OOS NEW PROGRAM REVIEW
FURTHER REQUEST

MARYLAND HIGHER EDUCATION COMMISSION
Application for New Academic Programs for Out-of-State Degree-Granting Institutions that Operate in Maryland

This questionnaire, properly completed with supporting documentation, shall serve as an application for approval for new academic programs for Out-of-State Degree-Granting Institutions under extended operational approval that operate in Maryland under the Code of Maryland Regulations (COMAR) 13B.02.01.06

Out-of-State Degree-Granting Institutions that are not under extended operational approval can add additional programs using the Out-of-State Renewal Application, as per COMAR 13B.02.01.08, which can be found on the MHEC website.

[If these programs/classes are to be offered at a military installation and the recruitment and enrollment of students is limited to active duty personnel, their dependents, or civilians employed at the installation, and if the institution waives its right to claim veterans' benefits for enrolled students, do not complete this application. Complete an Application for Exemption to COMAR 13B.02.01 instead.]

Please Note: A separate application form must be completed and submitted with all supporting documentation for each proposed location in Maryland.

PROPOSED START DATE. May 29, 2023

Applications should be submitted at least 5 months prior to the proposed start date.

INSITUTION APPLYING FOR APPROVAL.

Name of Institution: Webster University

Web Address: www.Webster.edu

OPEID Code:
U.S. Department of Education, Office of Postsecondary Education, ID Code – Title IV eligibility.

Chief Executives Officer:
Dr. Julian Schuster

Mailing Address:
470 E. Lockwood Drive | St. Louis, MO 63119

Telephone: 800-981-9801 **Email:** julianschuster@webster.edu

Institutional Liaison: Name and title of the individual who will serve as liaison to the Maryland Higher Education Commission:

Name: Johnnie Johnson, Ed.D.

Title: Maryland Campus Director

Mailing Address:
1413 Arkansas Rd. Suite 103A, JB Andrews, MD 20762

Telephone: 301-420-2256 **Email:** jjohnsoniv74@webster.edu

********** **CERTIFICATION** **********

I hereby affirm that the answers given in this application and its attachments are accurate and complete and further agree to comply with the *Annotated Code of Maryland* and State regulations governing the operation of out-of-State degree-granting institutions (COMAR 13B.02.01).

2/28/2023	
Date	Signature of Chief Executive Officer

Electronic applications are preferred for applications. You can send your application to oosauthorization.mhec@maryland.gov

All payments should be mailed to:
Maryland Higher Education Commission
Director of Academic Affairs
6 N. Liberty St., 10th Floor
Baltimore, Maryland 21201

A copy of these regulations can be found on the Maryland Higher Education Commission's web site www.mhec.state.md.us

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I. SUPPORTING DOCUMENTATION.

Only a complete application can be acted upon. While separate application forms must be completed and submitted for each proposed location, the following Supporting Documentation needs to be included only once for the entire package of applications. **CHECK EACH ITEM AS ATTACHED.**

☒ Cover letter from the chief academic officer addressed to the Secretary of Higher Education requesting the approval of the new program.

☒ Out-of-State New Program and Sub Mod Cover Sheet with all required signatures.

☒ Application Fee COMAR 13B.02.01.08B(2)

The institution shall submit a non-refundable application fee in the amount of (a) $7,500 for up to two degree programs and (b) an additional $850 for each degree program over two programs. The institution's check should be made payable to: Maryland Higher Education Commission. The application renewal fee will be waived for renewals of out-of-state institutions operating at Regional Maryland Higher Education Center.

II. APPLICATION QUESTIONAIRE

This questionnaire, properly completed with supporting documentation, shall serve as an application for approval for new academic programs for Out-of-State Degree-Granting Institutions that operate in Maryland under the Code of Maryland Regulations (COMAR) 13B.02.01.06

Please note: a separate application form must be completed and submitted with all supporting documentation for each proposed location in Maryland.

A/B. The institution shall present evidence demonstrating the educational need to establish operations, offer programs, and award the degrees in question in the State pursuant to COMAR 13B.02.01.06

(1) The degree to be awarded; Master of Science, Cybersecurity Operations

(2) The area of specialization; Threat Detection

(3) The purpose or objective of the program or course of study to be offered; The remaining responses are provided on pages five (5) through nine (9).

(4) Specific academic content of the program or course of study;

(5) The quality of the proposed program in comparison to existing programs;

(6) An analysis of the market for the program;

(7) The State's equal educational opportunity obligations under State and federal law.

