Dr. Chandra Bajracharya.

**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**

UMGC is committed to providing pedagogy training in support of student learning throughout the faculty life cycle with the institution. FACDEV 411, our required New Faculty Academic Orientation, is a two-week, facilitated online training that covers the history of UMGC, pedagogy of adult learning, facilitating online learning, and providing additional support for students through UMGC's Library, Effective Writing Center, and Office of Accessibility Services. Parallel required training courses exist for faculty teaching hybrid courses. Faculty are also required to complete the FACDEV 112 course focused on Coaching Strategies for Learning and Academic Success.

In addition, faculty members have access to just-in-time professional development opportunities through the university's Faculty Development unit, which provides offerings as our bi-monthly webinars; self-paced workshops on pedagogical and LMS-related matters; quick guides on online classroom support and technology; and a variety of training modules in specific areas.

**b) The learning management system**

UMGC provides multiple touchpoints to ensure thorough orientation to and continued education about our Learning Management System (LMS), Brightspace. Building on the materials provided in FACDEV 411, UMGC offers workshops on grading strategies; the integration of audio and video feedback to students; gradebook setup and rubrics; crafting powerful introductions; open educational resources (OERs) used in the classroom; and netiquette. Each online course includes a faculty-only space within the LMS where program leaders put guidance, instructions, and other support resources for faculty in delivery their section of their course.

In addition, many webinars directly amplify the skills needed by faculty members to be successful in the online classroom, e.g., coaching, feedback; scaffolding student learning; digital literacy; classroom assessment techniques; creating a more engaging classroom; etc.

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

Besides the strategies outlined above, UMGC has recognized the need to equip faculty more comprehensively with skills and abilities to enhance engagement and coaching, in order to improve student learning and retention.

To that end, UMGC has recently developed a coaching training that will be made available to all UMGC faculty. By Fall 2023, all faculty are projected to have completed FACDEV 112 Coaching Strategies for Learning and Academic Success. This training teaches faculty how to effectively use coaching skills to create an active and motivating presence in the online classroom in order to establish helpful and supportive relationships with each student leading to persistence and academic success.

This addition to our training catalog will diminish any perceived distance between faculty and students taking online courses by providing specific strategies and tactics to facilitate regular interaction and outreach and personalized and actionable 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 B.S. in Applied Technology. The UMGC Library provides access to a vast array of library resources and services to UMGC students, faculty, and staff worldwide to meet their academic needs and includes a wide and varied collection of journal articles, reports, case studies, and, in some instances, complete books available electronically via a comprehensive selection of online library databases. Library services include instruction, reference, electronic reserves, and document delivery for materials not otherwise available in the library databases. The UMGC Library relies on distributed technology as its primary mechanism to provide online access to resources and services to UMGC's widely dispersed, working-adult student population.

The curated collection of online academic research databases available to UMGC faculty and students provides access to hundreds of thousands of full-text articles as well as reports, statistics, case studies, book chapters, and complete books in a wide range of subject areas. In addition, students have access to the full text of dissertations and theses via the *ProQuest Dissertations and Theses* database. The Library assists faculty and learning designers in providing links to Library materials directly in online classes.

The UMGC Library also offers other resources and services. UMGC students, faculty, and staff within the continental United States have access to more than ten million volumes in print from the 16-member University System of Maryland and Affiliated Institutions (USMAI) library consortium. The UMGC Library offers document delivery services to all UMGC students, faculty, and staff worldwide for a variety of materials, including journal articles and book chapters. UMGC's expanding collection of 75,000 electronic books (e-books) has significantly increased the ability to meet the needs of UMGC's global population.

The UMGC Library provides faculty and students with research assistance in creating search strategies, selecting relevant databases, and evaluating and citing sources in a variety of formats via its Ask a Librarian, which includes 24/7 chat and email. A guide to locating scholarly articles and using UMGC's library databases. The UMGC Library OneSearch tool allows users to simultaneously search for scholarly articles, books, and/or other research resources via a single search engine in most of the databases to which the UMGC Library subscribes, either directly or as additional resources.<sup>17</sup> In addition, UMGC faculty can request customized library instruction sessions for both on-site and online classes and can also add UMGC Library tutorials and materials to their learning management system classrooms and refer students to them through the Web gateway.

A librarian liaison assigned to each academic department assists faculty with resource identification and other program needs. The Subject Guides area of the library's web site provides a listing of resource guides for each subject area, with each guide containing relevant databases, Web sites, 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 proposed B.S. in Applied Technology will primarily be offered online using the distance education platform described above. Existing resources related to facilities, infrastructure, and equipment are adequate to meet the needs of the program.

- 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 incoming students and all 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 their communication with the university. Faculty are required to use their UMGC addresses for all their official UMGC communications.

UMGC's standard learning management system is Brightspace. All UMGC classes are taught using this system and all the 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 help resources on UMGC's website.

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<sup>17</sup> Source: UMGC Library, 2020: <http://sites.umgc.edu/library/index.cfm>

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

1. Complete [Table 6: 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.

No new general funds are required for the implementation of this program. The financial table that follows is based only on students entering the new program. As shown in Tables 6 and 7 below, the program is expected to be self-supporting from inception. UMGC's existing base of adjunct and full-time faculty and administrative and support staff will support and serve the B.S. Applied Technology.

For the resource category 2.e, note that only instate tuition (\$312/credit) is considered.

**Table 6: Resource Projections for Years 1-5**

<b>Resource Categories</b>	<b>Year1</b>	<b>Year2</b>	<b>Year 3</b>	<b>Year4</b>	<b>Year 5</b>
1. Reallocated Funds	0	0	0	0	0
2. Tuition/Fee Revenue (c + g below)	\$234,000	\$936,000	\$1,872,000	2,808,000	\$3,744,000
a. Number of F/T Students	0	0	0	0	0
b. Annual Tuition/Fee Rate	N/A	N/A	N/A	N/A	N/A
c. Total F/T Revenue (a x b)	N/A	N/A	N/A	N/A	N/A
d. Number of P/T Students	25	100	200	300	400
e. Credit Hour Rate	\$312	\$312	\$312	\$312	\$312
f. Annual Credit Hour Rate	30	30	30	30	30
g. Total P/T Revenue (d x e x f)	234,000	936,000	1,872,000	2,808,000	3,744,000
3. Grants, Contracts & Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
<b>TOTAL (Add 1 - 4)</b>	<b>\$234,000</b>	<b>\$936,000</b>	<b>\$1,872,000</b>	<b>\$2,808,000</b>	<b>\$3,744,000</b>

2. Complete [Table 7: 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.

Because the primary computing area is derived from existing programs within the School of Cybersecurity & IT, and because the secondary areas of focus draw from existing programs within and beyond the School, no new full-time employees are required to support the program. The capstone course (BSAT 495) will be supervised by the Program Director for Computer Science. Because all but one of the courses are extant (BSAT 495), the only faculty-related expenditure will be in the teaching stipend for faculty who teach the capstone course.

In category 1.b, the adjunct faculty salary is the median salary for an adjunct associate faculty member with a terminal degree at longevity step 11. In category 7, the expenditure listed is for course development.

**Table 7: Program Expenditures**

<b>Expenditure Categories</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
1. Faculty (b + c below)	\$4483.17	\$22,415.85	\$31,382.19	\$40,348.53	\$49,314.87
a. Number of FTE sections	1	5	7	9	11
b. Total Salary (Adjunct salary at \$1371 per credit hour)	\$4113	\$20,565	\$28,791	\$37,017	\$45,243
c. Total Benefits (9%)	\$370.17	\$1850.85	\$2591.19	\$3331.53	\$4071.87
2. Admin. Staff (b + c below)	\$0	\$0	\$0	\$0	\$00
a. Number of FTE	0	0	0	0	0
b. Total Salary	0	0	0	0	0
c. Total Benefits (37%)	\$0	\$0	\$0	\$0	\$0
3. Support Staff (b+c below)	\$0	\$0	\$0	\$0	\$0
a. Number of FTE	0	0	0	0	0
b. Total Salary	\$0	\$0	\$0	\$0	\$0
c. Total Benefits (37%)	\$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 (course development)	4000	0	0	0	0
<b>TOTAL (Add 1 – 7)</b>	<b>\$8483.17</b>	<b>\$22,415.85</b>	<b>\$31,382.19</b>	<b>\$40,348.53</b>	<b>\$49,314.87</b>

**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 created an annual program review process that includes assessment of student learning as described earlier along with indirect measures of student learning including student course evaluations, student retention and graduation rates, and student program surveys administered in capstone courses. As part of this process, external data is collected, including enrollment in related programs at other institutions and trends in labor markets. UMGC's mission for career relevant education requires that program learning goals and curriculum are maintained in the context of changing needs in labor markets and required skills for graduates.

