

Certificate in Cybersecurity

Department

Computer Science (<https://www.stmarytx.edu/academics/department/computer-science/>)

The certificate program in Cybersecurity focuses on presenting students with the fundamental principles and hands-on experience of how to protect networks, computers, programs, and institutional data from attack, damage or unauthorized access. This program is designed to serve the needs of individuals who would like to increase their knowledge and skill levels in the field of cybersecurity in a short time frame.

Students who successfully complete the certificate program are highly encouraged to continue and earn their Master of Science degree in Cybersecurity by taking six additional courses and complete a capstone project or five additional courses and a thesis.

Program Specific Admission Requirements

Applicants must have an undergraduate degree (or equivalent experience) in Computer Science, Computer Engineering, Software Engineering, or a closely related discipline

Applicants whose undergraduate degree is not in Computer Science, Computer Engineering, Software Engineering, or a closely related discipline are required to demonstrate proficiency in the following subjects or take the corresponding prerequisite courses at St. Mary's University or other institutions: Discrete Mathematics, Object Oriented Programming, and Data Structures

Certificate Requirements

The certificate program in Cybersecurity requires four classes (12 credit hours) that can also be used toward a Master's of Science in Cybersecurity. Students will choose four courses from this list of three-hour courses:

Click on the course number to view course title and description.

| Code | Title | Semester Hours |
|-------------------------------|--|----------------|
| Certificate in Cybersecurity | | |
| Select four of the following: | | 12 |
| CS 6361 | Computer Network Security | |
| CS 6362 | Computer Security and Privacy | |
| CS 6363 | Cloud Computing Security | |
| CS 6364 | Digital Forensics and Cyber Crime | |
| CS 6365 | Preparation for Security Certification | |
| CS 6367 | Cybersecurity Risk Management | |
| CS 6368 | Cybersecurity Policy and Law | |
| CS 6369 | Cryptography Principles and Practice | |
| EG 7314 | Software Security | |
| Total Semester Hours | | 12 |