Online
Certificate in Cybersecurity 1: Fundamental System Security
16 Credit Hours

Admission Requirements:

- Application and processing fee.
- Submit official high school and/or college transcripts.
- Students are not required to submit ACT or SAT test scores.

Cost:

- Per Credit: $395
- Per Course: $1,185
- Resource Fee: A $300 resource fee will be administered per part of term.
- Total Tuition: $6,320*

  *Does not include resource fee

Graduation Requirements:

Students must earn a 2.0 GPA or higher to meet graduation requirements and successfully complete all required courses.

Job Outlook in Texas:

129,966 Jobs
Open in 2020*

360,880
Unique Postings (9/16-12/21)

$95,300 per year
Median Earnings

Acquired Skills:

Top Hard Skills

- Information Systems
- Operating Systems
- SQL (Programming Language)
- Project Management

Top Common Skills

- Communications
- Management
- Problem Solving
- Leadership

*Filtered by the proportion of the national workforce in these occupations with a Bachelor's degree.
Source Emsi Analyst 2022.

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2025-2026 Academic Year

Cybersecurity 1: Fundamental System Security

Curriculum:

ITA 110: Introduction to Information, Technology, and Computing
Provides an overview to the IT discipline, including computing technology basics, networking and communications, application programming, information and database management systems, and cybersecurity.

CSO 115: Introduction to Programming Using Scripting
An introduction to computer programming using a scripting language such as Python or PHP, with an emphasis on problem solving and logic. Topics include: variables and constants, arithmetic operations, data input and output, Boolean logic, conditional and iterative program control structures, user-defined functions, simple algorithm design, and debugging strategies.

ITO 221: Fundamentals of Networking and Data Communications
A first course in data communications and networking. Topics include: IP networks and services, comparative network configurations and communications protocols, function and purpose of physical network components, resource sharing, client-server systems, administrative issues and tools, and industry standards. Provides initial training towards professional network certification. Laboratory graded and credited with course.

ITO 310: Introduction to Computer and Information Security
A survey of the fundamental concepts of computer and information security, including policies and technologies used to achieve secure networks, systems, computing facilities, and information resources. Topics include common system vulnerabilities and threats; models and mechanisms for mandatory, discretionary, and role-based access controls; authentication technologies; ethical issues; and related ideas. Provides initial training towards professional database certification.

ITA 332: Cloud and Network Defense
In this course, students will apply tools and methods to secure organizational data and communication infrastructures. Challenges in providing security and effective defense for cloud, mobile, and remote systems are discussed.

ITO 335: Security Specialization
This course prepares students for the CompTia Security+ certification exam.

STACKABLE CERTIFICATE
You're one step closer to a bachelor's degree!

Want to expand your skills in cybersecurity and information technology? This certificate's credit hours are stackable toward ACU's online Bachelor of Science in Cybersecurity degree. It's a great option if you plan on applying for the undergraduate program at a later time. Simply complete the certificate program, and ACU will seamlessly apply your 16 credit hours toward your bachelor's.