



College of Arts and Sciences
Department of Mathematics and Computer Science

College of Business Administration
Department of Information Systems

UMSL is a NSA/DHS National Center
of Academic Excellence in Cyber
Defense Education



Graduate Certificate in Cybersecurity

The Graduate Certificate in Cybersecurity is a six-course (18 credit hours) multidisciplinary program housed in the Graduate School. It is designed to help students from all backgrounds achieve a foundation in information security. It provides students the flexibility to focus on technical and/or managerial aspects of computer, software, network, and information security. With primary courses offered by Computer Science and Information Systems departments, the program also allows students to choose from a range of electives based on student interests. This certificate serves a broad group of managers, technical specialists, and professionals with a bachelor's degree. A prior background in information security is not required to enter this program.

Required Courses		3
INFSYS 6828	Principles of Information Security	
CMP SCI 4730	Computer Networks	
Or INFSYS 6836	Telecommunications Design and Management	
CMP SCI 5782	Advanced Information Security	
Or INFSYS 6858	Advanced Cybersecurity Concepts	
Electives		3
CMP SCI 4700	Computer Forensics	
CMP SCI 4780	Computer and Network Security	
CMP SCI 4792	Mobile and Ubiquitous Computing	
CMP SCI 5020	Android Apps: Android Fundamentals	
CMP SCI 5222	Advanced iOS Apps	
CMP SCI 5732	Cryptography for Computer Security	
CMP SCI 5750	Cloud Computing	
CMP SCI 5794	Security of IoT Systems	
INFSYS 6868	Software Assurance	
INFSYS 6878	Management of Information Security	
Total Courses (Credit Hours)		6 (18)


Notes:

- 1) Students may substitute the above electives with other courses upon approval by the graduate program director of the Computer Science or Information Systems Department. In all cases, 18 hours are needed to complete the Graduate Certificate in Information Security
- 2) A maximum of two (2) 4000-level courses can be taken as part of the graduate certificate
- 3) A minimum of four courses must be taken in residence at UMSL

For more information visit <http://cybresecurity.umsl.edu> or contact the program directors

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UMSL|NOW : Some courses available online, all courses available in the evening, some every semester some on rotation.