As part of the annual program review, courses within the program portfolio are reviewed for course health. This includes student-success rates within courses and course reenrollment rates (how many students in a course re-enroll 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 allow academic program leaders to evaluate the effectiveness of course curriculum and instructional delivery. When a course is scheduled for revision, faculty teaching the course are surveyed to provide input to the faculty and instructional designers revising the course.

UMGC has adopted Quality Matters (QM) as the standard for curriculum design. As that process rolls out, courses will be reviewed on a regular basis against the Quality Matters rubric to ensure quality of course materials and design.

Full-time faculty are reviewed annually. Part-time faculty are reviewed on a course/semester basis. The student course evaluation provides an opportunity for faculty to receive both 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.**

Faculty, administrators, the Office of Academic Quality and Services, and the Integrative Learning and Design unit collaborate to implement and monitor assessment activities, review results, and make appropriate resources, curriculum, or other modifications. Annually, student performance across learning demonstrations is evaluated to determine where improvements may be required. Changes are made to curriculum and/or student support models. The process supports a continuous cycle of improvement.

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 facilities.

**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 community it serves. Cultural differences are recognized, valued, and considered essential to the educational

process. 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 and its proven record of providing higher education access to historically excluded populations. In addition to the University's commitment to DEI values, the School of Cybersecurity and Information Technology has integrated specific goals and priority action plans for enhancing DEI in the curriculum and among the faculty as part of the School's annual Strategic Plan.

The University's Integrative Learning Design unit collaborates with the School and UMGC's Office of Diversity and Equity to ensure a robustly inclusive curriculum that is built around UMGC's focus on project-, scenario-, and problem-based learning, which learning science has shown to more adequately respond to the learning approaches most effective for adult students. This planning is part of a broader UMGC strategic focus DEI, which is coordinated through the recently released DEI Strategic Plan for 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.**

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.**
  - 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 has been approved to offer distance education by the Middle States Commission on Higher Education (MSCHE) and maintains compliance with COMAR 13B.02.03.22. UMGC 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. Furthermore, among its many recognitions, as of 2016 UMGC had 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.

Historically, UMGC was an early provider of off-campus educational opportunities for students and one of the first universities in Maryland to develop online education. UMGC has been a leader among public institutions in providing quality and affordable online education and has been providing distance education to residents of the state of Maryland, to the nation's service members, and to those who live outside of Maryland for more than seventy years. Additionally, UMGC's Europe and Asia divisions offer hybrid and onsite classes to fulfill contract requirements and meet the needs of military students overseas. Stateside, all onsite classes, except for an occasional accelerated offering, are in hybrid format, blending onsite and online delivery.

UMGC's distance education offerings are in compliance with C-RAC's 2011 Guidelines.



## Appendix A



90.2.1.001

Robert L. Ehrlich, Jr.  
Governor

Michael S. Steele  
Lt. Governor

John J. Oliver, Jr.  
Chairman

Calvin W. Burnett  
Secretary of Higher Education

cc: LEL  
Bob J.

### MEMORANDUM

DATE: January 6, 2005  
TO: Dr. Nicholas H. Allen  
Provost and Chief Academic Officer, UMUC  
FROM: Michael J. Kiphart, Ph.D. *MAK*  
Assistant Secretary for Planning and Academic Affairs  
SUBJECT: UMUC Waiver of Full-Time Faculty and Library/Learning Resources Center

Office of the Provost  
UMUC

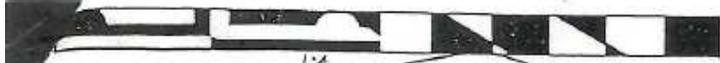
JAN 10 2005

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 Faculty 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](mailto:dsumler@mhec.state.md.us).

MJK:aaw  
Enclosures



cc: as filed

Forwarded memo  
for appropriate  
action  
via  
Comm. on Ed.  
Policy

Mr. Lance W. Billingsley, Esq.  
Chairman, Board of Regents  
University of Maryland System  
3300 Metzger Road  
Adelphi, MD 20783

April 23, 1996

RECEIVED  
APR 30 1996  
By VCAA

Parris N. Glendening  
Governor

RECEIVED

Edward O. Clarke, Jr.  
Chairman

APR 29 1996

Patricia S. Florestano  
Secretary of  
Higher Education

OFFICE OF THE CHANCELLOR  
THE UNIVERSITY OF MARYLAND  
SYSTEM

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.  
(cr)

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) 974-3513  
TTY for the Deaf: (800) 735-2258



## Appendix B: UMGC B.S. Applied Technology Program Recommended Gen Ed and Elective Courses

This appendix lists suggested courses which fulfill general education requirements, and suggested electives. UMGC students can always use other courses from the catalog, which meet MHEC general education requirements. For full course descriptions and an overview of all requirements, please refer to the current UMGC catalog.

Degree requirements may change based on the date of initial enrollment at UMGC.

Recommended GenEd courses	Requirements
LIBS 150 Introduction to Research (1)	General education/computing and research
PACE 111T Program and Career Exploration in Technology (3)	General education/computing and research
CMIS 102 Introduction to Problem Solving and Algorithm Design (3)	General education/computing and research
IFSM 201 Concepts and Applications of Information Technology (3)	General education/computing and research
SPCH 100 Foundations of Oral Communication (3)	General education/communications
WRWG 111 Academic Writing I (3)	General education/communications
WRWG 112 Academic Writing II (3)	General education/communications
STAT 200 Introduction to Statistics (3)	General education/mathematics
MATH 115 Pre-Calculus (3) or MATH 105 Topics for Mathematical Literacy (3)	General education/mathematics
BIOL 103 Introduction to Biology (4) or NSCI 103 Fundamentals of Physical Science (4)	General education/biological and physical sciences
BEHS 103 Technology in Contemporary Society (3)	General education/behavioral and social sciences
ECON 103 Economics in the Information Age (3)	General education/behavioral and social sciences
HIST 125 Technological Transformations (3)	General education/arts and humanities
HUMN 344 Technology and Culture (3)	General education/arts and humanities

**Appendix C: Mapping of Program Learning Goals for the B.S. program to core courses in the major**

PLG	Courses	
	BSAT 495	
Apply critical thinking and quantitative reasoning skills while using computing technologies and methodologies	X	
Combine concepts and practices in modern Information Technology (IT) and Information Systems (IS) along with fundamental concepts in other fields to develop computing-based multi-dimensional approaches to problem-solving	X	
Develop oral and written communication skills, to present computing-based solutions to complex problems	X	
Analyze insights about personal and professional goals	X	

