

COMPUTER INFORMATION SECURITY, Associate in Science Degree - 1030

Engineering & Technology Department

The Computer Information Security AS program prepares students to continue their studies towards a baccalaureate degree in computer information security at a four-year institution. This curriculum places emphasis on mathematics, computer programming, network infrastructure and operating systems and its secure application in industry. Since the requirements of senior institutions vary widely, it is essential to choose an intended transfer institution as soon as possible and carefully follow the program described in that college's catalog. Students may complete this program at the Harrisburg and Lancaster campuses by taking some courses through Virtual Learning.

Career or Transfer Opportunities

This transfer curriculum is provided as a guide for students planning to transfer to a baccalaureate degree granting institution. Computer information security specialists find employment as Security Information Service Operators, Information Security Specialists, Information Security Administrators, Information Security Advisors, Information Security Consultants, Information Security Analysts, Information Security Auditors, Information Security Manager, and Information Security Architects.

Competency Profile:

This curriculum is designed to prepare students to:

- Develop information security policies and procedures
- Apply technology devices to meet business requirements secure information system components
- Design secure network architectures
- Implement technological solutions, both hardware and software, as it pertains to information security
- Maintain an awareness of industry requirements and laws
- Respond to information system intrusions and support investigative processes
- Manage information security resources
- Provide information security training and awareness programs

PROGRAM REQUIREMENTS (TOTAL CREDITS = 65)

General Education		Major Requirements		Other Required Courses	
ENGL 101 English Composition I	3	CIS 105 Introduction to Software for Business	3	Program Electives**	6
ENGL 102 English Composition II (or)	3	CIS 140 Intermediate Database Management	3		
ENGL 104 Technical Writing	(3)	CIS 222 Introduction to Windows Servers	3		
COMM 101 Effective Speaking	3	CIS 224 Introduction to System Analysis & Design	4		
Humanities & Arts Elective*	3	CIS 241 Database Administration I	3		
Mathematics Elective - MATH 103, 119 or 121	3 or 4	CIS 264 Fundamentals of Linux Administration	3		
Mathematics or Science Elective - MATH 202	4	CISE 200 Information Security Fundamentals	3		
Science w/ a Laboratory Elective	3	CNT 120 Network Communication Technology I	3		
Social & Behavioral Science Elective	3	CNT 125 Network Communication Technology II	4		
First-Year Seminar Elective	1	CPS 121 Computer Science I – Intro to Computer Programming JAVA	3		
Wellness	<u>1</u>		<u>32</u>		
	27				

*Students are to select from the following courses: ART 181, 182; ENGL 206; HUM 115, 201; MUS 104; PHIL 200; THTR 101; or any foreign language course.

**Select from the following courses: CIS 145, 243, 245, 247, 270; CISE 210, 211; CNT 220, 230, 240, 250, 260, 291; CPS 161, 162, 230; ELEC 125, 126; MATH 104, 119, 121, 125, 203; WEB 143.

RECOMMENDED SEQUENCE FOR FULL-TIME STUDENTS

Part-time students can complete this program by taking one or more courses each semester.

Fall Semester I		Spring Semester I		Fall Semester II		Spring Semester II	
CIS 105	3	CIS 140	3	CIS 222	3	CIS 224	4
CNT 120	3	CNT 125	4	CIS 241	3	CIS 264	3
ENGL 101	3	CPS 121	3	COMM 101	3	CISE 200	3
FYS Elective	1	ENGL 102 or 104	3	Program Elective**	3	Program Elective**	3
Humanities/Arts Elective*	3	MATH 202	4	Science w/ a Lab Elective	3	Social/Behavioral Science Elective	3
MATH 103, 119 or 121	3 or 4			Wellness	1		