

Cybersecurity Technology

Demand for cybersecurity jobs continues to grow and cybersecurity careers can be dynamic and exciting. Between emerging threats and new technological innovations, the field of cybersecurity is constantly changing, and the Cybersecurity Technology (CTEC) program will prepare students to take advantage of a variety of cybersecurity career opportunities. CTEC is a baccalaureate degree major that draws from the fields of computing, information technology, information assurance, and information security. Based on widely accepted cybersecurity curricular guides, the CTEC program provides students with the theoretical and conceptual knowledge essential to understanding the cybersecurity discipline as well opportunities to develop practical skills. Graduates enter the workforce as cybersecurity professionals ready to make a difference applying advanced skills to protect critical digital infrastructures and services.

Students with a primary major in Information Technology (ITEC) pursuing a double major with Cybersecurity Technology (CTEC) as a secondary major, must complete 12 credit hours of CTEC course work in addition to course work used to satisfy primary major requirements.

Student Outcomes

Graduates of the program will have an ability to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Bachelor of Science (B.S.) in Cybersecurity Technology Degree Requirements

Degree Requirements	Credit Hours
University Core Curriculum Requirements	39
Require MATH 106 or MATH 108. Recommend PHIL 104 or PHIL 105, and ECON 113, PSYC 102 or SOC 108	
Foundation Course Requirements – ITEC 209, ITEC 216, ITEC 224, ITEC 225, ITEC 235, ITEC 236, ITEC 265, ITEC 280	24
Requirements for Major in Cybersecurity Technology	42
Required Major Courses – ITEC 312, ITEC 314, ITEC 370, ITEC 390, CTEC 328, CTEC 360, CTEC 375, CTEC 410, CTEC 418, CTEC 440, CTEC 461	33
Major Electives	9
General Electives	15

Degree Requirements	Credit Hours
Total	120

Capstone Option for Transfer Students

The Capstone Option is available to qualified students entering the CTEC degree program. More information about the Capstone Option can be found within the University Core Curriculum tab of the Undergraduate Catalog. The CTEC degree program has signed Program Articulation Agreements with several community college computing-related degree programs in order to facilitate the transfer of community college students to SIU. These agreements take full advantage of the Capstone Option for admission to the Bachelor of Science in Cybersecurity Technology.

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