

# 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.

# cyber.umbc.edu

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:

Faith Dinh, Program Coordinator faithdinh@umbc.edu 410-455-6512

### Rockville:

Karina Jenkins, Program Manager sgprofessionalprograms@umbc.edu 301-738-6285

# ADMISSIONS REQUIREMENTS

### M.P.S.

- A bachelor's degree in Computer Science, Information Systems, or a related field is preferred
- » Minimum undergraduate GPA of 3.0 on a 4.0 scale
- » GRE scores are not required
- Current professional experience in information technology or cybersecurity

### **Graduate Certificate**

- » A bachelor's degree in any discipline
- » Minimum undergraduate GPA of 3.0 on a 4.0 scale
- » GRE scores are not required for applicants
- » Basic understanding of the internet, networked information systems and information security

# INTERNATIONAL APPLICANTS

Please visit cyber.umbc.edu/ international for detailed admissions requirements for international applicants.

» Please pay special attention to English proficiency and testing requirements

# ADMISSIONS DEADLINES

Fall: August 1
Spring: December 1

For detailed application process please visit

### cyber.umbc.edu

Offered in Baltimore and Rockville. (schedules may vary)

### 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

# 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 (Ie, 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