

The Cybersecurity graduate program prepares students to take the next step in their careers. Real world examples and hands-on exercises using the latest industry tools and methodologies in their coursework will enable students to make an immediate impact at their job.

KEVIN SHIVERS  
MAGE FACULTY, CYBERSECURITY

#### TOP CYBERSECURITY POSITIONS

- Cybersecurity Analyst, Consultant, or Manager
- Network Engineer
- Penetration and Vulnerability Tester
- Software Developer
- Information Technology Director
- Systems Engineer

#### TOP STUDENT EMPLOYERS

- U.S. Department of Defense
- Hewlett Packard Enterprise
- HCL Technologies
- Ernst & Young
- Accenture
- NAVAIR

The A. James Clark School of Engineering is a catalyst for high-quality research, innovation, and learning, providing students the resources to be engaged problem-solvers and entrepreneurial thinkers. Pursue a degree tailored to your career interests through the top-ranking Maryland Applied Graduate Engineering programs.

DON'T WAIT TO FURTHER YOUR CAREER



MARYLAND APPLIED  
GRADUATE ENGINEERING

#### FOR MORE INFORMATION

We welcome your interest. For complete information, including course descriptions, deadlines, and schedules please contact us.

WEBSITE: [mage.umd.edu](http://mage.umd.edu)

TEL: 855-309-8379

EMAIL: [mage@umd.edu](mailto:mage@umd.edu)



A. JAMES CLARK  
SCHOOL OF ENGINEERING

GRADUATE ENGINEERING DEGREES IN  
**CYBERSECURITY**

Gain the technology skills you need to help secure digital infrastructures and develop cybercrime solutions.

# DON'T WAIT TO FURTHER YOUR CAREER

Discover how Maryland Applied Graduate Engineering (MAGE) programs prepare you to solve the most daunting engineering challenges and give you a competitive edge in today's market.

- Focus on a specialized area of engineering and target course-work to your interests.
- Learn from industry leaders who incorporate the latest education tools to create collaborative, interactive learning environments.
- Balance work and family through the flexibility of online or in-person classes.
- Access student services online to quickly receive the support you need regarding admissions, financial aid, or career services.

A leader in graduate engineering education for professionals, we are proud to serve the region's engineering community. Through our programs, advance your career with a degree from the A. James Clark School of Engineering, consistently ranked among the top 20 in the U.S. Located just a few miles from Washington, D.C., Maryland Engineering is at the center of a constellation of high-tech companies and federal laboratories, offering students and faculty access to unique professional opportunities.



## CYBERSECURITY AT MARYLAND

Our programs take full advantage of the resources of the Maryland Cybersecurity Center (MC2), a research and education powerhouse that takes a comprehensive approach to cybersecurity and technology development, stressing “more-than-tech” interdisciplinary solutions. Its work focuses on theoretical and applied cryptography, data-driven security, human-computer interaction and security, network and wireless security, machine learning and security, blockchain and cryptocurrency security, and programming languages security. The center brings experts from computer science and engineering together with colleagues throughout campus to establish broad-based cybersecurity initiatives. Located in the Brendan Iribe Center for Computer Science and Engineering, a stunning, 215,000 square foot state-of-the-art facility, MC2 is adjacent to the university's Discovery District, a dynamic research park that includes technology leaders like Adobe, Raytheon, and Capital One.

The University of Maryland has joined 83 academic institutions in an innovative initiative to increase the nation's capabilities in cybersecurity education and work-force development. The Academic Engagement Network supports and enhances the U.S. Cyber Command's forward-looking efforts involving the U.S. cyber workforce, applied cyber research, applied analytics, and other strategic issues.

## GRADUATE PROGRAMS IN CYBERSECURITY

The U.S. Bureau of Labor Statistics projects 35 percent employment growth for cybersecurity professionals from 2021 to 2031, a much faster rate of increase than other occupations. At the University of Maryland, you can move your career forward or transition into this high-demand field. The **Master of Engineering** program is offered in collaboration with the Department of Electrical and Computer Engineering, Department of Computer Science, and the Maryland Cybersecurity Center, merging engineering applications with computer science principles. Our programs give students the knowledge and skills to lead cybersecurity efforts in telecommunications, banking, utilities, data storage, transportation, and more. Courses are offered on campus and online. The four courses in the **Graduate Certificate in Engineering** allow students to focus on a very concentrated area of study. Both programs prepare engineers to directly meet today's cybersecurity challenges in government, the nonprofit sector, and private industry.

## ADMISSION REQUIREMENTS

- Applicants must have a bachelor's degree in a STEM field from an accredited institution
- Successful completion of the following course (or its equivalent): a programming course such as ENEE150, Intermediate Programming for Engineers, CMSC 132, Object-Oriented Programming II, or CMSC 216, Introduction to Computer System
- GPA of 3.0 or better
- Two letters of recommendation (M.Eng. applicants only)
- Unofficial copies of transcript
- Applicants with a degree outside of engineering or computer science are recommended to also possess at least one of the following certifications:
  - ▶ CompTIA Security+
  - ▶ GIAC GSEC
  - ▶ Certified Ethical Hacker
- For international students: an official English proficiency score report that meets the full admission requirements
- Official GRE scores considered but not required
- Completed applications considered for admission on a case-by-case basis

## DEGREE REQUIREMENTS

### MASTER OF ENGINEERING

- 10 courses (30 Credits)
- No thesis / no research
- No comprehensive exam

### GRADUATE CERTIFICATE IN ENGINEERING

- 4 courses (12 Credits)

### FULL LISTING OF COURSES

Visit [mage.umd.edu/cybersecurity](https://mage.umd.edu/cybersecurity) or scan here for more specific



requirements, available courses, and degree planning sheets.

## APPLICATION DEADLINES

### ON-CAMPUS DOMESTIC

**FALL** July 31

**SPRING** December 15

**SUMMER** May 15

### ON-CAMPUS INTERNATIONAL

**FALL** March 8

**SPRING** September 24

### ONLINE DOMESTIC AND INTERNATIONAL

**FALL** July 31

**SPRING** December 15

**SUMMER** May 15

## TAKE THE NEXT STEP

Are you ready to take the next step in your engineering career journey? Explore program options, application requirements, and deadlines through virtual and in-person open house sessions.

TO LEARN MORE, VISIT  
[mage.umd.edu/cybersecurity](https://mage.umd.edu/cybersecurity)