

# Master of Science in Cybersecurity Online

Through a collaborative and multidisciplinary curriculum, the online M.S. in Cybersecurity program from Syracuse University's College of Engineering and Computer Science prepares students to gain the in-demand skills to design and develop secure, assured systems.

## In the M.S. in Cybersecurity Online Program, Students Develop the Skills To:

- design inherently secure systems,
- protect these systems in various infrastructures,
- apply mathematical logic to assure systems, and
- detect cyberthreats through malware analysis and data mining.

## With an M.S. in Cybersecurity, You Can Pursue Positions Such As:

- Information Security Analyst
- Business Analyst
- Cybersecurity Consultant
- Cybersecurity Engineer
- Software Developer
- Cryptographer

### Engineering@Syracuse Students

**49%** U.S. Ethnic Minority

**19%** Military Background

This self-reported information above reflects all-time enrolled students as of December 2019.

## Prepare to Succeed in an Evolving Industry With Syracuse.

**Security professionals are in high demand as technology scales. The Center for Cyber Safety and Education projects a shortage of 1.8 million cybersecurity workers by 2022.<sup>1</sup>**

At the forefront of developments in the field, the College of Engineering prepares students with the expertise needed to close the skills gap and enter this emerging industry.



**Live, Online  
Classes**



**Interdisciplinary  
Curriculum**



**No Relocation  
Necessary**



**Networking  
Opportunities**

<sup>1</sup> The Center for Cyber Safety and Education, [Global Information Security Workforce Study 2017](#) (retrieved April 2020)

## Earn Your Degree in as Few as 15 Months

The M.S. in Cybersecurity program consists of 30 credits. Students in the program take 15 credits of core courses and 15 credits of electives, nine of which are required technical electives. They learn in face-to-face online classes and also attend an on-campus immersion, ensuring a collaborative academic experience and networking opportunities.

### Core courses in the program include:

- Computer Security
- Internet Security
- Assurance Foundations
- Design and Analysis of Algorithms
- Principles of Operating Systems

### M.S. in Cybersecurity students must take the following required technical elective courses:

- Machine Learning
- Introduction to Cryptography
- Biometrics

## Applying to the Program

The College of Engineering and Computer Science seeks students who are passionate about computer systems and determined to shape tomorrow's technology. The online M.S. in Cybersecurity is a rigorous degree program suited for those with a strong background in computing disciplines and proficiency in programming languages who are looking to further their specialized skills.

### To apply, you will need:

- A bachelor's degree
- Official degree-bearing transcripts
- A current business resume
- A 500-word personal statement
- Two letters of recommendation
- GRE waivers are available



“Syracuse University’s class sizes are small, and you interact with your professors and classmates each week. It really is as close to a brick-and-mortar experience as you can get.”

**Jonathan Ennis—Class of 2018**

## About the College

Established in 1901, Syracuse University’s College of Engineering and Computer Science has a long tradition of preparing students to become responsive leaders who create practical and sustainable solutions to today’s greatest technological challenges. Through collaborative and multidisciplinary curricula, programs in the College provide students with the real-world skills to meet the needs of a growing industry worldwide. Graduates of online Engineering@Syracuse programs join an accomplished alumni community of dedicated tech professionals.

*Syracuse University is fully accredited by the Middle States Commission on Higher Education (MSCHE) and is registered at the New York State Education Department.*