**Appendix D: MHEC inventory of program titles which contain “Technology,” “Studies,” and/or “Applied”**

Institution	Program	Degree
<a href="#">Allegany College of Maryland</a>	<a href="#">APPLIED TECHNICAL STUDIES</a>	Associate Degree
<a href="#">Bowie State University</a>	<a href="#">APPLIED AND COMPUTATIONAL MATHEMATICS</a>	Post-Baccalaureate Certificate
<a href="#">Bowie State University</a>	<a href="#">APPLIED AND COMPUTATIONAL MATHEMATICS</a>	Master's Degree
<a href="#">Coppin State University</a>	<a href="#">APPLIED MOLECULAR BIOLOGY AND BIOCHEMIST</a>	Master's Degree
<a href="#">Coppin State University</a>	<a href="#">APPLIED MOLECULAR BIOLOGY AND BIOCHEMIST</a>	Post-Baccalaureate Certificate
<a href="#">Coppin State University</a>	<a href="#">APPLIED PSYCHOLOGY</a>	Bachelor's Degree
<a href="#">Frostburg State University</a>	<a href="#">APPLIED COMPUTER SCIENCE</a>	Master's Degree
<a href="#">Frostburg State University</a>	<a href="#">APPLIED ECOLOGY AND CONSERVATION BIOLOG</a>	Master's Degree
<a href="#">Harford Community College</a>	<a href="#">APPLIED DISABILITY STUDIES</a>	Associate Degree
<a href="#">Hood College</a>	<a href="#">APPLIED COMPUTING</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED &amp; COMPUTATIONAL MATHEMATICS</a>	Doctorate (Research & Scholarship)
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED &amp; COMPUTATIONAL MATHEMATICS</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED &amp; COMPUTATIONAL MATHEMATICS</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED AND COMPUTATIONAL MATHEMATICS</a>	Post-Master's Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED BEHAVIOR ANALYSIS</a>	Post-Master's Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED BIOMEDICAL ENGINEERING</a>	Post-Master's Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED BIOMEDICAL ENGINEERING</a>	Post-Baccalaureate Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED BIOMEDICAL ENGINEERING</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED ECONOMICS</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED HEALTH SCIENCES INFORMATICS</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED MATHEMATICS &amp; STATISTICS</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED MATHEMATICS &amp; STATISTICS</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED MATHEMATICS &amp; STATISTICS</a>	Doctorate (Research & Scholarship)
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED PHYSICS</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED PHYSICS</a>	Post-Master's Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED PSYCHOLOGY</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">APPLIED RESEARCH FOR COMMUNICATION</a>	Post-Baccalaureate Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">QUANTITATIVE METHODS IN APPLIED ECON</a>	Post-Master's Certificate
<a href="#">McDaniel College</a>	<a href="#">APPLIED MATHEMATICS</a>	Bachelor's Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">APPLIED GEOGRAPHY</a>	Associate Degree
<a href="#">Morgan State University</a>	<a href="#">APPLIED LIBERAL STUDIES</a>	Bachelor's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">APPLIED BEHAVIOR ANALYSIS</a>	Master's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">APPLIED BEHAVIOR ANALYSIS</a>	Post-Master's Certificate
<a href="#">Salisbury University</a>	<a href="#">APPLIED BIOLOGY</a>	Master's Degree

<a href="#">SANS Technology Institute</a>	<a href="#">APPLIED CYBERSECURITY</a>	Upper Division Certificate
<a href="#">SANS Technology Institute</a>	<a href="#">APPLIED CYBERSECURITY</a>	Bachelor's Degree
<a href="#">SANS Technology Institute</a>	<a href="#">APPLIED CYBERSECURITY</a>	Bachelor's Degree
<a href="#">Stevenson University</a>	<a href="#">APPLIED MATHEMATICS</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">APPLIED AND INDUSTRIAL MATHMATICS</a>	Master's Degree
<a href="#">Towson University</a>	<a href="#">APPLIED INFORMATION TECHNOLOGY</a>	Master's Degree
<a href="#">Towson University</a>	<a href="#">APPLIED MUSIC</a>	Post-Baccalaureate Certificate
<a href="#">Towson University</a>	<a href="#">APPLIED PHYSICS</a>	Master's Degree
<a href="#">Univ. of Maryland Eastern Shore</a>	<a href="#">APPLIED COMPUTER SCIENCE</a>	Master's Degree
<a href="#">Univ. of Maryland Eastern Shore</a>	<a href="#">APPLIED DESIGN</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">APPLIED SOCIAL SCIENCES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">APPLIED AGRICULTURE</a>	Lower Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">APPLIED ECONOMICS</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">APPLIED POLITICAL ANALYTICS</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">APPLIED SOCIAL SCIENCES</a>	Upper Division Certificate
<a href="#">University of Baltimore</a>	<a href="#">APPLIED INFORMATION TECHNOLOGY</a>	Bachelor's Degree
<a href="#">University of Baltimore</a>	<a href="#">APPLIED PSYCHOLOGY</a>	Master's Degree
<a href="#">University of Maryland, Baltimore City</a>	<a href="#">AGING AND APPLIED THANATOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore City</a>	<a href="#">APPLIED AND PROFESSIONAL ETHICS</a>	Master's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED AND PROFESSIONAL ETHICS</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED AND PROFESSIONAL ETHICS</a>	Master's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED DEVELOPMENTAL PSYCHOLOGY</a>	Master's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED DEVELOPMENTAL PSYCHOLOGY</a>	Doctorate (Research & Scholarship)
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED MATHEMATICS</a>	Doctorate (Research & Scholarship)
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED MATHEMATICS</a>	Master's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED MOLECULAR BIOLOGY</a>	Master's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED SOCIAL RESEARCH METHODS</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">APPLIED SOCIOLOGY</a>	Master's Degree
<a href="#">Allegany College of Maryland</a>	<a href="#">COMPUTER TECHNOLOGY</a>	Associate Degree

<a href="#">Allegany College of Maryland</a>	<a href="#">MEDICAL LAB TECHNOLOGY-BIOTECHNOLOGY</a>	Lower Division Certificate
<a href="#">Allegany College of Maryland</a>	<a href="#">MULTIMEDIA TECHNOLOGY</a>	Associate Degree
<a href="#">Allegany College of Maryland</a>	<a href="#">TREE CARE TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">CYBER TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">ELECTRONICS TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">GENERAL TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">MECHATRONICS TECHNOLOGY</a>	Associate Degree
<a href="#">Anne Arundel Community College</a>	<a href="#">MECHATRONICS TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">RADIOLOGIC TECHNOLOGY</a>	Associate Degree
<a href="#">Anne Arundel Community College</a>	<a href="#">SURGICAL TECHNOLOGY</a>	Associate Degree
<a href="#">Baltimore City Community College</a>	<a href="#">BIOTECHNOLOGY</a>	Associate Degree
<a href="#">Baltimore City Community College</a>	<a href="#">BIOTECHNOLOGY LAB SCIENCE</a>	Lower Division Certificate
<a href="#">Baltimore City Community College</a>	<a href="#">HEALTH INFORMATION TECHNOLOGY</a>	Associate Degree
<a href="#">Baltimore City Community College</a>	<a href="#">INFORMATION TECHNOLOGY BASIC SKILLS</a>	Lower Division Certificate
<a href="#">Baltimore City Community College</a>	<a href="#">ROBOTICS/MECHATRONICS TECHNOLOGY</a>	Associate Degree
<a href="#">Bowie State University</a>	<a href="#">COMPUTER TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Bowie State University</a>	<a href="#">TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Capitol Technology University</a>	<a href="#">COMPUTER ENGINEERING TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Capitol Technology University</a>	<a href="#">ELECTRONICS ENGINEERING TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Capitol Technology University</a>	<a href="#">ELECTRONICS ENGINEERING TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Capitol Technology University</a>	<a href="#">ENGINEERING TECHNOLOGY</a>	Master's Degree
<a href="#">Capitol Technology University</a>	<a href="#">ENGINEERING TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Capitol Technology University</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Capitol Technology University</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Capitol Technology University</a>	<a href="#">MANAGEMENT OF CYBER &amp; INFO TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Capitol Technology University</a>	<a href="#">SECURE MOBILE TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Capitol Technology University</a>	<a href="#">TECHNOLOGY</a>	Doctorate (Research & Scholarship)
<a href="#">Capitol Technology University</a>	<a href="#">TECHNOLOGY &amp; BUSINESS MNGT</a>	Bachelor's Degree
<a href="#">Capitol Technology University</a>	<a href="#">TECHNOLOGY WITH RESEARCH METHODS</a>	Doctorate (Research & Scholarship)
<a href="#">Carroll Community College</a>	<a href="#">ENTERTAINMENT TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Carroll Community College</a>	<a href="#">ENTERTAINMENT TECHNOLOGY</a>	Associate Degree
<a href="#">Carroll Community College</a>	<a href="#">OFFICE TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Cecil College</a>	<a href="#">AUDIO TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Cecil College</a>	<a href="#">FIRE SCIENCE TECHNOLOGY</a>	Associate Degree
<a href="#">Chesapeake College</a>	<a href="#">BUSINESS MANAGEMENT TECHNOLOGY CERTIF.</a>	Lower Division Certificate
<a href="#">Chesapeake College</a>	<a href="#">COMPUTER SCIENCE TECHNOLOGY</a>	Associate Degree
<a href="#">Chesapeake College</a>	<a href="#">EDUCATIONAL TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Chesapeake College</a>	<a href="#">ENGINEERING TECHNOLOGY</a>	Associate Degree
<a href="#">Chesapeake College</a>	<a href="#">SURGICAL TECHNOLOGY</a>	Associate Degree

