



UCF

College of Engineering and Computer Science

Cyber Security and Privacy MS

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MS in Cyber Security & Privacy

- UCF has been designated as both National Centers of Academic Excellence in Cyber Defense (CAE-CD) and in Research (CAE-R)
 - <https://cyber.cecs.ucf.edu/>
- The **Cyber Security and Privacy Faculty Cluster** is actively conducting research in cybersecurity areas that will be integrated into many courses offered in this MS program
 - <https://cyber.cs.ucf.edu/>
 - Two new cybersecurity faculty joined in Fall 2022



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MS Degree in Cyber Security and Privacy

- Program Catalog:
 - <https://www.ucf.edu/catalog/graduate/#/programs/Hk7CQJZdju>
 - This new MS program starts **Fall 2021**
 - In Fall 2022, we have **61** active students in this MS program
 - GRE is NOT required for application; only need one recommendation letter
- **Program Website:** <https://mscyber.cs.ucf.edu/>
- Currently only has traditional in-campus MS program
 - Some courses are online courses or have online sessions
 - Has plan to add pure online MS program in the near future
- Hosted in Department of Computer Science, EECS
 - Jointly offered with School of Modeling, Simulation and Training (SMST), Dept. Management, Dept. Criminal Justice, and Dept. Psychology
 - Has two tracks: **Technical track** and **Interdisciplinary track**
 - Has both thesis option (24 credits + thesis) and non-thesis option (30 credits)



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Curriculum

- Required Courses: 9 Credit Hours
 - CAP 5150 - Foundations of Computer Security and Privacy
 - CDA 5209/5220 - Foundations of Secure Execution Environment
 - CIS 6614 - Advanced Software Systems Security
- Thesis Option: 6 credit hours (two semester's thesis courses)
- Non-thesis Option: 6 Credit Hours
 - take 6 credit hours of any electives in either technical track or interdisciplinary track



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Track 1: Technical Track

Cybersecurity/Privacy (Select minimum one course)

- CAP 5151 - Internet of Things Security and Privacy
- CAP 6135 - Malware and Software Vulnerability Analysis
- CDA 6221 - Advanced Topics in Secure Execution Environment
- CIS 6395 - Incident Response Technologies
- CNT 5410L - Cyber Operations Lab
- CIS 5730 - Blockchains and Smart Distributed Contracts

Networking (Select minimum one course)

- CNT 5008 - Computer Communication Networks Architecture
- CNT 5805 - Network Science
- CNT 6707 - Advanced Computer Networks



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Track 1: Technical Track

Database (Select minimum one course)

- COP 5711 - Parallel and Distributed Database Systems
- COP 6731 - Advanced Database Systems

Others:

- CDA 5106 - Advanced Computer Architecture
- COP 5611 - Operating Systems Design Principles
- COT 5405 - Design and Analysis of Algorithms
- COT 6410 - Computational Complexity
- CAP 5610 - Machine Learning
- CAP 5636 - Advanced Artificial Intelligence
- CAP 6640 - Computer Understanding of Natural Language
- CEN 5016 - Software Engineering



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Track 2: Interdisciplinary Track

Management

- ISM 6327 - Foundations of Cybersecurity and Privacy
- ISM 6328 - Cyber Risk Assessment
- ISM 6375 - Cyber Management and Leadership

Modeling and Simulation

- IDC 5602 - Cybersecurity: A Multidisciplinary Approach
- IDC 6600 - Emerging Cyber Issues
- IDC 6601 - Behavioral Aspects of Cybersecurity

Psychology

- EXP 5256 - Human Factors I
- EXP 6257 - Human Factors II
- INP 6072 - Survey Research Methods and Program Evaluation in Indust. and Org. Psychology
- PPE 5055 - Personality Theories
- SOP 5059 - Advanced Social Psychology

Criminal Justice

- CCJ 6073 - Data Management Systems for Crime Analysis
- CCJ 6074 - Investigative and Intelligence Analysis: Theory and Methods
- CCJ 6717 - CJ Theories of Crime Analysis and Prevention