



**UCF**



## **Master's Degree in Cyber Security and Privacy**

<https://mscyber.cs.ucf.edu/>

### ***Program Description***

The Master's Degree in Cyber Security and Privacy (MS-Cyber) program will provide high-quality cybersecurity graduate education, advance cyber security and privacy research, and address the issues of state, national and international cybersecurity. It is offered jointly by College of Engineering and Computer Science (CECS) (Department of Computer Science), School of Modeling, Simulation, and Training (SMST), College of Sciences (Department of Psychology), College of Community Innovation and Education (Department of Criminal Justice). The degree is housed in CECS due to its requirement for students with primarily STEM backgrounds.

The MS in Cyber Security and Privacy program will have two tracks: TRACK 1: Technical Track and TRACK 2: Interdisciplinary Track.

The MS program requires 30 credit hours to graduate. A student can transfer up to 9 credit hours from prior graduate study that are good substitute to elective courses included in this MS program and approved by the program coordinator. Among the 30 credit hours, at least half of the course work must be at 6000 level.

### ***Admissions Requirements***

An undergraduate degree in Computer Science, Computer Engineering, Information Technology, or equivalent is desirable but not required. Applicants without a strong undergraduate background in Computer must demonstrate an understanding of the material covered in the following undergraduate courses: COP 3502C - Computer Science I; COP 3503C - Computer Science II; CIS 3360 - Security in Computing. Applicants must submit and meet the following minimum requirements (GRE is not required):

- An earned Bachelor's degree from an accredited university with official transcript
- A minimum GPA of 3.0 (on a scale of 4.0) in all work attempted as an undergraduate student or in the last 60 attempted hours for the Bachelor's degree
- Resume
- One letter of recommendation

### ***Application Deadlines***

- The application and processing fee must be submitted by the appropriate deadline.

	<b>Fall Priority</b>	<b>Fall Deadline</b>	<b>Spring Deadline</b>
<b>U.S. Applicants</b> <i>Students not needing an F or J visa</i>	Jan 15	July 1	Dec 1
<b>International Applicants</b>	Jan 15	Jan 15	July 1



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**Program Curriculum** (every course in this MS program is 3 credit hours)

**Required Courses** (9 credit hours)

- CAP5150 - Foundations of Computer Security and Privacy
- CDA5209 - Foundations of Secure Execution Environment
- CIS6614 - Advanced Software Systems Security

<b>Track 1: Technical Track</b>	<b>Track 2: Interdisciplinary Track</b>
<p><b>Cybersecurity/Privacy (minimum 1 course)</b></p> <ul style="list-style-type: none"> <li>CAP5151 - Internet of Things Security and Privacy</li> <li>CAP6135 - Malware and Software Vulnerability Analysis</li> <li>CDA6221 - Advanced Topics in Secure Execution Environment</li> <li>CIS6395 - Incident Response Technologies</li> <li>CNT5410L - Cyber Operations Lab</li> <li>CIS5730 - Blockchains and Smart Distributed Contracts</li> </ul> <p><b>Networking (minimum 1 course)</b></p> <ul style="list-style-type: none"> <li>CNT5008 - Computer Communication Networks Architecture</li> <li>CNT5805 - Network Science</li> <li>CNT6707 - Advanced Computer Networks</li> </ul> <p><b>Database (minimum 1 course)</b></p> <ul style="list-style-type: none"> <li>COP5711 - Parallel and Distributed Database Systems</li> <li>COP6731 - Advanced Database Systems</li> </ul> <p><b>Other Electives</b></p> <ul style="list-style-type: none"> <li>CDA5106 - Advanced Computer Architecture</li> <li>COP5611 - Operating Systems Design Principles</li> <li>COT5405 - Design and Analysis of Algorithms</li> <li>COT6410 - Computational Complexity</li> <li>CAP5610 - Machine Learning</li> <li>CAP5636 - Advanced Artificial Intelligence</li> <li>CAP6640 - Computer Understanding of Natural Language</li> <li>CEN5016 - Software Engineering</li> </ul>	<p><b>Management</b></p> <ul style="list-style-type: none"> <li>ISM6327 - Foundations of Cybersecurity and Privacy</li> <li>ISM6328 - Cyber Risk Assessment</li> <li>ISM6375 - Cyber Management and Leadership</li> </ul> <p><b>Modeling and Simulation</b></p> <ul style="list-style-type: none"> <li>IDC5602 - Cybersecurity: A Multidisciplinary Approach</li> <li>IDC6600 - Emerging Cyber Issues</li> <li>IDC6601 - Behavioral Aspects of Cybersecurity</li> </ul> <p><b>Phycology</b></p> <ul style="list-style-type: none"> <li>EXP5256 - Human Factors I</li> <li>EXP6257 - Human Factors II</li> <li>INP6072 - Survey Research Methods and Program Evaluation in Indust. and Org. Psychology</li> <li>PPE5055 - Personality Theories</li> <li>SOP5059 - Advanced Social Psychology</li> </ul> <p><b>Criminal Justice</b></p> <ul style="list-style-type: none"> <li>CCJ6073 - Data Management Systems for Crime Analysis</li> <li>CCJ6074 - Investigative and Intelligence Analysis: Theory and Methods</li> <li>CCJ6717 - CJ Theories of Crime Analysis and Prevention</li> </ul>

**Thesis Option or Course Option** (6 credit hours)

- Thesis Option: 3 credit-hour MS thesis class per semester for two semesters
- Course Option: a student can take any two electives in both tracks

**MS-Cyber Program Contact:**  
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 MS-Cyber Graduate Program Coordinator  
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