

CIS CYBERSECURITY, ASSOCIATE OF APPLIED SCIENCE

Cybersecurity has emerged as a unique profession specializing in the technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access.

The cybersecurity profession combines knowledge and skills from disciplines such as computer science, information technology, criminal justice, psychology, and business, along with specialized topics unique to cybersecurity.

Earn a Cybersecurity Associate of Applied Science degree!

- Specialize in cybersecurity while learning about computing.
- Increase your understanding of robust cyber defense technology.
- Utilize computer technology to address information system needs with security in mind.
- Analyze common security vulnerabilities and apply appropriate security controls.

GRADUATION REQUIREMENTS

Students must complete a minimum of 95 credit hours with a cumulative Grade Point Average (GPA) of 2.0 or better. Twenty-four (24) credits must be completed at Southwestern before the degree is awarded. All courses must be completed with a grade of 'C' or better.

Complete the graduation application process one term prior to the term of completion (e.g., spring term graduates must apply during winter term).

PROGRAM STUDENT LEARNING OUTCOMES

- Identify cybersecurity practices to mitigate threats that originating inside and outside of an organization.
- Analyze common security vulnerabilities and apply appropriate security controls.
- Demonstrate ability to plan and implement both wired and wireless networks sufficient for home or small business use.
- Research, interpret, and communicate technical information in written, graphic, diagrammatic, electronic, and oral forms.
- Design an appropriate risk analysis for a business in a given environment.

PREREQUISITES

Students must take the following prerequisites:

Code	Title	Credits
CIS120	Concepts of Computing	4
MTH98	Math Literacy (or placement in a higher math course)	4
or MTH95	Intermediate Algebra	

WR90R	Academic Literacy (or placement in a higher writing course)	4
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PROGRAM GUIDE

Course	Title	Credits
First Year		
Fall		
CIS185	Introduction To Cyber Security	3
CJ100	Intro to Criminal Justice	4
CS160	Computer Science Orientation	4
CIS151	Network Essentials	4
PE231	Wellness for Life ³	3
Credits		18
Winter		
CIS140U	Intro to Operating Systems: Unix	4
CJ101	Intro to Criminology	4
CIS152	Network Routing & Switching Config	4
Credits		12
Spring		
WR115	Fundamentals of Report Writing ²	4
MTH105	Math in Society ⁶	4
BA277	Business Ethics	3
or PHL102	or Ethics	
CIS188	Wireless Networking	3
CS133WS	Computer Language I: Web Scripting	4
Credits		18
Second Year		
Fall		
CS275	Database Management	4
MTH243	Intro to Probability and Statistics	4
BA285	Human Relations in Organizations ⁷	3
CIS285	Cyber Security Essentials	4
Credits		15
Winter		
CS195	Web Development I	3
SP111	Fundamentals of Public Speaking ⁵	3
PSY202	General Psychology ¹	3
CS244	Systems Analysis	3
CIS286	Cyber Security Operations I	4
Credits		16
Spring		
CIS287	Cyber Security Operations II	4
CIS280	CWE: Computer Information Systems	4
CIS297	IT Professional Capstone	4
Specific Elective ⁴		4
Credits		16
Total Credits		95

¹ PSY100, PSY201, PSY203, PSY216 may be substituted for PSY202.

² A higher writing may be substituted excluding WR241, WR242, WR243, and WR250.

- ³ PE231, HE250 or three (3) credits of PE185 sport/activity courses will satisfy this requirement.
- ⁴ Specific Electives: Any PSY, BA, CJ, CIS/CS course not required for degree; WR227, MTH95 or higher not required for degree, ART225.
- ⁵ SP100, SP111, SP218, SP219 will satisfy this requirement.
- ⁶ MTH105 or higher, excluding MTH211, will satisfy this requirement.
- ⁷ BA110, BA120, BA285, PSY100, PSY201, PSY202, PSY203 will satisfy this requirement.
- * All honors may substitute for their equivalent requirements.