

# CYBER SECURITY



## ABOUT THIS PROGRAM

### TECH CORE

#### ANCHORED IN TECH CORE

Prepare to be immersed in coursework designed to help you build interdisciplinary skills you'll need for today's Internet of Things (IoT) economy. Project work and activities allow you to develop relevant skills in:

- Programming
- Hardware
- Connectivity
- Security
- Operating Systems

#### IS THIS PROGRAM FOR YOU?

If you're interested in pursuing a career in cybersecurity and defending organizations from malicious attacks, then this program may be for you.

#### A PROGRAM TO FUEL YOUR FUTURE

Prepare to develop the critical skills needed to defend organizations and government agencies from data breaches with this certificate program. Through online simulations and assignments, you will develop the skills necessary to secure networks, apply information assurance policies to mitigate risks and leverage your knowledge of ethical and legal issues to apply the appropriate security solutions.

## CAREER OPPORTUNITIES

Graduates of DeVry's Cyber Security certificate program may consider, but are not limited to, the following careers:

*Entry level opportunities in such positions as:*

- Computer Network Support Specialist
- Computer User Support Specialist
- Network System Administrator
- Cybersecurity (Cyber Security) Specialist
- Information Security Analyst

## QUICK FACTS

**40**  
CREDIT HOURS  
minimum credit hours  
required for graduation

**14**  
COURSES

**32%**  
GROWTH  
nationally from 2022-2032 for  
employment of Information  
Security Analysts<sup>1</sup>



#### NICCS VERIFIED CURRICULUM

DeVry University's cybersecurity curriculum is acknowledged and verified as an approved provider by the National Initiative for Cybersecurity Careers and Studies (NICCS). NICCS is an online training initiative and portal that follows the National Initiative for Cybersecurity Education framework and connects students, educators and industry to cybersecurity resources and U.S. training providers.



#### EVERY COURSE COUNTS

The Cyber Security certificate can serve as a stepping stone to the Associate of Cybersecurity and Networking and/or the Bachelor's of Cybersecurity and Networking. If you choose to continue on with your education, all credits apply to your bachelor's degree.<sup>2</sup>

**MINIMUM COMPLETION TIME\***

**1 year 2 months**



**NORMAL COMPLETION TIME**

**1 year 6 months**

#### ACCELERATE AT YOUR PACE

Choose the schedule that best fits your goals and commitments. You can earn your **Undergraduate Certificate** in as few as **1 year 2 months**. Or, follow a normal schedule and complete your program in 1 year 6 months.

<sup>\*</sup>Per 12-month period, assumes completion of 3 semesters, enrollment in 9-12 credit hours per semester and continuous, year-round enrollment with no breaks.

<sup>\*\*</sup>Per 12-month period, assumes completion of 2 semesters and enrollment in 8-13 credit hours per semester.

<sup>1</sup> <https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>. Growth projected on a national level. Local growth will vary by location. BLS projections are not specific to DeVry University students or graduates and may include earners at all stages of their career and not just entry level.

<sup>2</sup> The figures displayed represent the minimum credit hours required for graduation. Additional coursework may be necessary to complete program requirements. At the time of application to the next credential level, an evaluation of qualifying transfer credit will occur and the most beneficial outcome will be applied. Future programmatic changes could impact the application of credits to a future program. Refer to the academic catalog for details.

# Cyber Security

## PROGRAM OUTLINE

### MATHEMATICS

MATH114 Algebra for College Students

### TECH CORE

CEIS101C Introduction to Technology and Information Systems  
 CEIS106 Introduction to Operating Systems  
 CEIS110 Introduction to Programming  
 CEIS114 Introduction Digital Devices  
 NETW191 Fundamentals of Information Technology & Networking  
 NETW211 Fundamentals of Cloud Computing  
 SEC285 Fundamentals of Information System Security

### CYBER SECURITY

SEC290 Fundamentals of Infrastructure Security  
 SEC395 Cybersecurity Architecture and Engineering  
 SEC399 Cybersecurity Career Preparation

*One of:*

SEC311 Ethical Hacking  
 SEC322 Penetration Testing

*One of:*

SEC305 Cybersecurity and Data Privacy  
 SEC340 Business Continuity  
 SEC380 Cloud Computing Security

### CAREER PREPARATION

CEIS298 Introduction to Technical Project Management

## WHAT YOU'LL LEARN

### MATHEMATICS

- Analyze data
- Solve problems

### TECH CORE

- Produce, secure, operate and troubleshoot small enterprise networks
- Network, secure and deploy digital devices and sensors into the IoT ecosystem
- Solve technical problems using an algorithmic approach and basic programming and coding methods
- Install and configure operating systems using Command-Line Interface (CLI)

