



Wayne  
County  
Community  
College  
District

# Computer Information Systems: Cybersecurity

## PAY

The median annual wage for an entry-level Cybersecurity professional is \$95,510 as of 2018.

## JOB OUTLOOK

Cyberattacks have grown in frequency and sophistication over the last few years, and many organizations are behind in their ability to detect these attacks. From 2016 to 2026, the demand for Cybersecurity professionals (information security analysts) is expected increase much faster than the average at 28 percent.\*

In addition, as the healthcare industry expands its use of electronic medical records, more Cybersecurity analysts are likely to be needed to create the safeguards that will satisfy patients' concerns.

*Bureau of Labor Statistics, U.S. Department of Labor Occupational Outlook Handbook, April 2018, Information Security Analyst, on the Internet at <http://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>*



## ABOUT THE PROGRAM

The Cybersecurity program offers a 2-year Associates in Applied Science Degree, a 1-year Certificate as well as Short-Term certificates.

This program is based on the National Initiative for Cybersecurity Education (NICE) framework and provide students with a solid foundation in the fundamentals of secure information technology system design,

construction, and maintenance of Cyber infrastructure and systems defense.



Students will utilize virtual environments, including Cybersecurity video games/simulations to demonstrate mastery of competencies, knowledge and skills, while preparing for industry recognized Cybersecurity certifications.

## WHAT DO CYBERSECURITY PROFESSIONALS DO?

Cybersecurity Professionals use their expertise and knowledge to continuously monitor and analyze databases, networks, hardware, firewalls and encryption to mitigate risk by:

- Preparing reports that document the extent of damage caused by security breaches
- Conducting penetration testing
- Researching the latest information technology (IT) security trends
- Developing security standards and best practices for their organization
- Recommending security enhancements to management or senior IT staff
- Information Systems and Network Auditing
- Enterprise Cybersecurity Awareness and Business Continuity

## WHERE DO THEY WORK?

Cybersecurity Professionals work in a wide variety of private and public organizations. Upon completion of either program, students will be prepared to enter or advance in an array of Cybersecurity career areas, including:

- Information Systems and Network Defense
- Vulnerability Assessment and Management
- Incident Response Coordination and Solution Deployment
- Digital Forensics and Penetration Testing
- Security Program Development and Evaluation
- Information Systems and Network Auditing
- Enterprise Cybersecurity Awareness and Business Continuity

**Wayne County Community College District....  
Jobs for Today, Jobs for the Future!**

**FOR MORE INFORMATION, CALL 313-496-2600  
OR VISIT OUR WEBSITE AT WWW.WCCCD.EDU**

# Recommended Sequence of Courses

## Cybersecurity A.A.S. Program Course Sequence

CR. No.	COURSE TITLE	CREDITS
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### **SEMESTER 1**

CIS 110	Introduction to Computer Information Systems	4
ENG 119	English I	3
BUS 225	Computer Applications in Business	3
Elective:	Humanities	3
<b>SEMESTER TOTAL</b>		<b>13</b>

### **SEMESTER 2**

CIS 240	Networking Essentials	3
MAT 113	Intermediate Algebra	3
CIS 210	Introduction to Operating Systems	3
ENG 120	English II	3
<b>SEMESTER TOTAL</b>		<b>12</b>

### **SEMESTER 3**

CIS 270	Network+	3
CIS 272	Security+	3
SPH 101	Fundamentals of Speech	3
Elective:	CIS	3
<b>SEMESTER TOTAL</b>		<b>12</b>

### **SEMESTER 4**

CIS 274	Certified Ethical Hacker	3
CIS 276	Cyber Network Associate	3
PS 101	American Government	3
Elective:	Social Science	3
<b>SEMESTER TOTAL</b>		<b>12</b>

### **SEMESTER 5**

CIS 278	Certified Authorization Professional	3
CIS 212	Linux	4
Elective:	Natural Science w/Lab	4
<b>SEMESTER TOTAL</b>		<b>11</b>

**CIS: CYBERSECURITY A.A.S.**

**PROGRAM TOTAL** .....**60**

*Note: Program total hours may not include prerequisites.*

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