

## A Career Pathway that makes an IMPACT

- Defeating cybercriminals who present the greatest challenge to every citizen, company and government in the world
- Using and creating new technologies in a team effort to thwart cyberattacks
- Contributing to the industry of your choice: finance, health, transportation, energy, fashion, social media, and marketing
- Quickly evolving field so you'll never be bored
- Multiple types of positions:
  - Cybersecurity Analyst
  - Software Developer
  - Penetration and Vulnerability tester
  - Network or Systems Engineer
  - Information Security Analyst/Engineer

## Why a Career in Cyber Security?

- Dynamic career pathway
- High demand for professionals
- Highest starting salaries
- Nationally – 744,000 jobs
- Statewide – 36,000 jobs



## Get In Touch

*Contact your advisor to learn more*

### Contact Us

For an Undergraduate Certificate  
in Cyber Security  
Contact: Teresa Perez at [mtperetz@fau.edu](mailto:mtperetz@fau.edu)

For a Graduate Certificate  
in Cyber Security  
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To learn about the Cyber Security initiative  
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[www.fau.edu/cybersecurity](http://www.fau.edu/cybersecurity)

# CYBER SECURITY

Prepare for a  
Lucrative Career



Supported, in part, by  
The Governor's Office  
and Cyber Florida

**FAU**  
COLLEGE OF ENGINEERING  
& COMPUTER SCIENCE  
Florida Atlantic University

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## How to Prepare for a Career in Cyber Security at FAU?

### Graduate Cyber Security Certificate Program – 12 Credits Computer Science Track

*Students must take three courses from the Computer Science (CS) Cyber Security track. Students must take one additional course from either the CS track or from the Mathematical track.*

#### College of Engineering and Computer Science

**Elective Courses – List updated periodically**

#### Computer Science (CS)

- CDA 5326 Cryptographic Engineering
- CIS 5371 Practical Aspects of Modern Cryptography
- CIS 6370 Computer Data Security
- CIS 6375 Distributed Systems Security
- COT 6427 Secret Sharing Protocols
- COT 6930 Computational Algorithms on Encrypted Data
- CTS 6319 Cyber Security: Measurement and Data Analysis

#### College of Science – Mathematical Sciences (MS)

- MAD 5474 Introduction to Cryptology and Information Security
- MAD 6478 Cryptanalysis
- MAD 6607 Coding Theory
- MAS 6217 Number Theory and Cryptography



### Undergraduate Cyber Security Certificate Program – 12 Credits Computer Science Track

*Students must take the CS core course, and, then take two 3-credit courses from the CS elective course list and one 3-credit course from the CS, IT or MS elective course lists. All four courses must be completed with a grade of "C" or better.*

#### College of Engineering and Computer Science Core Course

CNT 4403 Foundations of Cybersecurity

#### Computer Science (CS)

**Elective Courses – List updated periodically**

- CAP 4623 Trustworthy Artificial Intelligence
- CDA 4321 Introduction to Cryptographic Engineering
- CIS 4213 Cyber Physical Systems Security
- CIS 4367 Operating Systems Security
- CIS 4634 Applied Cryptography
- COP 4665 Mobile Applications
- COP 4808 Full Stack Web Development
- CNT 4411 Network and Data Security

#### College of Business – Information Technology (IT) Elective Courses

- ISM 4320 Introduction to Cybersecurity
- ISM 4323 Management of Information Assurance and Security
- ISM 4324 Computer Forensics

#### College of Science – Mathematical Sciences (MS) Elective Courses

- CAP 3786 RI: Introduction to Data Science
- MAD 4605 Introduction to Coding Theory
- MAP 4190 Mathematics of Cybersecurity
- MAS 4206 Mathematics for Cryptography

The Department of Labor Statistics projects employment of Information Security Analysts to grow 35 percent from 2021 to 2031, much faster than the average for all occupations.

[www.fau.edu/cybersecurity](http://www.fau.edu/cybersecurity)



### The Future of Cyber Security

Cyber security is a dynamic career pathway. Everywhere around us we see an increasing need for a well-prepared Cyber security workforce. It is estimated that, nationally, there are over 744,000 jobs available, and that number is projected to increase. With such a large demand, there are also many exciting opportunities to explore new technologies, engage in creative problem solving with an analytical mindset, work in just about any industry (e.g., national defense, finance and banking, health care and medicine, energy, and fashion), and, equally exciting, work just about anywhere in the world.

Cyber security is one of the fastest growing and highest paying career fields for the next decade. Those who enter the cyber security workforce will be on the forefront in protecting all aspects of our daily lives - our cell phones and personal computers, our increasing use of digital technologies, our need for power to operate these devices – and so much more - from the ever-increasing threat of cyber criminals whose damage is estimated to be ~7 trillion dollars by 2025.

Both industry and government are looking for a diverse group of cyber professionals including women and underrepresented populations who are interested in pursuing this career pathway upon completion of their BS and/or MS degree and a cybersecurity certificate in FAU's exciting program of study.