### CYBER SECURITY

- Apply behavioral analytics to networks and devices to prevent, detect, and counter cybersecurity threats through continuous security monitoring
- Develop a balanced perspective on the administrative and technological elements of information security
- Apply principles of technology in the building, testing, operation and maintenance of connected and distributed digital-based systems and networks

### CAREER PREPARATION

- Apply principles of technology in the building, testing, operation and maintenance of connected and distributed digital-based systems and networks

**Earn a credential at every step.**

**HOW DO CREDENTIALS STACK?**

Here's an example: When you earn a Cyber Security Undergraduate Certificate, all courses you complete in the program apply to your Associate Degree in Cybersecurity and Networking. When you complete the associate, all courses are designed to stack into our Bachelor's in Cybersecurity and Networking. Build your confidence - and your resume - when you start your journey at DeVry.<sup>3</sup>

<sup>3</sup>The figures displayed represent the minimum credit hours required for graduation. Additional coursework may be necessary to complete program requirements. At the time of application to the next credential level, an evaluation of qualifying transfer credit will occur and the most beneficial outcome will be applied. Future programmatic changes could impact the application of credits to a future program. Refer to the academic catalog for details.

**RECOMMENDED PLAN OF STUDY**

DeVry's Cyber Security Certificate program is designed to prepare you with the knowledge and skills needed to pursue up to 8 external industry-specific certifications\* within 14 months, should you choose to seek professional certification or licensure exams. Our recommended course sequencing fosters the development of these skills early on and throughout the entire program.

SEMESTER 1		SEMESTER 2		SEMESTER 3		SEMESTER 4		TOTAL: 40 CREDIT HOURS 3.5 SEMESTERS 14 MONTHS
<b>COURSE</b>	<b>CREDITS</b>	<b>COURSE</b>	<b>CREDITS</b>	<b>COURSE</b>	<b>CREDITS</b>	<b>COURSE</b>	<b>CREDITS</b>	
CEIS101C	2	CEIS106	4	CEIS114	3	SEC290	3	
MATH114	4	CEIS110	3	NETW191	3	SEC395	3	
<b>TOTAL</b>	<b>6</b>	<b>TOTAL</b>	<b>7</b>	<b>TOTAL</b>	<b>6</b>	<b>TOTAL</b>	<b>7</b>	
<b>8 WEEKS</b>		<b>8 WEEKS</b>		<b>8 WEEKS</b>		<b>8 WEEKS</b>		
<b>2 MONTHS</b>		<b>2 MONTHS</b>		<b>2 MONTHS</b>		<b>2 MONTHS</b>		
<b>0-4 MONTHS</b>		<b>5-10 MONTHS</b>		<b>11-14 MONTHS</b>				
<b>ALIGNED CERTIFICATIONS</b>		<b>ALIGNED CERTIFICATIONS</b>		<b>ALIGNED CERTIFICATIONS</b>				
CompTIA Linux+   Certified Entry-Level Python Programmer		CompTIA A+   CompTIA Network+   CompTIA Project+ CompTIA Cloud+   CompTIA Security+		EC-Council Certified Ethical Hacker CompTIA CySA+   CompTIA PenTest+   (ISC)2 CCSP				
<ul style="list-style-type: none"> <li>• Internet of Things (IoT) concepts including the interplay between people, places, data and devices (P2D2)</li> <li>• Investigate how to configure a network using the Linux operating system</li> <li>• Use Python programming to build apps and application frameworks</li> </ul>		<ul style="list-style-type: none"> <li>• Set up a small network in a virtual environment and test the connectivity</li> <li>• Apply cloud-centric access control and security techniques</li> <li>• Provision resources for a small network on a cloud platform</li> <li>• Utilize security technology and tools to migrate cybersecurity threats</li> </ul>		<ul style="list-style-type: none"> <li>• Leverage intelligence and threat detection techniques to identify vulnerabilities</li> <li>• Understand the regulations, contingencies and risk management of information security</li> <li>• Utilize appropriate tools and techniques to perform vulnerability scanning and penetration testing</li> <li>• Implement and manage security operations for cloud environments</li> </ul>				

\*Credits and degrees earned from DeVry do not automatically qualify the holder to participate in professional certification or licensure exams. DeVry does not pay or reimburse students enrolled in this program for the cost associated with these external certifications and does not guarantee students will successfully pass such exams.

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