

CYBERSECURITY, CERTIFICATE - CBS6

This certificate is designed for computer or network systems professionals that need expertise in security. The program will provide students with the concepts and skills of the fast-growing field of cybersecurity, including security of systems and infrastructure in business and industry. Students will learn how to protect networks and defend information systems from attack. It is ideal if you are employed in a computer-related field and seeking cybersecurity knowledge. Students who complete this certificate may continue their education by enrolling in the associate degree program in Computer Technology.

Requirements

Courses	Course Title	Credit Hours
Required Course Information		
CPT 247	UNIX Operating System	3
CPT 282	Information Systems Security	3
IST 220	Data Communications	3
IST 256	LAN Desktop Technologies	3
IST 257	LAN Network Server Technologies	3
IST 268	Computer Forensics	3
IST 269	Digital Forensics	3
IST 293	IT and Data Assurance I	3
IST 294	IT and Data Assurance II	3
Total Hours		27

Graduation Plan

Fall Start

Course	Title	Hours
First Year		
Fall Semester		
IST 220	Data Communications	3
IST 268	Computer Forensics	3
IST 293	IT and Data Assurance I	3
Hours		9
Spring Semester		
IST 269	Digital Forensics	3
IST 294	IT and Data Assurance II	3
Hours		6
Summer Semester		
CPT 247	UNIX Operating System	3
CPT 282	Information Systems Security	3
Hours		6
Second Year		
Fall Semester		
IST 256	LAN Desktop Technologies	3

IST 257	LAN Network Server Technologies	3
Hours		6
Total Hours		27

Spring Start

Course	Title	Hours
First Year		
Spring Semester		
IST 220	Data Communications	3
IST 268	Computer Forensics	3
Hours		6
Summer Semester		
CPT 247	UNIX Operating System	3
CPT 282	Information Systems Security	3
Hours		6
Fall Semester		
IST 256	LAN Desktop Technologies	3
IST 257	LAN Network Server Technologies	3
IST 293	IT and Data Assurance I	3
Hours		9
Second Year		
Spring Semester		
IST 269	Digital Forensics	3
IST 294	IT and Data Assurance II	3
Hours		6
Total Hours		27

Summer Start

Course	Title	Hours
First Year		
Summer Semester		
IST 220	Data Communications	3
Hours		3
Fall Semester		
IST 256	LAN Desktop Technologies	3
IST 257	LAN Network Server Technologies	3
IST 268	Computer Forensics	3
IST 293	IT and Data Assurance I	3
Hours		12
Spring Semester		
IST 269	Digital Forensics	3
IST 294	IT and Data Assurance II	3
Hours		6
Second Year		
Summer Semester		
CPT 247	UNIX Operating System	3

CPT 282	Information Systems Security	3
	Hours	6
	Total Hours	27

- Analyze and resolve security issues in networks and computer systems to secure an IT Infrastructure.
- Design, develop, test, and evaluate secure software.
- Evaluate and communicate the human role in security systems with an emphasis on ethics, social engineering vulnerabilities, and training.
- Interpret and forensically investigate security incidents.

Application and Advising

If you are ready to start your education, there are a few simple steps involved in enrolling at Piedmont Technical College.

Get Started Today (<https://www.ptc.edu/admissions/new-students/>)

Advising Information

The following information provides a guide for advisors who are helping students enroll in this program.

Program Notes

Students may start this program in any term, and this program can be completed on a part-time or full-time basis. Some courses are offered online.

Note that all courses are not offered every semester, and sequencing of courses is very important, so it is best to follow the established outline of courses as closely as possible.

College policy states that computer coursework is valid for eight years.

Notes About Individual Classes

If students need developmental or transitional classes, they should be taken first.

Student Program Learning Outcomes

Purpose Statement

This certificate is designed for computer or network systems professionals that need expertise in security. The program will provide students with the concepts and skills of the fast growing field of cybersecurity, including security of systems and infrastructure in business and industry. Students will learn how to protect networks and defend information systems from attack. It is ideal if you are employed in a computer related field and seeking cybersecurity knowledge. Students who complete this certificate may continue their education by enrolling in the associate degree program in Computer Technology.

Student Learning Outcomes

- Demonstrate the ability to use logical design techniques in creating programs and systems.
- Recognize and describe the personal computer hardware components.
- Install, configure and upgrade personal computer operating systems.
- Apply basic computer literacy concepts.
- Plan, design and construct a working computer network including appropriate Local Area Network (LAN) and Wide Area Network (WAN) connections and protocols.
- Demonstrate the ability to organize data using current computer technology.