<a href="#">College of Southern Maryland</a>	<a href="#">CLOUD AND INFORMATION TECHNOLOGY</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">CLOUD AND INFORMATION TECHNOLOGY CERTIFI</a>	Lower Division Certificate
<a href="#">College of Southern Maryland</a>	<a href="#">ENVIRONMENTAL TECHNOLOGY</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">ENVIRONMENTAL TECHNOLOGY</a>	Lower Division Certificate
<a href="#">College of Southern Maryland</a>	<a href="#">FIRE SCIENCE TECHNOLOGY</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">MANUFACTURING TECHNOLOGY</a>	Lower Division Certificate
<a href="#">College of Southern Maryland</a>	<a href="#">MARITIME OPERATIONS TECHNOLOGY</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">NETWORK TECHNOLOGY</a>	Lower Division Certificate
<a href="#">College of Southern Maryland</a>	<a href="#">TECHNOLOGY MANAGEMENT</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">ADVANCED HVAC &amp; ENERGY TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">ANESTHESIA TECHNOLOGY</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">AUTO TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">AUTOMOTIVE TECHNOLOGY</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">BASIC HVAC &amp; ENERGY TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">BASIC NETWORK TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">BIOTECHNOLOGY LABORATORY TECHNICIAN</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">CIS GENERAL INFORMATION TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">COMPUTER SERVICE TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">DIRECTED TECHNOLOGY - (CORRECTIONS PROF)</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">DIRECTED TECHNOLOGY (PUBLIC ASST SPEC)</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">DIRECTED TECHNOLOGY (TELECOMM ELECTRON)</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">ENGINEERING TECHNOLOGY</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">HISTOTECHNOLOGY</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">HVAC &amp; ENERGY TECHNOLOGY</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">INFORMATION TECHNOLOGY SUPPORT CERTIF.</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">INTERMEDIATE NETWORK TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">MEDICAL LABORATORY TECHNOLOGY</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">NETWORK TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">NETWORK TECHNOLOGY</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">SURGICAL TECHNOLOGY</a>	Associate Degree
<a href="#">Coppin State University</a>	<a href="#">ASSISTIVE TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Frederick Community College</a>	<a href="#">BIOTECHNOLOGY</a>	Lower Division Certificate
<a href="#">Frederick Community College</a>	<a href="#">BIOTECHNOLOGY</a>	Associate Degree
<a href="#">Frederick Community College</a>	<a href="#">BUILDING TRADES TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Frederick Community College</a>	<a href="#">HEALTHCARE INFORMATION TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Frederick Community College</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Associate Degree
<a href="#">Frederick Community College</a>	<a href="#">STEM TECHNOLOGY</a>	Associate Degree
<a href="#">Frederick Community College</a>	<a href="#">SURGICAL TECHNOLOGY</a>	Associate Degree

<a href="#">Frostburg State University</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Garrett College</a>	<a href="#">BUSINESS INFORMATION TECHNOLOGY</a>	Associate Degree
<a href="#">Goucher College</a>	<a href="#">ART AND TECHNOLOGY</a>	Master's Degree
<a href="#">Hagerstown Community College</a>	<a href="#">ALTERNATIVE ENERGY TECHNOLOGY</a>	Associate Degree
<a href="#">Hagerstown Community College</a>	<a href="#">BIOTECHNOLOGY</a>	Lower Division Certificate
<a href="#">Hagerstown Community College</a>	<a href="#">BIOTECHNOLOGY</a>	Associate Degree
<a href="#">Hagerstown Community College</a>	<a href="#">ELECTRICAL ENGINEERING TECHNOLOGY</a>	Associate Degree
<a href="#">Hagerstown Community College</a>	<a href="#">GRAPHIC DESIGN TECHNOLOGY</a>	Associate Degree
<a href="#">Hagerstown Community College</a>	<a href="#">GRAPHIC DESIGN TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Hagerstown Community College</a>	<a href="#">INDUSTRIAL TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Hagerstown Community College</a>	<a href="#">INFORMATION SYSTEMS TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Hagerstown Community College</a>	<a href="#">INFORMATION SYSTEMS TECHNOLOGY</a>	Associate Degree
<a href="#">Hagerstown Community College</a>	<a href="#">NETWORKING TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Hagerstown Community College</a>	<a href="#">WEB &amp; MULTIMEDIA TECHNOLOGY</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">BIOTECHNOLOGY</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">BIOTECHNOLOGY</a>	Lower Division Certificate
<a href="#">Harford Community College</a>	<a href="#">ENGINEERING TECHNOLOGY</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">GEOSPATIAL TECHNOLOGY</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">GEOSPATIAL TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Harford Community College</a>	<a href="#">HEALTH INFORMATION TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Hood College</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Master's Degree
<a href="#">Hood College</a>	<a href="#">MANAGEMENT OF INFORMATION TECHNOLOGY</a>	Master's Degree
<a href="#">Howard Community College</a>	<a href="#">BIOMEDICAL EQUIPMENT TECHNOLOGY</a>	Associate Degree
<a href="#">Howard Community College</a>	<a href="#">COMPUTER SUPPORT TECHNOLOGY</a>	Associate Degree
<a href="#">Howard Community College</a>	<a href="#">CYBER FORENSICS TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Howard Community College</a>	<a href="#">ENTERTAINMENT TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Howard Community College</a>	<a href="#">ENTERTAINMENT TECHNOLOGY</a>	Associate Degree
<a href="#">Howard Community College</a>	<a href="#">HELPDESK/LAN SUPPORT TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Howard Community College</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Associate Degree
<a href="#">Howard Community College</a>	<a href="#">OFFICE TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Howard Community College</a>	<a href="#">PHOTONICS TECHNOLOGY</a>	Associate Degree
<a href="#">Howard Community College</a>	<a href="#">RADIOLOGIC TECHNOLOGY</a>	Associate Degree
<a href="#">Johns Hopkins University</a>	<a href="#">BIOTECHNOLOGY</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">BIOTECHNOLOGY EDUCATION</a>	Post-Baccalaureate Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">BIOTECHNOLOGY ENTERPRISE</a>	Post-Baccalaureate Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">LEADERSHIP IN TECHNOLOGY INTEGRATION</a>	Post-Baccalaureate Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">NANOBIOTECHNOLOGY</a>	Certificate of Advanced Study
<a href="#">Johns Hopkins University</a>	<a href="#">SPACE TECHNOLOGY</a>	Master's Degree
<a href="#">Lincoln College of Technology</a>	<a href="#">A/C.REFRIGERATION &amp; HEATING TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Lincoln College of Technology</a>	<a href="#">AUTOMOTIVE TECHNOLOGY</a>	Lower Division Certificate

