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

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
BA Individualized Studies
Metropolitan State University
BS Information Technology
Saint Mary’s University, Twin Cities Campus

Program Faculty
Mark Rawlings
mark.rawlings@saintpaul.edu

Program Requirements
☐ Check off when completed

<table>
<thead>
<tr>
<th>Course</th>
<th>Cr</th>
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<tbody>
<tr>
<td>CSCI 1410 Computer Science &amp; Information Systems</td>
<td>4</td>
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<tr>
<td>CSCI 1440 Networking Fundamentals</td>
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<tr>
<td>CSCI 1523 Intro to Computing and Programming Concepts</td>
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<tr>
<td>CSCI 2420 Computer Security</td>
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<tr>
<td>CSCI 2461 Computer Networking 3 – Linux</td>
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<tr>
<td>CSCI 2465 Computer Networking 4 – Infrastructure</td>
<td>4</td>
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<tr>
<td>CSCI 2475 A+ Hardware/Operating System Prep</td>
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<tr>
<td>CSCI 2480 Network Security and Penetration Prevention</td>
<td>4</td>
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<tr>
<td>CSCI 2482 Security Incident Handling, Response and Disaster Recovery</td>
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<tr>
<td>CSCI 2484 Ethical Hacking &amp; Countermeasures</td>
<td>4</td>
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<tr>
<td>CSCI 2570 Machine Architecture and Organization</td>
<td>4</td>
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<td>Subtotal</td>
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General Education/MnTC Requirements

Refer to the Minnesota Transfer Curriculum Course List for each Goal Area

Goal 1: Communication
ENGL 1711 Composition 1 – 4 cr
COMM 17XX – 3 cr

Goal 3 or Goal 4
Goal 3: Natural Sciences
OR
Goal 4: Mathematical /Logical Reasoning

Goal 5: History, Social Science and Behavioral Sciences

Goal 6: Humanities and Fine Arts

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 1523 Intro to Computing and Programming
CSCI 2465 Computer Networking 4 – Infrastructure
Goal 1: ENGL 1711 Composition 1
Goal 3: Natural Sciences
Goal 4: Mathematical /Logical Reasoning
(MATH 1730 or proficiency required)

Total Semester Credits 15

Second Semester
CSCI 1523 Intro to Computing and Programming
CSCI 2465 Computer Networking 4 – Infrastructure
CSCI 2475 A+ Hardware/Operating System Prep
Goal 6: Humanities and Fine Arts

Total Semester Credits 15

Third Semester
CSCI 2420 Computer Security
CSCI 2461 Computer Networking 3 – Linux
CSCI 2482 Security and Incident Handling Response and Disaster Recovery (fall only)
CSCI 2570 Machine Architecture and Organization

Total Semester Credits 16

Fourth Semester
CSCI 2480 Network Security and Penetration Prevention (Spring only)
CSCI 2484 Ethical Hacking and Countermeasures (spring only)
Goal 1: COMM 17XX
Goal 5: History, Social Science and Behavioral Sciences

Total Semester Credits 14

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.

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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

**Adv. Algebra & Functions:** Score of 250+ 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.