Cybersecurity, M.S.

With an ever-growing demand for cybersecurity professionals, the M.S. in Cybersecurity prepares graduates to be leaders in the protection of data assets and analysis of potential threats to systems and networks.

The curriculum focuses on the techniques, policies, operational procedures, and technologies that secure and defend the availability, integrity, authentication, confidentiality, and non-repudiation of information and information systems and the development of secure software systems. The program is offered 100% online. The courses have been carefully blended to meet real-world requirements and to facilitate hands-on experiences that maximize a student's learning outcome in the program.

Program Highlights

- Complete the program in five academic semesters
- Flexible online classes
- Become a highly-skilled, adaptable cybersecurity professional
- Predict and protect against cybercrime
- Participate in interactive case studies

Program Requirements

A minimum grade of "C" is required for all courses with an institutional GPA of 3.0 or higher.

Admission Requirements

In addition to the University graduate admission requirements described in the Admissions section of the catalog, the department bases decisions for regular admission on a holistic review of credentials in which the following criteria are used to assess the potential success of each applicant:

- Completion of an undergraduate degree with a minimum institutional GPA of 3.0
- Letter of intent (written by the applicant) to include the applicant's motivation for pursuing an M.S. in Cybersecurity degree, the extent of related work experience in the field, and future goals related to the attainment of an M.S. in Cybersecurity degree
- Submission of a resume
- Name and contact information of two individuals that can speak to the applicant's ability to successfully complete the program

Students entering the program with a degree other than Cybersecurity, Computer Science, or Information Technology and pursuing the Data or Software & System Security track may be required to complete prerequisite courses in computing and programming. The department offers the following foundational courses to complete the prerequisite coursework:

- COP 5518 Foundations: Computing Essentials
- COP 5007 Foundations: Programming Essentials

Cybersecurity Program Requirements

A minimum of 15 credits in coursework must be at the 6000-level. In addition, a minimum grade of "C" is required for all courses with an institutional GPA of 3.0 or higher.

Core Courses		6
CIS 5775	Cybersecurity Principles	
ISM 6574	Advanced Legal, Ethical, and Human Aspects of Cybersecurity	
Coursework from the selected track		12
Electives		9
Advisor approved elective at the 5000- or 6000-level		
COT 6935	Seminar in Cybersecurity	3
Total Hours		**30**

Data Security Track		
COP 5725	Database Systems	3
Choose three courses from the following:		9
CAP 6771	Data Mining	
CAP 6772	Data Warehousing	
CAP 6789	Advanced Big Data Analytics	
CET 6882	Network Performance Monitoring and Security	
CIS 6376	Database Security	
CIS 6394	Digital Forensics	
CIS 6625	Data Security	
COP 5775	Database Administration	
CTS 5458	Data Visualization	

Software & System Security Track		
CEN 5079	Secure Software Development	3
Choose three courses from the following:		9
CEN 6074	Software Assurance and Security	
CIS 5396	Ethical Hacking and Penetration Testing	
CIS 6394	Digital Forensics	
CIS 6625	Data Security	
COP 5522	Parallel and Distributed Programming	
COP 5725	Database Systems	
CNT 5407	System and Network Security	
CNT 6519	Wireless Network Security	

Security Management Track		
ISM 6575	Advanced Cybersecurity Risk Management	3
Choose three courses from the following:		9
COP 5725	Database Systems	
COP 5775	Database Administration	
GEB 5816	MBA Foundations: Principles of Human Resources Management *	
GEB 5875	MBA Foundations: Management Skills and Applications *	
ISM 6326	Information Security Auditing and Control	

National Security Track		
DSC 6045	Homeland Security	3
Choose three courses from the following:		9
CCJ 5018	Crime and Public Policy	
CCJ 6715	Issues in Contemporary Criminal Justice	
INR 6097	Political Violence	
DSC 5020	Terrorism	
INR 5129	Statecraft	

INR 5330	National Security Policy, Technology and Cyber	
INR 5365	Intelligence	

* GEB 5816 and GEB 5875 are 1.5 semester hours (sh); students must take both courses

Cybersecurity Certificate

This certificate program is focused on data and system security and prepares professionals to be leaders in the protection of data assets and analysis of potential threats to systems and networks. The program's courses have been carefully blended to meet real-world requirements and to facilitate hands-on experiences that maximize a student's learning outcome in the program.

Admission Requirements

- Admission to UWF as a degree or non-degree-seeking graduate student.
- Submission of resume.
- Provide proof of a bachelor's degree from a post-secondary institution accredited by an agency recognized by the United States Department of Education and course syllabi for any IT or computing-related coursework.

Students entering the certificate program with a degree other than Cybersecurity, Computer Science, or Information Technology may be required to complete prerequisite courses in computing and programming. The department offers the following foundational courses to complete the prerequisite coursework:

- COP 5518 Foundations: Computing Essentials
- COP 5007 Foundations: Programming Essentials

Prospective students for this certificate must contact the departmental advisor to complete the certificate declaration before the drop/add period of the semester of completion. Students must complete all courses listed below within five years of admission into the program. They must also have a "C" or better in each course and a grade point average of 3.0 or higher for the combined courses.

CIS 5775	Cybersecurity Principles	3
CNT 5407	System and Network Security	3
Choose two courses from the following:		6
CEN 5079	Secure Software Development	
CIS 6376	Database Security	
CIS 6394	Digital Forensics	
COP 5725	Database Systems	
Total Hours		**12**