<a href="#">Lincoln College of Technology</a>	<a href="#">AUTOMOTIVE TECHNOLOGY MANAGEMENT (BTPS)</a>	Bachelor's Degree
<a href="#">Lincoln College of Technology</a>	<a href="#">TECHNOLOGY &amp; SKILLED TRADES</a>	Associate Degree
<a href="#">Loyola University Maryland</a>	<a href="#">EDUCATIONAL TECHNOLOGY</a>	Master's Degree
<a href="#">Loyola University Maryland</a>	<a href="#">MEDICAL TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">ARCHITECTURAL/CONSTRUCTION TECHNOLOGY</a>	Associate Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">BIOTECHNOLOGY</a>	Associate Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">BIOTECHNOLOGY CERTIFICATE</a>	Lower Division Certificate
<a href="#">Montgomery College-All Campuses</a>	<a href="#">BUILDING TRADES TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Montgomery College-All Campuses</a>	<a href="#">DIGITAL MEDIA AND WEB TECHNOLOGY</a>	Associate Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">FIRE PREVENTION TECHNOLOGY</a>	Associate Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">FIRE PREVENTION TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Montgomery College-All Campuses</a>	<a href="#">FIRE PROTECTION TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Montgomery College-All Campuses</a>	<a href="#">FIRE PROTECTION TECHNOLOGY</a>	Associate Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Montgomery College-All Campuses</a>	<a href="#">WIRELESS TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Morgan State University</a>	<a href="#">INTERDISCIPLINARY TECHNOLOGY SERVICES</a>	Bachelor's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">BIOTECHNOLOGY &amp; MANAGEMENT</a>	Master's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">INSTRUCTIONAL DESIGN AND TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Prince George's Community College</a>	<a href="#">ENTERTAINMENT TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Prince George's Community College</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Associate Degree
<a href="#">Prince George's Community College</a>	<a href="#">SURGICAL TECHNOLOGY</a>	Associate Degree
<a href="#">Prince George's Community College</a>	<a href="#">WEB TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Salisbury University</a>	<a href="#">TEACHING &amp; LEARNING W/TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Stevenson University</a>	<a href="#">MIDDLE SCHOOL EDUC:LIB ARTS &amp; TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">APPLIED INFORMATION TECHNOLOGY</a>	Master's Degree
<a href="#">Towson University</a>	<a href="#">EDUCATIONAL TECHNOLOGY</a>	Post-Baccalaureate Certificate

<a href="#">Towson University</a>	<a href="#">HEALTH INFORMATION TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Towson University</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Doctorate (Research & Scholarship)
<a href="#">Towson University</a>	<a href="#">INSTRUCTIONAL TECHNOLOGY</a>	Master's Degree
<a href="#">Towson University</a>	<a href="#">INSTRUCTIONAL TECHNOLOGY</a>	Doctorate (Research & Scholarship)
<a href="#">Univ. of Maryland Eastern Shore</a>	<a href="#">CAREER &amp; TECHNOLOGY EDUCATION</a>	Master's Degree
<a href="#">Univ. of Maryland Eastern Shore</a>	<a href="#">CYBERSECURITY ENGINEERING TECHNOLOGY</a>	Master's Degree
<a href="#">Univ. of Maryland Eastern Shore</a>	<a href="#">ENGINEERING TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Univ. of Maryland Eastern Shore</a>	<a href="#">TECHNOLOGY &amp; ENGINEERING EDUCATION</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">BIOTECHNOLOGY</a>	Master's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">BIOTECHNOLOGY (BS/BTPS)</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">CYBERSECURITY TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">CYBERSECURITY TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland University College</a>	<a href="#">CYBERSECURITY TECHNOLOGY</a>	Master's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">DATABASE SYSTEMS TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland University College</a>	<a href="#">FOUNDATIONS OF INFORMATION TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland University College</a>	<a href="#">INFORMATION TECHNOLOGY</a>	Master's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">INSTRUCTIONAL TECHNOLOGY</a>	Master's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">INSTRUCTIONAL TECHNOLOGY INTEGRATION</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland University College</a>	<a href="#">LEARNING DESIGN &amp; TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland University College</a>	<a href="#">LEARNING DESIGN AND TECHNOLOGY</a>	Master's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">TECHNOLOGY IN DISTANCE EDUC &amp; E-LEARNING</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland University College</a>	<a href="#">TECHNOLOGY MANAGEMENT</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">AGRICULTURAL SCIENCE &amp; TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">ENVIRONMENTAL SCIENCE &amp; TECHNOLOGY</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">ENVIRONMENTAL SCIENCE &amp; TECHNOLOGY</a>	Bachelor's Degree

<a href="#">Univ. of Maryland, College Park</a>	<a href="#">ENVIRONMENTAL SCIENCE &amp; TECHNOLOGY</a>	Doctorate (Research & Scholarship)
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">INTEGRATED TECHNOLOGY IN EDUCATION</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">LEARNING DESIGN AND TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">SCIENCE, TECHNOLOGY AND SOCIETY</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">SCIENCE, TECHNOLOGY, AND INNOVATION POLI</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">TECHNOLOGY AND INFORMATION DESIGN</a>	Bachelor's Degree
<a href="#">University of Baltimore</a>	<a href="#">APPLIED INFORMATION TECHNOLOGY</a>	Bachelor's Degree
<a href="#">University of Baltimore</a>	<a href="#">INFO SYSTEMS &amp; TECHNOLOGY MANAGEMENT</a>	Bachelor's Degree
<a href="#">University of Baltimore</a>	<a href="#">TECHNOLOGY COMMERCIALIZATION (UB/UMBC)</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore City</a>	<a href="#">MEDICAL AND RESEARCH TECHNOLOGY</a>	Master's Degree
<a href="#">University of Maryland, Baltimore City</a>	<a href="#">MEDICAL AND RESEARCH TECHNOLOGY</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">BUSINESS TECHNOLOGY ADMINISTRATION</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">HEALTH INFORMATION TECHNOLOGY</a>	Upper Division Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">INSTRUCTIONAL TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">LEARNING AND PERFORMANCE TECHNOLOGY</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">MUSIC TECHNOLOGY</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">TRANSLATIONAL LIFE SCIENCE TECHNOLOGY</a>	Bachelor's Degree
<a href="#">Washington Adventist University</a>	<a href="#">RADIOLOGIC TECHNOLOGY</a>	Associate Degree
<a href="#">Wor-Wic Community College</a>	<a href="#">COMPUTER TECHNOLOGY</a>	Associate Degree
<a href="#">Wor-Wic Community College</a>	<a href="#">CORRECTIONS TECHNOLOGY</a>	Lower Division Certificate
<a href="#">Allegany College of Maryland</a>	<a href="#">APPLIED TECHNICAL STUDIES</a>	Associate Degree
<a href="#">Allegany College of Maryland</a>	<a href="#">GENERAL STUDIES</a>	Lower Division Certificate
<a href="#">Allegany College of Maryland</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">Allegany College of Maryland</a>	<a href="#">LEGAL STUDIES</a>	Associate Degree
<a href="#">Allegany College of Maryland</a>	<a href="#">LEGAL STUDIES</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">FORENSIC STUDIES</a>	Associate Degree
<a href="#">Anne Arundel Community College</a>	<a href="#">GENDER &amp; SEXUALITY STUDIES</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">PARALEGAL STUDIES</a>	Associate Degree
<a href="#">Anne Arundel Community College</a>	<a href="#">PARALEGAL STUDIES</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">TRANSFER STUDIES</a>	Lower Division Certificate
<a href="#">Anne Arundel Community College</a>	<a href="#">TRANSFER STUDIES</a>	Associate Degree
<a href="#">Baltimore City Community College</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree

