# Cybersecurity Operations, AS

## Purpose

The Associate in Science (AS) in Cybersecurity Operations prepares students for further education and careers such as network defense analyst, network defense technician, cybersecurity analyst, or network security operator.

The content includes but is not limited to planning, installing, configuring, monitoring, troubleshooting, and managing computer networks in a LAN/WAN environment; ensuring computer and network security; applying network defense and countermeasures; and working in a security operations center. Students will be prepared to apply conceptual and theoretical knowledge to the workplace utilizing technical skills learned during the program.

This program is designed to help students obtain the skills needed to earn various industry-recognized certifications, including CompTIA A+, CompTIA Linux+, CompTIA Network+, CompTIA Security+, EC-Council EDRP & E|CH, **EC-Council C|ND, and EC-Council C|SA.**

## Program Structure

This program is a planned sequence of instruction consisting of 60 credit hours in the following areas: 18 credit hours of General Education Requirements, 39 credit hours of Cybersecurity Operations Core, and 3 credit hours of General Electives.

## Course Prerequisites

Many courses require prerequisites. Check the description of each course in the list below for prerequisites, minimum grade requirements, and other restrictions related to the course. Students must complete all prerequisites prior to registering for a course.

All courses in the Cybersecurity Operations Core Requirements must be completed with a grade of “C” or better.

## Graduation

Students must fulfill all requirements of their program to be eligible for graduation. Students must indicate their intention to attend the commencement ceremony by completing the Commencement Form by the published deadline.

## General Education Requirements: 18 Credit Hours

* ENC 1101 Composition I **3 credits**
* ENC 1102 Composition II **3 credits**
* Core Mathematics General Education Course (Recommended: MAC 1105 College Algebra or STA 2023 Statistical Methods I) **3 credits**
* Core Natural Science General Education Course **3 credits**
* Core Humanities General Education Course **3 credits**
* Core Social Sciences General Education Course\* **3 credits**

\*Students who need to meet the State’s Civic Literacy course requirement should take AMH 2020 History of the United States Since 1877 OR POS 2041 American National Government.

## Cybersecurity Operations, AS Degree Core Requirements: 39 Credit Hours

* COP 1000 Introduction to Computer Programming **3 credits**
* CTS 1133 Computer Software **3 credits**
* CTS 1131 Computer Hardware **3 credits**
* CNT 1000 Computer Networking Essentials **3 credits**
* CTS 2334 Microsoft Windows Server **3 credits**
* CTS 1314 Network Defense and Countermeasures I **3 credits**
* CTS 2321 Linux Internet Servers **3 credits**
* COP 1822 Internet Programming HTML **3 credits**
* CGS 2811 Disaster Recovery and Incident Response **3 credits**
* CTS 2317 Network Defense and Countermeasures II **3 credits**
* CTS 2120 Computer and Network Security (Security+) **3 credits**
* CET 2691 Laws & Legal Aspects of IT Security **3 credits**
* CIS 2772 Security Operations Center **3 credits**

## Approved Electives: 3 Credit Hours

* Any 1000 or 2000 level course **3 credits**

# Total Degree Requirements: 60 Credit Hours

**Information is available online at:** [www.fsw.edu/academics/](http://www.fsw.edu/academics/) **or on the School of Business and Technology Home Page at:** [www.fsw.edu/sobt](http://www.fsw.edu/sobt).