

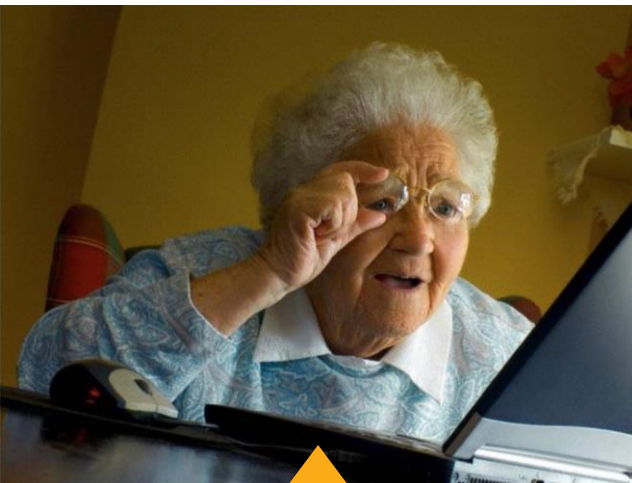
Introduction to Cybersecurity 2.1

Overview

April 2018



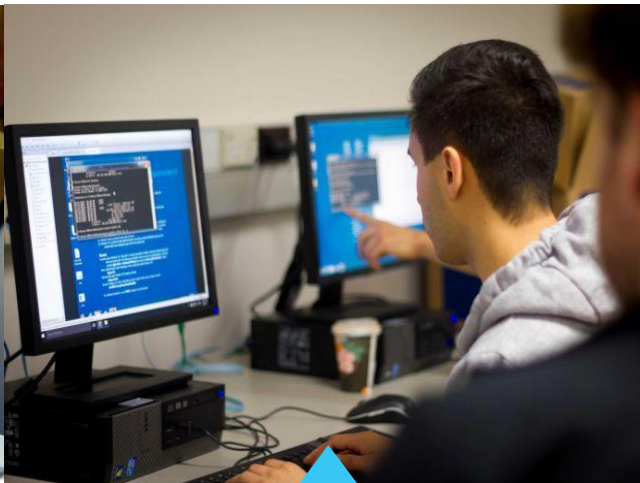
Why Cybersecurity?



Everyone Needs to Know

Even the grandmas on Facebook need to know and practice basic security hygiene, because what happens everywhere on the Internet can eventually affect us all.

Source: [Why Cybersecurity Starts at Home](#)



Skill Shortage

A report from Frost & Sullivan and (ISC)² found that the global cybersecurity workforce will have more than 1.5 million unfilled positions by 2020.

Source: [report](#)



Hot Jobs

10 IT skills that Employers need in 2017 – cybersecurity is rated top 3 skills that will be in high demand for 2017. Average salary for entry level jobs range from US\$64k-\$113k p.a.

Source: [CIO from IDG](#) , [Indeed.com](#)

The Networking Academy Learning Portfolio

Current & Planned



Aligns to Certification



Instructor Training required



Self-paced

* Available within 12 months

Collaborate for Impact

	Exploratory	Foundational	Career-Ready
Networking		Networking Essentials Mobility Fundamentals	CCNA R&S: Introduction to Networks, R&S Essentials, Scaling Networks, Connecting Networks CCNP R&S: Switch, Route, TShoot Emerging Tech Workshop: Network Programmability Using Cisco APIC-EM*
Security	Introduction to Cybersecurity	Cybersecurity Essentials	CCNA Security CCNA Cyber Ops*
IoT & Analytics	Introduction to IoT	IoT Fundamentals: Connecting Things, Big Data & Analytics Hackathon Playbook, IoT Security*	
OS & IT	NDG Linux Unhatched	NDG Linux Essentials IT Essentials	NDG Linux I NDG Linux II
Programming		CLA: Programming Essentials in C CPA: Programming Essentials in C++ PCA: Programming Essentials in Python* Emerging Tech Workshop: Experimenting with REST APIs Using Cisco Spark*	CLP: Advanced Programming in C* CPP: Advanced Programming in C++
Business	Be Your Own Boss	Entrepreneurship	
Digital Literacy	Get Connected		

Introduction to Cybersecurity

Course Overview

The Introduction to Cybersecurity course explores cyber trends, threats and staying safe in cyberspace, and protecting personal and company data.

Benefits

Learn how to protect your personal data and privacy online and in social media, and why more and more IT jobs require cybersecurity awareness and understanding.

Learning Components

- 5 modules
- Interactive and instructional content
- 8 Activities and 7 lab exercises that reinforce learning
- 4 quizzes and 1 final exam
- Links to related resources



Features

Target Audience: Secondary and 2-Year college students, general audience

Prerequisites: None

Instructor Training Required: No

Languages: Chinese-S, English (2.1), French, German, Hebrew, Italian, Japanese, Spanish, Portuguese

Course Delivery: Instructor-led or Self-paced

Estimated Time to Complete: 15 hours

Course Outline

Chapter	Chapter Titles	Summary Description
1	The Need for Cybersecurity	<ul style="list-style-type: none">• Learn the need for and importance of cybersecurity.• Understand the characteristics and value of personal data, and data within an organization.
2	Attacks, Concepts and Techniques	<ul style="list-style-type: none">• Recognize the characteristics and operation of a cyber attack.• Interpret the trends in the cyber threat landscape.
3	Protecting Your Data and Privacy	<ul style="list-style-type: none">• Understand how to protect devices from threats.• Master how to safeguard your privacy.
4	Protecting the Organization	<ul style="list-style-type: none">• Learn techniques to protect organizations from cyber attacks.• Recognize the behavior-based approach to cybersecurity.• Explain Cisco's approach to cybersecurity.
5	Will Your Future Be in Cybersecurity?	<ul style="list-style-type: none">• Understand legal and ethical issues in cybersecurity• Explore the opportunities for pursuing an education and a career in cybersecurity.

Module 1: The Need for Cybersecurity



Learn what cybersecurity is and why the demand for cybersecurity professionals is growing.

Module 1 presents:

- What your online identity and data is, where it is, and why it is of interest to cyber criminals.
- What organizational data is, and why it must be protected.
- What cyber warfare is and why organizations, nations, and governments need cybersecurity professionals to protect their citizens and infrastructure.



Module 2: Attacks, Concepts and Techniques



Learn how a cybersecurity professional analyzes a cyberattack.

Module 2 details:

- Security vulnerabilities and the different types of vulnerabilities and malware.
- The techniques used by attackers to infiltrate a system.
- The characteristics and operation of a cyber attack.
- The trends in the cyber threat landscape.



Module 3: Protecting Your Data and Privacy



Become aware of your personal devices and data.

Module 3 covers:

- Tips for protecting your personal devices and data by creating strong passwords and using wireless networks safely.
- Authentication techniques helping you maintain your data securely with tips about what to do and what not to do online.
- Protecting devices from threats.
- Safeguarding your privacy.



Module 4: Protecting The Organization



Learn about the technologies, processes, and best practices used when protecting an organization's network.

Module 4 presents:

- Equipment, data, and the commonly used security terms such as botnets, the kill chain, and behavior-based security.
- Cisco's approach to cybersecurity using a CSIRT team and a security playbook.
- Techniques for protecting organizations from cyber attacks.
- The behavior-based approach to cybersecurity.
- Cisco's approach to cybersecurity.



Module :5 Will Your Future Be in Cybersecurity?



Explore educational paths towards certifications with the Cisco Networking Academy (NetAcad).

Module 5 summarizes:

- Understand legal and ethical Issues in Cybersecurity
- Explore the opportunities for pursuing an education and a career in cybersecurity.