<a href="#">Bowie State University</a>	<a href="#">CHILD &amp; ADOLESCENT STUDIES</a>	Bachelor's Degree
<a href="#">Carroll Community College</a>	<a href="#">COMMUNICATIONS STUDIES AND JOURNALISM</a>	Associate Degree
<a href="#">Carroll Community College</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">Cecil College</a>	<a href="#">COMMUNICATION STUDIES</a>	Associate Degree
<a href="#">Cecil College</a>	<a href="#">EQUINE STUDIES</a>	Associate Degree
<a href="#">Cecil College</a>	<a href="#">EQUINE STUDIES</a>	Lower Division Certificate
<a href="#">Cecil College</a>	<a href="#">EQUINE STUDIES MANAGEMENT</a>	Lower Division Certificate
<a href="#">Cecil College</a>	<a href="#">GENERAL STUDIES</a>	Associate Degree
<a href="#">Cecil College</a>	<a href="#">PARALEGAL STUDIES</a>	Associate Degree
<a href="#">Chesapeake College</a>	<a href="#">GENERAL COLLEGE STUDIES</a>	Associate Degree
<a href="#">Chesapeake College</a>	<a href="#">GLOBAL AND INTERCULTURAL STUDIES</a>	Lower Division Certificate
<a href="#">Chesapeake College</a>	<a href="#">PARALEGAL STUDIES</a>	Associate Degree
<a href="#">Chesapeake College</a>	<a href="#">PARALEGAL STUDIES</a>	Lower Division Certificate
<a href="#">Chesapeake College</a>	<a href="#">TECHNICAL/PROFESSIONAL STUDIES</a>	Associate Degree
<a href="#">Chesapeake College</a>	<a href="#">THEATRE &amp; PERFORMANCE STUDIES</a>	Lower Division Certificate
<a href="#">Chesapeake College</a>	<a href="#">TRANSFER STUDIES - ADVANCED</a>	Lower Division Certificate
<a href="#">Chesapeake College</a>	<a href="#">TRANSFER STUDIES - BASIC</a>	Lower Division Certificate
<a href="#">College of Southern Maryland</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">GENERAL STUDIES</a>	Lower Division Certificate
<a href="#">College of Southern Maryland</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">GENERAL STUDIES: MEDIA STUDIES</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">LEGAL STUDIES</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">LEGAL STUDIES</a>	Associate Degree
<a href="#">College of Southern Maryland</a>	<a href="#">PARALEGAL STUDIES</a>	Associate Degree
<a href="#">Collegium sanctorum angelorum</a>	<a href="#">STUDIES IN ENGLISH AND LATIN</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">CRIMINAL JUSTICE STUDIES</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">GENERAL STUDIES</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">GLOBAL STUDIES</a>	Lower Division Certificate
<a href="#">Community College of Balt County</a>	<a href="#">LEGAL STUDIES</a>	Associate Degree
<a href="#">Community College of Balt County</a>	<a href="#">PARALEGAL STUDIES</a>	Lower Division Certificate
<a href="#">Coppin State University</a>	<a href="#">GLOBAL STUDIES</a>	Bachelor's Degree
<a href="#">Coppin State University</a>	<a href="#">INTERDISCIPLINARY STUDIES</a>	Bachelor's Degree
<a href="#">Coppin State University</a>	<a href="#">URBAN STUDIES</a>	Bachelor's Degree
<a href="#">Frederick Community College</a>	<a href="#">CIVIL WAR STUDIES</a>	Lower Division Certificate
<a href="#">Frederick Community College</a>	<a href="#">COMPUTER SCIENCE STUDIES CERTIFICATE</a>	Lower Division Certificate
<a href="#">Frederick Community College</a>	<a href="#">COMPUTER STUDIES</a>	Lower Division Certificate
<a href="#">Frederick Community College</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">Frostburg State University</a>	<a href="#">COMMUNICATION STUDIES</a>	Bachelor's Degree
<a href="#">Frostburg State University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Frostburg State University</a>	<a href="#">LIBERAL STUDIES</a>	Bachelor's Degree

<a href="#">Frostburg State University</a>	<a href="#">PHYSICIAN ASSISTANT STUDIES</a>	Master's Degree
<a href="#">Garrett College</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">Garrett College</a>	<a href="#">PARAMEDIC STUDIES</a>	Associate Degree
<a href="#">Garrett College</a>	<a href="#">PROFESSIONAL &amp; TECHNICAL STUDIES</a>	Associate Degree
<a href="#">Goucher College</a>	<a href="#">AMERICAN STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">AREA STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">COGNITIVE STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">EDUCATION STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">EUROPEAN STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">FRENCH TRANSNATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">INTEGRATIVE ARTS STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">INTERNATIONAL/INTERCULTURAL STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">LITERARY STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">PEACE STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">PRELEGAL STUDIES</a>	Bachelor's Degree
<a href="#">Goucher College</a>	<a href="#">WOMEN'S STUDIES</a>	Master's Degree
<a href="#">Goucher College</a>	<a href="#">WOMENS, GENDER, &amp; SEXUALITY STUDIES</a>	Bachelor's Degree
<a href="#">Hagerstown Community College</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Associate Degree
<a href="#">Hagerstown Community College</a>	<a href="#">GENERAL STUDIES</a>	Associate Degree
<a href="#">Hagerstown Community College</a>	<a href="#">PARALEGAL STUDIES CERTIFICATE</a>	Lower Division Certificate
<a href="#">Hagerstown Community College</a>	<a href="#">TECHNICAL STUDIES</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">APPLIED DISABILITY STUDIES</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">COMMUNICATION STUDIES</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">LEGAL STUDIES</a>	Associate Degree
<a href="#">Harford Community College</a>	<a href="#">PARALEGAL STUDIES</a>	Lower Division Certificate
<a href="#">Harford Community College</a>	<a href="#">TECHNICAL/PROFESSIONAL STUDIES</a>	Associate Degree
<a href="#">Hood College</a>	<a href="#">ARABIC AND MIDDLE EASTERN STUDIES</a>	Bachelor's Degree
<a href="#">Hood College</a>	<a href="#">EDUCATION - MULTIDISCIPLINARY STUDIES</a>	Master's Degree
<a href="#">Hood College</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Bachelor's Degree
<a href="#">Hood College</a>	<a href="#">GLOBAL STUDIES</a>	Bachelor's Degree
<a href="#">Hood College</a>	<a href="#">INTERDISCIPLINARY STUDIES</a>	Bachelor's Degree
<a href="#">Hood College</a>	<a href="#">LATIN AMERICAN STUDIES</a>	Bachelor's Degree
<a href="#">Hood College</a>	<a href="#">SPAN: IBERIAN &amp; LATIN AMER CULT STUDIES</a>	Bachelor's Degree
<a href="#">Hood College</a>	<a href="#">SUSTAINABILITY STUDIES</a>	Bachelor's Degree
<a href="#">Howard Community College</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">Johns Hopkins University</a>	<a href="#">AFRICANA STUDIES</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">CHINESE &amp; AMERICAN STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">CONTINUING ENGINEERING STUDIES</a>	Post-Baccalaureate Certificate

<a href="#">Johns Hopkins University</a>	<a href="#">DRAMA STUDIES (MDS)</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">EAST ASIAN STUDIES</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">FILM AND MEDIA STUDIES</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">HUMANISTIC STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Johns Hopkins University</a>	<a href="#">HUMANISTIC STUDIES</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">INTERDISCIPLINARY HUMANISTIC STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Johns Hopkins University</a>	<a href="#">INTERDISCIPLINARY STUDIES</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Johns Hopkins University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">INTERNATIONAL STUDIES (DIPLOMA, BOLOGNA)</a>	Post-Master's Certificate
<a href="#">Johns Hopkins University</a>	<a href="#">LATIN AMERICAN STUDIES</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">MUSEUM STUDIES</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">NEAR EASTERN STUDIES</a>	Bachelor's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">NEAR EASTERN STUDIES</a>	Master's Degree
<a href="#">Johns Hopkins University</a>	<a href="#">NEAR EASTERN STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Johns Hopkins University</a>	<a href="#">QUANTITATIVE STUDIES</a>	Bachelor's Degree
<a href="#">Loyola University Maryland</a>	<a href="#">COMP. CULTURE &amp; LIT. STUDIES</a>	Bachelor's Degree
<a href="#">Loyola University Maryland</a>	<a href="#">FORENSIC STUDIES</a>	Bachelor's Degree
<a href="#">Loyola University Maryland</a>	<a href="#">GLOBAL STUDIES</a>	Bachelor's Degree
<a href="#">Loyola University Maryland</a>	<a href="#">INTERDISCIPLINARY STUDIES</a>	Bachelor's Degree
<a href="#">Loyola University Maryland</a>	<a href="#">LIBERAL STUDIES</a>	Master's Degree
<a href="#">Loyola University Maryland</a>	<a href="#">THEOLOGICAL STUDIES</a>	Master's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">ANIMATION &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">CERAMICS &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">CRITICAL STUDIES</a>	Master's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">DRAWING &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">ENVRNMNTL DESIGN &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">FIBER &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">FILM &amp; VIDEO &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">GENERAL FINE ARTS &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">GRAPHIC DESIGN &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">ILLUSTRATION &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">INTRDSCPLNRY SCLPTRE &amp; HUMANSTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">PAINTING &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">PHOTOGRAPHY &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree
<a href="#">Maryland Institute College of Art</a>	<a href="#">PRINTMAKING &amp; HUMANISTIC STUDIES</a>	Bachelor's Degree

