

CyberSecurity AAS DEGREE

Program Overview

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 skills such as critical thinking, performance monitoring, decision making and evaluating systems and organizations.

The CyberSecurity program at Saint Paul College is 60 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 public and private employment sectors. Graduates will find excellent opportunities as systems administrators, network engineers, system programmers, and systems specialists.

Program Outcomes

1. Graduates will have knowledge and skills in system design, analysis and maintenance.
2. Graduates will have the skills to gather, monitor, and analyze multiple sources of data to identify changes in circumstances or events.
3. Graduates will have the skills to evaluate information to determine compliance with security standards.
4. Graduates of the CyberSecurity program will be prepared for employment as information Security Analysts or Computer Systems Analysts.

Transfer Opportunities

Saint Paul College has a transfer articulation agreement between the following program and post-secondary institution for the baccalaureate degree program listed below.

For more information please go to saintpaul.edu/Transfer.

CyberSecurity AAS

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|----|--|
| BA | Individualized Studies
Metropolitan State University |
| BS | Information Technology
Saint Mary's University,
Twin Cities Campus |
| BS | Operations Management
Minnesota State University, Moorhead |

Program Faculty

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Program Requirements

Check off when completed

Course	Cr
<input type="checkbox"/> CSCI 1410 Computer Science & Information Systems	4
<input type="checkbox"/> CSCI 1423 Computer Networking 1 – Client	4
<input type="checkbox"/> CSCI 1440 Networking Fundamentals	4
<input type="checkbox"/> CSCI 1523 Intro to Computing and Programming Concepts	4
<input type="checkbox"/> CSCI 2420 Computer Security	4
<input type="checkbox"/> CSCI 2461 Computer Networking 3 – Linux	4
<input type="checkbox"/> CSCI 2465 Computer Networking 4 – Infrastructure	4
<input type="checkbox"/> CSCI 2480 Network Security and Penetration Prevention	4
<input type="checkbox"/> CSCI 2482 Security Incident Handling, Response and Disaster Recovery	4
<input type="checkbox"/> CSCI 2484 Ethical Hacking & Countermeasures	4
<input type="checkbox"/> CSCI 2570 Machine Architecture and Organization	4
Subtotal	44

General Education/MnTC Requirements

Refer to the Minnesota Transfer Curriculum Course List for each Goal Area	Cr
<input type="checkbox"/> Goal 1: Communication	7
ENGL 1711 Composition 1 – 4 cr COMM 17XX – 3 cr	
<input type="checkbox"/> Goal 3 or Goal 4	3
Goal 3: Natural Sciences OR Goal 4: Mathematical /Logical Reasoning	
<input type="checkbox"/> Goal 5: History, Social Science and Behavioral Sciences	3
<input type="checkbox"/> Goal 6: Humanities and Fine Arts	3
(PHIL 1720 Ethics is recommended)	
General Education Requirements	16

Total Program Credits 60

Program Start Dates

Fall, Spring, Summer

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 1410 Computer Science & Information Systems	4
CSCI 1423 Computer Networking 1 – Client	4
CSCI 1440 Networking Fundamentals	4
Goal 1: ENGL 1711 Composition 1	4
Total Semester Credits	16

Second Semester

CSCI 1523 Intro to Computing and Programming Concepts	4
CSCI 2461 Computer Networking 3 – Linux	4
CSCI 2570 Machine Architecture and Organization	4
Goal 6: Humanities and Fine Arts	3
(PHIL 1720 Ethics is recommended)	
Total Semester Credits	15

Third Semester

CSCI 2420 Computer Security	4
CSCI 2465 Computer Networking 4 – Infrastructure	4
Goal 1: COMM 17XX	3
Goal 3: Natural Sciences OR Goal 4: Mathematical /Logical Reasoning	3
(MATH 1730 or proficiency required)	
Total Semester Credits	14

Fourth 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
Goal 5: History, Social Science and Behavioral Sciences	3
Total Semester Credits	15

Total Program Credits 60

See back of this guide for Course Chart

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

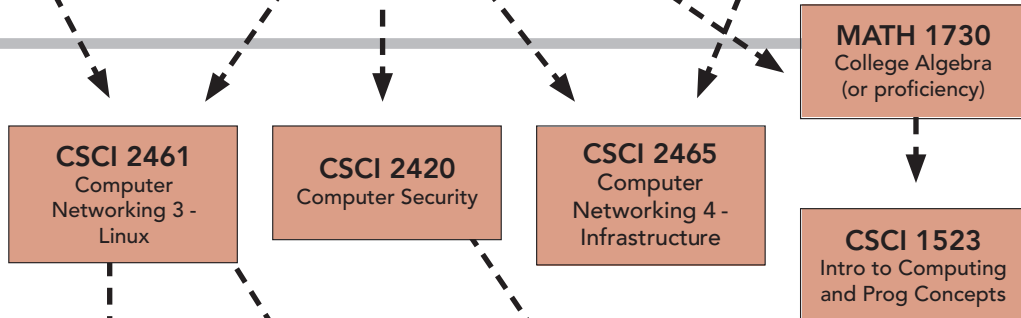
CyberSecurity AAS DEGREE *(continued)*
(44 credits + 16 GenEd credits)

The below chart illustrates the courses required for completion of this degree.

Introductory

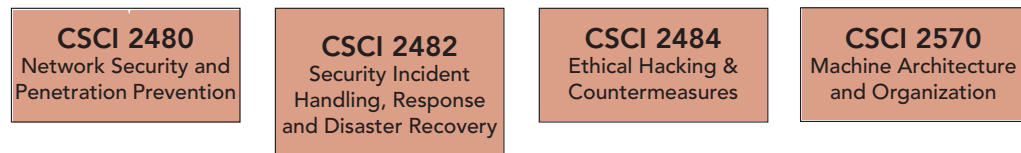


Intermediate



Advanced

(offered once per year)



Minimum Program Entry Requirements
 Students entering this program must meet the following minimum program entry requirements:

Reading: Score of 78+ or grade of "C" or better in READ 0722

Writing: Score of 78+ on Reading Comprehension or grade of "C" or better in ENGL 0922

College Level Mathematics: Score of 50+ or grade of "C" or better in MATH 0920

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.

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