C. In addition, the out-of-State institution shall demonstrate that the proposed program, for which the institution is making application:

(1) Meets a critical and compelling regional or Statewide need; and

(2) Is consistent with the Maryland State Plan for Postsecondary Education.

D. The out-of-State institution shall clearly state the demand and need for a program, for which the institution is making application, in terms of meeting present and future needs of the region and the State in general. Two kinds of need may be identified:

(1) Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the State in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations; and

(2) Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.

E. Market Demand Data

(1) The out-of-State institution shall present data projecting market demand and the availability of openings in the job market to be served by the new program for which the institution is making application. The type of information submitted will vary, depending on the program, but may include workforce and employment projections prepared by the federal and State governments as well as professional and trade associations.

(2) With the exception of programs in the liberal arts, recently collected, existing, or new market surveys shall be used which clearly provide quantifiable and reliable data from prospective employers on the educational and training needs, and the anticipated number of vacancies, expected over the next 5 years.

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(3) In assessing demand for a new program, for which the institution is making application, an institution shall also present data showing the current supply of graduates in that program area in the State and region.

A/B. The institution shall present evidence demonstrating the educational need to establish operations, offer programs, and award the degrees in question in the state pursuant to COMAR 13B.02.01.06

3. The purpose or objective of the program or course of study to be offered:
    a. Webster University's cybersecurity programs prepare students and professionals to succeed in demanding public and private positions, protecting the ever-expanding global reach of computer systems. Graduates may oversee, operate, or protect critical computer systems, information, infrastructures, and communications networks from cyber crime, cyber fraud, or cyber espionage. Students who complete an undergraduate degree with an emphasis in Cybersecurity, a cybersecurity degree, or a graduate certificate program can effectively propose solutions for securing cyber networks and ensuring online security.
        i. OUTCOMES
            1. Graduates will be capable of explaining important principles and theories used throughout the field of Cybersecurity.
            2. Graduates will be capable of applying knowledge in the field of Cybersecurity to analyze real-world problems.
            3. Graduates will be capable of effectively integrating knowledge in the field of Cybersecurity to propose solutions to real-world problems.

4. Specific academic content of the program or course of study:
    a. The 36 credit hours required for the MS in cybersecurity operations must include the required core courses:
        i. Core Courses (24 hours)
            - CSSS 5000 Introduction to Cybersecurity (3 hours)
            - CSSS 5110 Cybersecurity Communications (3 hours)
            - CSSS 5120 Cybersecurity Infrastructures (3 hours)
            - CSSS 5130 Cybersecurity Intelligence/Counter Intelligence (3 hours)
            - CSSS 5140 Cybersecurity Strategic Operations (3 hours)
            - CSSS 5160 Encryption Methods and Techniques (3 hours)
            - CSSS 5180 Social Engineering (3 hours)
            - CSSS 6000 Practical Research in Cybersecurity (3 hours)
        ii. Elective Courses (12 hours)

            Three elective courses (9 hours) chosen from the following:
            - CSSS 5210 Cybersecurity Law and Policy (3 hours)
            - CSSS 5220 Cybersecurity Threat Detection (3 hours)
            - CSSS 5230 Cybersecurity Forensics (3 hours)
            - CSSS 5250 Use and Protection of Space Assets (3 hours)
            - CSSS 5265 Foundations of Software Development (3 hours)
            - CSSS 5270 Cybersecurity in Cloud Computing (3 hours)
            - CSSS 5290 Cybersecurity Risk Management Framework (3 hours)
            - CSSS 5990 Advanced Topics in Cybersecurity** (3 hours)
            - CSSS 6500 Cybersecurity Internship (3 hours)

5. The quality of the proposed program in comparison to existing programs:
    a. The overall quality of the Cybersecurity Operations program is equal to the quality of all other Webster University programs in that they meet the academic standards for regional accreditation and contain courses that are equivalent to the curriculums of other Cybersecurity programs at other institutions within the state of Maryland.
6. An analysis of the market for the program:
    a. The (MS) in cybersecurity operations prepares individuals for demanding positions in public and private sectors overseeing, operating, or protecting critical computer systems, information, networks, infrastructures, and communications networks.
7. The state's equal educational opportunity obligations under state and federal law:
    a. At Webster University, there is a place for everyone. With efforts ranging from our Diversity, Equity & Inclusion Council to sponsored events, we are committed to inclusive excellence throughout our university.
    b. Webster University is committed to maintaining a safe learning and working environment that provides the campus community with the appropriate process for reporting and redressing individual reports of sexual harassment. Our **Title IX office** offers support, training, and reporting tools to help members of our university community. We have outlined these resources in our policy and encourage our community to engage with our team openly.