<a href="#">Maryland University of Integrative Health</a>	<a href="#">HERBAL STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Maryland University of Integrative Health</a>	<a href="#">INTEGRATIVE HEALTH STUDIES (ONLINE)</a>	Master's Degree
<a href="#">Maryland University of Integrative Health</a>	<a href="#">INTEGRATIVE HEALTH STUDIES (ONLINE)</a>	Post-Baccalaureate Certificate
<a href="#">McDaniel College</a>	<a href="#">ARABIC AND MIDDLE EASTERN STUDIES</a>	Bachelor's Degree
<a href="#">McDaniel College</a>	<a href="#">ASIAN STUDIES</a>	Bachelor's Degree
<a href="#">McDaniel College</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Bachelor's Degree
<a href="#">McDaniel College</a>	<a href="#">FOOD STUDIES</a>	Bachelor's Degree
<a href="#">McDaniel College</a>	<a href="#">RELIGIOUS STUDIES</a>	Bachelor's Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">COMMUNICATION STUDIES</a>	Associate Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">ETHNIC SOCIAL STUDIES</a>	Lower Division Certificate
<a href="#">Montgomery College-All Campuses</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">PARALEGAL STUDIES</a>	Associate Degree
<a href="#">Montgomery College-All Campuses</a>	<a href="#">TRANSFER STUDIES</a>	Lower Division Certificate
<a href="#">Montgomery College-All Campuses</a>	<a href="#">WOMEN'S AND GENDER STUDIES</a>	Lower Division Certificate
<a href="#">Morgan State University</a>	<a href="#">AFRICAN AMERICAN STUDIES</a>	Master's Degree
<a href="#">Morgan State University</a>	<a href="#">APPLIED LIBERAL STUDIES</a>	Bachelor's Degree
<a href="#">Morgan State University</a>	<a href="#">INTERDISCIPLINARY EDUCATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Morgan State University</a>	<a href="#">INTERDISCIPLINARY STUDIES SOCIETAL EQUIT</a>	Bachelor's Degree
<a href="#">Morgan State University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Master's Degree
<a href="#">Morgan State University</a>	<a href="#">MUSEUM STUDIES &amp; HISTORICAL PRESERVATION</a>	Post-Baccalaureate Certificate
<a href="#">Morgan State University</a>	<a href="#">MUSEUM STUDIES &amp; HISTORICAL PRESERVATION</a>	Master's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">COMMUNICATIONS STUDIES</a>	Bachelor's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">GENERAL STUDIES/ INTERDISCIPLINARY</a>	Bachelor's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">LIBERAL STUDIES</a>	Master's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">PHILOSOPHICAL STUDIES</a>	Master's Degree
<a href="#">Mount St. Mary's University</a>	<a href="#">SOCIAL STUDIES</a>	Bachelor's Degree
<a href="#">Notre Dame of Maryland University</a>	<a href="#">EARLY CHILDHOOD EDU/LIBERAL STUDIES</a>	Bachelor's Degree
<a href="#">Notre Dame of Maryland University</a>	<a href="#">ELEMENTARY EDUCATION/LIBERAL STUDIES</a>	Bachelor's Degree
<a href="#">Notre Dame of Maryland University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Notre Dame of Maryland University</a>	<a href="#">RELIGIOUS STUDIES</a>	Bachelor's Degree
<a href="#">Prince George's Community College</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree
<a href="#">Prince George's Community College</a>	<a href="#">TRANSFER STUDIES</a>	Lower Division Certificate
<a href="#">Reid Temple Bible College</a>	<a href="#">BIBLICAL STUDIES</a>	Lower Division Certificate
<a href="#">Reid Temple Bible College</a>	<a href="#">BIBLICAL STUDIES</a>	Associate Degree
<a href="#">Reid Temple Bible College</a>	<a href="#">GENERAL STUDIES</a>	Lower Division Certificate
<a href="#">Reid Temple Bible College</a>	<a href="#">GENERAL STUDIES</a>	Associate Degree
<a href="#">Salisbury University</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Bachelor's Degree
<a href="#">Salisbury University</a>	<a href="#">INTERDISCIPLINARY STUDIES</a>	Bachelor's Degree

<a href="#">Salisbury University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">St. Mary's College of Maryland</a>	<a href="#">ADVANCED MUSIC PERFORMANCE STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">St. Mary's College of Maryland</a>	<a href="#">ASIAN STUDIES</a>	Bachelor's Degree
<a href="#">St. Mary's College of Maryland</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Bachelor's Degree
<a href="#">St. Mary's College of Maryland</a>	<a href="#">HUMAN STUDIES</a>	Bachelor's Degree
<a href="#">St. Mary's College of Maryland</a>	<a href="#">MUSIC PERFORMANCE STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">St. Mary's College of Maryland</a>	<a href="#">PUBLIC POLICY STUDIES</a>	Bachelor's Degree
<a href="#">St. Mary's College of Maryland</a>	<a href="#">RELIGIOUS STUDIES</a>	Bachelor's Degree
<a href="#">St. Mary's College of Maryland</a>	<a href="#">THEATRE, FILM &amp; MEDIA STUDIES</a>	Bachelor's Degree
<a href="#">St. Mary's College of Maryland</a>	<a href="#">WOMEN, GENDER, AND SEXUALITY STUDIES</a>	Bachelor's Degree
<a href="#">St. Mary's Seminary and University</a>	<a href="#">BIBLICAL STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Stevenson University</a>	<a href="#">COMMUNICATION STUDIES</a>	Master's Degree
<a href="#">Stevenson University</a>	<a href="#">COMMUNICATION STUDIES</a>	Bachelor's Degree
<a href="#">Stevenson University</a>	<a href="#">COMMUNICATION STUDIES</a>	Bachelor's Degree
<a href="#">Stevenson University</a>	<a href="#">FORENSIC STUDIES</a>	Master's Degree
<a href="#">Stevenson University</a>	<a href="#">INTERDISCIPLINARY STUDIES</a>	Bachelor's Degree
<a href="#">Stevenson University</a>	<a href="#">LEGAL STUDIES</a>	Bachelor's Degree
<a href="#">Stevenson University</a>	<a href="#">PROFESSIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">AUTISM STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Towson University</a>	<a href="#">COMMUNICATION STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">CULTURAL STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">DEAF STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">ENVIRONMENTAL SCIENCE AND STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">INTERDISCIPLINARY STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">INTERNATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">JEWISH STUDIES</a>	Master's Degree
<a href="#">Towson University</a>	<a href="#">METROPOLITAN STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">PHYSICIAN ASSISTANT STUDIES</a>	Master's Degree
<a href="#">Towson University</a>	<a href="#">PROFESSIONAL STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Towson University</a>	<a href="#">PROFESSIONAL STUDIES</a>	Master's Degree
<a href="#">Towson University</a>	<a href="#">PROFESSIONAL STUDIES</a>	Post-Master's Certificate
<a href="#">Towson University</a>	<a href="#">RELIGIOUS STUDIES</a>	Bachelor's Degree
<a href="#">Towson University</a>	<a href="#">WOMEN'S &amp; GENDER STUDIES</a>	Master's Degree
<a href="#">Towson University</a>	<a href="#">WOMEN'S &amp; GENDER STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Towson University</a>	<a href="#">WOMEN'S &amp; GENDER STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland Eastern Shore</a>	<a href="#">GENERAL STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland Eastern Shore</a>	<a href="#">PHYSICIAN ASSISTANT STUDIES</a>	Master's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">COMMUNICATION STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">COMPUTER STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland University College</a>	<a href="#">EAST ASIAN STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">FOREIGN LANGUAGE AREA STUDIES</a>	Upper Division Certificate

