Program Requirements Guide 2021-2022

CyberSecurity CERTIFICATE

Program Overview

Note: Students must have completed the Computer Network Engineering AAS degree or have instructor approval.

CyberSecurity professionals work in a wide variety of information technology positions, but have a focus on information assurance, cyber ethics, and incident detection, investigation and response. Students completing this degree will be able to investigate and defend computer systems against cyber-attacks, unauthorized use or modification, and exploitation.

Students entering into this program of study should have excellent communication, reading and math skills. Throughout the program students will experience coursework that will help them develop critical skills such as critical thinking, performance monitoring, decision making and evaluating systems and organizations.

The CyberSecurity certificate program at Saint Paul College is 24 credits in length. The program provides 16 credits specifically related to CyberSecurity which will aid students in the field and in potential certifications.

Career Opportunities

CyberSecurity professionals will find a growing need in both the public and private employment sectors. Graduates will find excellent opportunities as systems administrators, network engineers, system programmers, and systems specialists.

Program Outcomes

1. Analyze multiple sources of network data to identify a security incident.
2. Determine if a computer system complies with national security standards.
3. Troubleshoot hardware and software problems in a network environment.
4. Describe and identify password policies.
5. Install and configure basic host and network security.

Program Faculty

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Program Requirements

☐ Check off when completed

Course                                      Cr
☐ CSCI 1440 Networking Fundamentals          4
☐ CSCI 2420 Computer Security                4
☐ CSCI 2451 Computer Networking 2 - Server  4
☐ CSCI 2480 Network Security and Penetration Prevention 4
☐ CSCI 2482 Security Incident Handling, Response and Disaster Recovery 4
☐ CSCI 2484 Ethical Hacking & Countermeasures 4

Subtotal .................................................. 24

Total Program Credits ................................. 24

Program Start Dates

Fall, Spring

Course Sequence

This course sequence is recommended for a full-time student; however, this sequence is not required. Not all courses are offered each semester, a selection of courses is offered summer term. Students should consult with the Program Faculty each semester.

First Semester

CSCI 1440 Networking Fundamentals .............. 4
CSCI 2420 Computer Security .......................... 4
CSCI 2451 Computer Networking 2 - Server ........ 4
Total Semester Credits ............................... 12

Second Semester

CSCI 2480 Network Security and Penetration Prevention .............. 4
CSCI 2482 Security and Incident Handling Response and Disaster Recovery ........ 4
CSCI 2484 Ethical Hacking & Countermeasures ........ 4
Total Semester Credits ............................... 12

Total Program Credits ................................. 24

Minimum Program Entry Requirements

Students entering this program must meet the following minimum program entry requirements:

Reading: Score of 250+ or grade of "C" or better in READ 0722 or READ 0724 or EAPP 0900

Writing: Score of 250+ on Reading Comprehension or grade of "C" or better in ENGL 0922 or EAPP 0900

Quant. Reasoning, Algebra & Stats: Score of 250+ or Adv. Algebra & Functions: Score of 215+ or grade of "C" or better in MATH 0910

Assessment Results and Prerequisites:

Students admitted into Saint Paul College programs may need to complete additional courses based on assessment results and course prerequisite requirements. Certain MATH, READ, and ENGL courses have additional prerequisites.

Information is subject to change. This Program Requirements Guide is not a contract.

3/23/21