C. In addition, the out-of-State institution shall demonstrate that the proposed program for which the institution is making an application:

1. Meets a critical and compelling regional or Statewide need:
    a. This program address and meet the needs of the state of Maryland's increasing need for Cybersecurity professionals and aligns with the state's need based on programs such as the one the former Governor, Larry Hogan, outlined in an article dated May 13, 2022: https://statescoop.com/maryland-larry-hogan-cybersecurity-bills/
2. And, is consistent with the Maryland State Plan for Postsecondary Education.
    a. Webster University's Cybersecurity Operations program consistently meets the objectives of the state of Maryland's plan for postsecondary education. According to the Maryland.gov website, which outlines the state's plan for higher and additional education, there are three primary goals:
        i. **Access:** Ensure equitable access to affordable and high-quality postsecondary education for all Maryland residents
            1. Webster University has the least expensive graduate tuition in the state, juxtaposed to all other educational institutions in Maryland offering graduate programs.
        ii. **Success:** Promote and implement practices and policies that will ensure student success.
            1. Webster University provides online resources that are accessible using Webster credentials so students can be connected to individuals and services that will assist in the process of succeeding as a student. A brief explanation with a link to the portal can be found here.
        iii. **Innovation:** Foster innovation in all aspects of Maryland higher education to improve access and student success.
            1. The Cybersecurity program is available at Joint Base Andrews and online, which will allow Webster University to serve the population at a convenient location for those who want to take in-person classes and online for those who want extra convenience, but cannot reach the Joint Base Andrews facility or do not otherwise desire to take classes in-person. All students, regardless of location, class modality, or program, will receive the same level of quality academic and general student support.

D. The out-of-State institution shall clearly state the demand and need for a program for which the institution is applying to meet the present and future needs of the region and the state in general. Two kinds of needs may be identified:

1. Societal needs, including the tradition of liberal arts education, which provides immeasurable returns to the state in part by instilling in citizens a capacity for advanced learning and individual and societal benefits regardless of workforce or market demand considerations; and
    a. The Cybersecurity Operations program aligns with the University's Mission: "Webster University, a worldwide institution, ensures high-quality learning experiences that transform students for global citizenship and individual excellence."
2. Occupational needs relative to meeting workforce requirements or upgrading vocational or technical skills.
    a. A recent search for Cybersecurity jobs in Maryland reveals there are in excess of 3,000 jobs available just within Maryland alone. There are more than 53,000 Cybersecurity jobs available in America.

E. Market Demand Data

1. The out-of-State institution shall present data projecting market demand and the availability of openings in the job market to be served by the new program for which the institution is applying. The type of information submitted will vary, depending on the program. Still, it may include workforce and employment projections prepared by the federal and state governments as well as professional and trade associations.
    a. The Maryland Department of Labor projects Cybersecurity jobs account for roughly 3% of all Maryland jobs. They also project that the number of employed Cyber professionals will exceed 113,000 in 2024, representing an increase of 31% in employment. (also see enclosed Appendix I).
2. With the exception of programs in the liberal arts, recently collected, existing, or new market surveys shall be used, which clearly provide quantifiable and reliable data from prospective employers on the educational and training needs and the anticipated number of vacancies expected over the next five years.
    a. Data from the the International Information System Security Certificate Consortium, or $(ISC)^2$, 2022 report explains there is a projected global Cybersecurity workforce shortage of 3.4 million people, of which the United States is projected to account for 38% of that figure, the highest number among all other countries. Maryland is projected to have the fourth largest shortage concerns in the United States (see Appendix III).
3. In assessing demand for a new program for which the institution is applying, an institution shall also present data showing the current supply of graduates in that program area in the state and region.
    a. According to data from the University System of Maryland institutions from the previous five-year period (2018-2022), the number of master's level graduates equaled 10,375 (see Appendix II). Given the Department of Labor data, the number of jobs in Cybersecurity is outpacing the number of graduates in this area. This is a large vacancy that Webster can help fill by permitting the addition of the Master of Cybersecurity Operations at the Joint Base Andrews (MD) campus.