<a href="#">Univ. of Maryland University College</a>	<a href="#">GENERAL AND LIBERAL STUDIES</a>	Associate Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">GENERAL STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">GERONTOLOGY AND AGING STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">LEGAL STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">MANAGEMENT STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland University College</a>	<a href="#">WOMEN, GENDER, AND SEXUALITY STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">AFRICAN AMERICAN STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">AFRICAN AMERICAN STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">AFRICAN AMERICAN STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">AMERICAN STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">AMERICAN STUDIES</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">AMERICAN STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">ARABIC STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">ASIAN AMERICAN STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">CINEMA AND MEDIA STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">DIGITAL STUDIES IN THE ARTS &amp; HUMANITIES</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">EAST ASIAN STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">GERMAN STUDIES</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">GERMAN STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">INDIVIDUAL STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">INFORMATION STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">ITALIAN STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">JEWISH STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">JEWISH STUDIES</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">JEWISH STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">JOURNALISM STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">LATIN AMERICAN AND CARIBBEAN STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">LATIN AMERICAN AND CARRIBEAN STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">LEADERSHIP STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">LGBTQ STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">MODERN FRENCH STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">NATIONAL SECURITY STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">PERSIAN STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">POLICY STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">POPULATION STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">PROFESSIONAL STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">PROFESSIONAL STUDIES</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">THEATRE &amp; PERFORMANCE STUDIES</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">THEATRE &amp; PERFORMANCE STUDIES</a>	Doctorate (Research & Scholarship)

<a href="#">Univ. of Maryland, College Park</a>	<a href="#">WOMEN, GENDER, AND SEXUALITY STUDIES</a>	Bachelor's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">WOMEN, GENDER, AND SEXUALITY STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">WOMEN, GENDER, AND SEXUALITY STUDIES</a>	Upper Division Certificate
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">WOMEN, GENDER, AND SEXUALITY STUDIES</a>	Master's Degree
<a href="#">Univ. of Maryland, College Park</a>	<a href="#">WOMEN, GENDER, AND SEXUALITY STUDIES</a>	Doctorate (Research & Scholarship)
<a href="#">University of Baltimore</a>	<a href="#">FORENSIC STUDIES</a>	Bachelor's Degree
<a href="#">University of Baltimore</a>	<a href="#">INTERDISCIPLINARY STUDIES</a>	Bachelor's Degree
<a href="#">University of Baltimore</a>	<a href="#">LEGAL STUDIES</a>	Master's Degree
<a href="#">University of Baltimore</a>	<a href="#">LEGAL STUDIES</a>	Bachelor's Degree
<a href="#">University of Baltimore</a>	<a href="#">PROFESSIONAL COUNSELING STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">AFRICANA STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">AMERICAN STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">ANCIENT STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">ASIAN STUDIES</a>	Upper Division Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">ASIAN STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">GENDER &amp; WOMEN'S STUDIES</a>	Upper Division Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">GENDER &amp; WOMEN'S STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">GENDER &amp; WOMEN'S STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">GEOGRAPHY AND ENVIRONMENTAL STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">GLOBAL STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">HISTORICAL STUDIES</a>	Master's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">JAZZ STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">MBA PREPARATORY STUDIES</a>	Upper Division Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">MEDIA &amp; COMMUNICATION STUDIES</a>	Bachelor's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">MEDIA &amp; COMMUNICATION STUDIES</a>	Upper Division Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">PRE-PROFESS. STUDIES IN ACCOUNTING</a>	Upper Division Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">PROFESSIONAL STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">PROFESSIONAL STUDIES</a>	Master's Degree
<a href="#">University of Maryland, Baltimore County</a>	<a href="#">SECURITY STUDIES</a>	Upper Division Certificate
<a href="#">Washington Adventist University</a>	<a href="#">GENERAL STUDIES</a>	Associate Degree
<a href="#">Washington Adventist University</a>	<a href="#">GENERAL STUDIES</a>	Bachelor's Degree
<a href="#">Washington Adventist University</a>	<a href="#">LIBERAL STUDIES</a>	Bachelor's Degree
<a href="#">Washington Adventist University</a>	<a href="#">POLITICAL STUDIES</a>	Bachelor's Degree
<a href="#">Washington Adventist University</a>	<a href="#">RELIGIOUS STUDIES</a>	Bachelor's Degree
<a href="#">Washington Bible College</a>	<a href="#">BIBLICAL STUDIES</a>	Post-Baccalaureate Certificate
<a href="#">Washington Bible College</a>	<a href="#">BIBLICAL STUDIES</a>	Lower Division Certificate
<a href="#">Washington Bible College</a>	<a href="#">BIBLICAL STUDIES</a>	Associate Degree
<a href="#">Washington Bible College</a>	<a href="#">BIBLICAL STUDIES</a>	Upper Division Certificate
<a href="#">Washington Bible College</a>	<a href="#">BIBLICAL STUDIES</a>	Bachelor's Degree

<a href="#">Washington Bible College</a>	<a href="#">BIBLICAL STUDIES (Masters of Arts)</a>	Master's Degree
<a href="#">Washington Bible College</a>	<a href="#">GENERAL STUDIES</a>	Bachelor's Degree
<a href="#">Washington College</a>	<a href="#">AMERICAN STUDIES</a>	Bachelor's Degree
<a href="#">Washington College</a>	<a href="#">COMMUNICATIONS AND MEDIA STUDIES</a>	Bachelor's Degree
<a href="#">Washington College</a>	<a href="#">ENVIRONMENTAL STUDIES</a>	Bachelor's Degree
<a href="#">Washington College</a>	<a href="#">FRENCH STUDIES</a>	Bachelor's Degree
<a href="#">Washington College</a>	<a href="#">GERMAN STUDIES</a>	Bachelor's Degree
<a href="#">Washington College</a>	<a href="#">HISPANIC STUDIES</a>	Bachelor's Degree
<a href="#">Washington College</a>	<a href="#">INTERNATIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Women's Institute of Torah Seminary &amp; College</a>	<a href="#">JEWISH CULTURE AND PROFESSIONAL STUDIES</a>	Bachelor's Degree
<a href="#">Women's Institute of Torah Seminary &amp; College</a>	<a href="#">JUDAIC STUDIES</a>	Bachelor's Degree
<a href="#">Wor-Wic Community College</a>	<a href="#">COMPUTER STUDIES TRANSFER</a>	Associate Degree
<a href="#">Wor-Wic Community College</a>	<a href="#">GENERAL STUDIES</a>	Lower Division Certificate
<a href="#">Wor-Wic Community College</a>	<a href="#">GENERAL STUDIES TRANSFER</a>	Associate Degree

## Appendix E: MHEC Approval for UMGC to Assess non-ACE-evaluated Trainings for Credit



Larry Hogan  
Governor  
Boyd K. Rutherford  
Lt. Governor  
Ian D. MacFarlane  
Chair  
James D. Fielder, Jr., Ph. D.  
Secretary

July 27, 2020

Blakely R. Pomietto, MPH  
Senior Vice President for Academic Affairs and Chief Academic Officer  
University of Maryland Global Campus  
3501 University Boulevard East  
Adelphi, MD 20783

Dear Vice President Pomietto:

We have reviewed your request to establish an assessment method at the University of Maryland Global Campus (UMGC) to award credit hours through an assessment procedure not otherwise covered in COMAR 13B.02.02.16. We know that many individuals engage in postsecondary education with a breadth of prior learning – particularly military experience – that may not be formally recognized by our colleges and universities. While COMAR 13B.02.02.16 establishes three explicit methods of awarding credit for prior learning<sup>1</sup>, there is a fourth provision allowing for institutions to use another assessment method approved to demonstrate competencies.

The assessment procedure that you have proposed is thorough and appears to mirror the national standard provided by the American Council on Education (ACE) and the National College Credit Recommendation Service (NCCRS). It is applaudable that the UMGC endeavored to pilot the procedures proposed with the Marine Corps' Intelligence Surveillance Reconnaissance (ISR) Systems Engineer Course.

After reviewing the materials provided, we have determined that the policy is complete and that all assessment methods will be effective for assessing students' competencies. UMGC is approved to use the method and materials provided in the proposal (attached) to award credit for prior learning to students who have participated in the applicable training. Should UMGC deviate or make changes to the method or materials, UMGC is expected to submit a revised request for review. I wish you continued success.

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<sup>1</sup>(a) Successful completion of an acceptable standardized examination such as the College Level Examination Program; (b) An examination developed by the institution; or (c) A portfolio assessment.