



Cisco Networking Academy  
Mind Wide Open

# Cybersecurity Essentials 1.0 Overview



# Cybersecurity Market and Opportunities

**Cybersecurity spending outlook: \$1 trillion from 2017 to 2021**



Source: Cybersecurity Market Report by Cybersecurity Ventures



More than [209,000 cybersecurity jobs](#) in the U.S. are unfilled, and postings are up 74% over the past five years, according to a 2015 analysis of numbers from the Bureau of Labor Statistics by Peninsula Press, a project of the Stanford University Journalism Program.

A [report](#) from Cisco puts the global figure at one million cybersecurity job openings. Demand is expected to rise to 6 million globally by 2019.



## The Most Critical Skills Gap: Cybersecurity

Data breaches are both costly and damaging to a company's reputation. But there aren't enough people to fill open cybersecurity positions.



# Cybersecurity Essentials 1.0

## Course Overview

Cybersecurity Essentials covers foundation knowledge and essentials skills in all security domains in the cyber world – information security, systems security, network security, mobile security, physical security, ethics and laws, related technologies, defense and mitigation techniques used in protecting businesses.

## Learning Progression

High school and higher education students interested in learning about foundational knowledge and build essential skills in cyber security, and career opportunities in the cyber security field.

**Prerequisites:** Introduction to Cybersecurity

**Languages:** English

**Course Delivery:** Instructor-led or Self-paced

**Estimated Time to Complete:** 30 hours

**Next Course:** CCNA R&S or CCNA Security

## Cybersecurity Essentials

Chapter 0	Course Introduction
Chapter 1	Cybersecurity - A World of Wizards, Heroes, and Criminals
Chapter 2	The Cybersecurity Sorcery Cube
Chapter 3	Cybersecurity Threats, Vulnerabilities, and Attacks
Chapter 4	The Art of Protecting Secrets
Chapter 5	The Art of Ensuring Integrity
Section 1.0	Introduction
Section 1.1	The Cybersecurity World
Section 1.2	Cyber Criminals versus Cyber Heroes
Section 1.3	Threats to the Kingdom
Section 1.4	The Dark Forces of Cybersecurity
Section 1.5	Creating More Heroes

Topic 1.0.1	Welcome
Page 1.0.1.1	Chapter 1: Cybersecurity - A World of Wizards, Heroes, and Criminals



## Learning Components

- 8 chapters
- Interactive Multimedia Content
- 34 Activities, 10 Packet Tracer Activities, 12 Labs that reinforce learning
- 8 end-of-chapters quiz, and 1 final exam
- Links to related resources

# Cybersecurity Essentials Goals

Cybersecurity Essentials helps students:

- Understand the players in the cyber security world and motivation of cyber criminals and cybersecurity professionals.
- Learn to identify security attacks, symptoms, processes, and countermeasures.
- Learn foundational and essential knowledge in various security domains – cybersecurity, information security, application security, host and system security, network security, mobile security, security laws, ethics, and security policies.
- Build skills in security management, controls, protection and mitigation technologies.
- Explore the roles of different cybersecurity professionals and career options.
- Consider or advance a career in cybersecurity



# Cybersecurity Essentials Key Competencies

Upon completion of this course, students will be able to:

- Describe the characteristics of criminals and specialists in the cybersecurity realm.
- Describe how the principles of confidentiality, integrity, and availability as they relate to data states and cybersecurity countermeasures.
- Describe the tactics, techniques and procedures used by cyber criminals.
- Describe technologies, products and procedures used to protect confidentiality, ensure integrity and provide high availability.
- Explain how cybersecurity professionals use technologies, processes and procedures to defend all components of the network.
- Explain the purpose of laws related to cybersecurity.



Thank you.



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