

2023-24 ACADEMIC PROGRAMS

CYBERSECURITY (APCSCY)

Associate in Applied Science

In this Associate's degree program, students are introduced to the skills and strategies needed to plan and carry out security measures to protect an organization's computer networks and systems. Students will learn networking and network security skills using server, infrastructure and perimeter technologies working in Linux operating systems, Cisco infrastructure and perimeter devices, and Microsoft operating systems.

Learners in this program acquire the following skills:

- Understand common networking and security terms and concepts.
- Learn basic Linux tools and utilities.
- Deploy server and clients in a Microsoft Windows network.
- Learn basic scripting using Python.
- Solve internetworking problems using Cisco devices in a "real-life" and emulated internetwork.
- Configure secure topologies using a "real-life" and emulated internetwork.
- Learn basic penetration testing techniques using contemporary tools in a virtual environment.
- Monitoring, detecting, investigating, analyzing and responding to security events.

This degree program transfers into Eastern Michigan University's [Information Assurance & Cybersecurity](#) undergraduate program. For the student either deferring or not desiring transfer, sufficient skills are acquired to qualify the learner for an entry-level position in network administration or information security.

For the working professional, many courses in this program are available online.

Students completing this program are also eligible to receive Computer Networking Academy Certificate, Principles of Cybersecurity certificate and Cybersecurity Operations Security by completing 2 additional credit hours in certification preparation (CNT 295 and CSS 295).

This is a **high demand, high skill** and **high wage** program as defined by the [Michigan Community College Network](#).

NSA-Certified

Washtenaw Community College has been designated as a National Center of Academic Excellence in Cyber Defense Education. We are extremely pleased to receive this acknowledgment and will continue our commitment to providing a comprehensive cybersecurity education to our students.



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Description

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Articulation

Eastern Michigan University, BS degree

Copies can be obtained from the Counseling Office, a program advisor, or from the Curriculum and Assessment Office Web site: <https://www.wccnet.edu/learn/transfer-wcc-credits/articulation-agreements.php>.

Continuing Eligibility

Minimum grade of "C" in all major courses

Course Requirements

First Semester

Class	Title	Minimum Credits
CIS 120	Linux/UNIX I: Fundamentals	3
CNT 201	Administering Microsoft Windows Client Operating Systems	3
CNT 206	Introduction to Networks	4
Elective	Writing Elective(s)*	3
Elective	Soc. Sci. Elective(s)	3
Total		16

Second Semester

Class	Title	Minimum Credits
CNT 216	Switching, Routing and Wireless Essentials	4
CPS 141	Introduction to Programming Using Python	4
CSS 200	Introduction to Network Security - Security+	4
CSS 205	Essentials of Network Penetration Testing	4
Total		16

Third Semester

Class	Title	Minimum Credits
CNT 226	Enterprise Networking, Security, and Automation (ENSA)	4
CSS 210	Network Perimeter Protection - CCNA Security	4
CNT 211 or CNT 223 or CNT 224	Installation, Storage, and Compute - Windows Server Networking with Windows Server Identity with Windows Server	4
MTH 160	Basic Statistics	4
Total		16

Fourth Semester

Class	Title	Minimum Credits
CNT 290	Network Forensics	4
CSS 225	Cybersecurity Operations - CCNA Cyber Ops	4
Elective	Arts/Human. Elective(s)	3
Elective	Speech/Comp. Elective(s)	3
Elective	Nat. Sci. Elective(s)	3
Total		17

Total Credits Required: 65

Footnotes

*Students planning to transfer to a 4-year college should take ENG 111; otherwise, student may consider ENG 107.

Accurate as of 02/03/2023 Information is subject to change without notice.