



## Undergraduate Certificate in Cybersecurity



The Undergraduate Certificate in Cybersecurity is a five-course interdisciplinary studies program. It is designed to help students from all backgrounds achieve a foundation in cybersecurity. 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 or without a bachelor's degree. A prior background in information security is not required to enter this program. It is open to both current UMSL students as well as new students specifically enrolling for this certificate. A minimum GPA of 2.5 is required for admission.

Core Courses: take three		Availability
<a href="#">CMP SCI 3702</a>	Cyber Threads and Defense	FP
Or <a href="#">INFSYS 3848</a>	Introduction to Information Security	FP
<a href="#">CMP SCI 4730</a>	Computer Networks	FP
Or <a href="#">INFSYS 3842</a>	Data Networks and Security	TBD
<a href="#">CMP SCI 4782</a>	Advanced Information Security	P
Or <a href="#">INFSYS 3858</a>	Advanced Security and Information Systems	P
Electives: choose two		
<a href="#">CMP SCI 4700</a>	Computer Forensics	F
<a href="#">CMP SCI 4020</a>	Android Apps: Android Fundamentals	P
<a href="#">CMP SCI 4222</a>	Advanced iOS Apps	F
<a href="#">CMP SCI 4732</a>	Cryptography for Computer Security	S
<a href="#">CMP SCI 4750</a>	Cloud Computing	F
<a href="#">CMP SCI 4792</a>	Mobile Computing, Networking and Security	P
<a href="#">CMP SCI 4794</a>	Security of IoT Systems	F
<a href="#">INFSYS 3830</a>	Data Programming for Business Intelligence	TBD
<a href="#">INFSYS 3862</a>	Artificial Intelligence App for Business and Cybersecurity	TBD
<a href="#">INFSYS 3864</a>	Applied Cryptography for Business Applications	TBD
<a href="#">INFSYS 3866</a>	Cloud Security for Business	TBD
<a href="#">INFSYS 3868</a>	Software Assurance	FP
<a href="#">INFSYS 3878</a>	Management of Information Security	FP
Total Courses		5

Students may substitute courses upon the approval by the program director in the focus department. A minimum of three courses must be taken from UMSL. For more information visit <http://cybersecurity.umsi.edu> or contact the program directors Dr. Dinesh Mirchandani ([mirchandani@umsi.edu](mailto:mirchandani@umsi.edu)) or Dr. Cezary Janikow ([janikowc@umsi.edu](mailto:janikowc@umsi.edu))  
For more info about Computer Science visit [umsi.edu/cs](http://umsi.edu/cs), for careers visit [umsi.edu/cs/careers](http://umsi.edu/cs/careers).  
For electronic version visit <http://umsi.edu/cs/certificates>.

**Availability:** Summer (S), Fall (F), Spring (P)

**Mode:** Online  Evening 

For course rotation visit <https://www.umsi.edu/cmpsci/undergraduate-studies/3yearcourse.html>