Graduate Programs in Cybersecurity

Master of Professional Studies: Cybersecurity

Post-Baccalaureate Certificates:
Cybersecurity Operations
Cybersecurity Strategy and Policy
Digital Forensics

CYBERSECURITY - A PROFESSIONALLY-FOCUSED, RELEVANT AND PRACTICAL GRADUATE DEGREE

» Courses are designed to prepare technical professionals and others in the ‘cyber’ fields to fill operational management and leadership roles in cybersecurity, cyber operations, and/or related organizations in the government or private sector.
» Students gain applicable skills that speak to the needs of the operational cybersecurity workforce in Maryland.
» Cybersecurity is a critical domain of global competition that reaches across social, economic, political and military realms of influence.

WHEN YOU CHOOSE UMBC PROFESSIONAL PROGRAMS, YOU CAN COUNT ON:

» Classes taught by cybersecurity industry experts with significant current professional experience.
» Flexible evening, hybrid, online, and/or weekend class schedule that accommodates working professionals.
» Wide-ranging resources offered at a top-notch public research university.

WHY UMBC?

» UMBC is uniquely positioned to provide education and training that respond to the state’s need for qualified technical professionals in the cybersecurity field.
» The 2019 U.S. News & World Report Best Colleges guide ranks UMBC in the top ten on its closely-watched Most Innovative Schools list and has recognized UMBC as a global leader in higher education.
» UMBC is certified as a National Center of Academic Excellence in Cyber Defense Education (CAE/CDE) as well as a Center of Academic Excellence in Cyber Defense Research (CAE-R) sponsored by the National Security Agency and Department of Homeland Security (DHS).
» UMBC provides a comprehensive and quality education at a manageable cost.

For program information in Baltimore: Dr. Rick Forno | Program Director richard.forno@umbc.edu
For program information in Rockville: Dr. Behnam Shariati Asst. Program Director shariati@umbc.edu
For application information: Baltimore: Dustin Hodgson | dustin@umbc.edu Rockville: sgprofessionalprograms@umbc.edu

cyber.umbc.edu
Master’s of Professional Studies (M.P.S.): Cybersecurity
30 Credits (10 courses)

REQUIRED CORE COURSES
18 CREDITS
- CYBR 620: Introduction to Cybersecurity
- CYBR 623: Cybersecurity Law & Policy
- CYBR 624: Cybersecurity Project
- CYBR 650: Managing Cyber Operations
- CYBR 652: Enterprise Security
- CYBR 658: Risk Analysis and Compliance

ELECTIVE COURSES
SELECT 4 COURSES (12 CREDITS)
- CYBR 621: Cyber Warfare
- CYBR 622: Global Cyber Capabilities and Trends
- CYBR 642: Introduction to Digital Forensics
- CYBR 644: Cyber Practitioner Development Lab **
- CYBR 691: Special Topics in Cybersecurity
- CMPE 685: Principles of Communications Networks *

CERTIFICATE PROGRAMS
POST-BACCALAUREATE CERTIFICATE: CYBERSECURITY STRATEGY & POLICY REQUIRED COURSES (12 CREDITS)
- CYBR 620: Introduction to Cybersecurity
- CYBR 622: Global Cyber Capabilities and Trends
- CYBR 621: Cyber Warfare
- CYBR 623: Cybersecurity Law & Policy

POST-BACCALAUREATE CERTIFICATE: CYBERSECURITY OPERATIONS REQUIRED COURSES (12 CREDITS)
- CYBR 620: Introduction to Cybersecurity
- CYBR 650: Managing Cybersecurity Operations
- CYBR 658: Risk Analysis and Compliance
- One Additional Cybersecurity Elective

CMSC 644: Information Assurance *
CMSC 652: Cryptography and Data Security *
CMSC 687: Introduction to Network Security *
CMSC 691: Special Topics in Computer Science *
Other relevant graduate course(s) approved by the Cybersecurity Graduate Program Director.
* Offered at Baltimore campus
** Pass or fail only. Not a graded course.

POST-BACCALAUREATE CERTIFICATE: DIGITAL FORENSICS *
REQUIRED COURSES (12 CREDITS)
- CYBR 620: Introduction to Cybersecurity or CMSC equivalent (e.g., CMSC 626, CMSC 687)
- CYBR 641: Computer Crime Investigations
- CYBR 642: Introduction to Digital Forensics
- CYBR 643: Advanced Digital Forensics

* Offered at Baltimore campus only

All credits earned in these graduate certificates may be applied to the Master of Professional Studies (M.P.S.): Cybersecurity

Office of Professional Programs
UMBC’s Office of Professional Programs offers a broad array of professionally focused master’s degree and certificate programs that address industry needs while anticipating future opportunities.
professionalprograms.umbc.edu