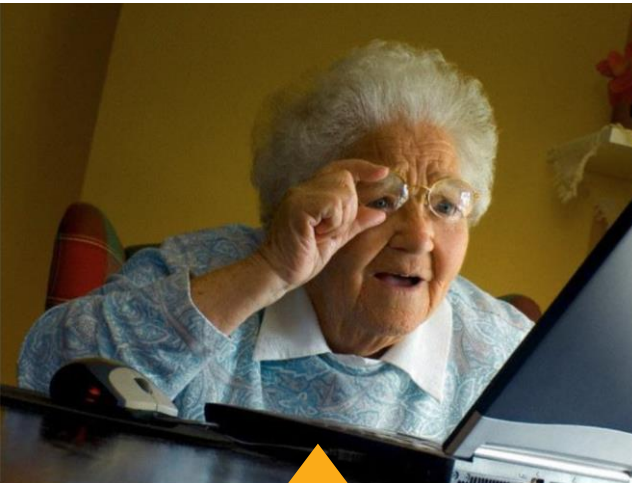# Introduction to Cybersecurity 2.1 Overview

December 2017
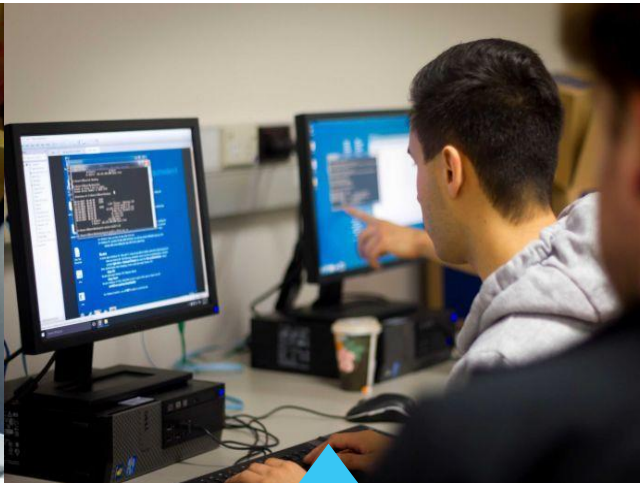
Why Cybersecurity?

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.

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.

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.

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

What's Changed In 2.1?

- Minor content updates
    - Recent security breach example
    - Add newly discovered wireless networks security vulnerability – KRACK
    - Update NIST standard for password
- Improve course structure caters to public audience
    - Remove irrelevant content and terminologies
    - Simplifies certification references
- Improved Accessibility compliant to WCAG 2.0
- Bug fixes and link refreshes
- Refer to Release Notes for details

Course Outline

Chapter	Chapter Titles	Summary Description
1	The Need for Cybersecurity	• 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	• Recognize the characteristics and operation of a cyber attack. • Interpret the trends in the cyber threat landscape.
3	Protecting Your Data and Privacy	• Understand how to protect devices from threats. • Master how to safeguard your privacy.
4	Protecting the Organization	• 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?	• 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.

Students Enrollment and Support

Visit the Course information page on Cisco NetAcad.com to enroll in the self-paced course.

If you need assistance, post questions on the Cisco Networking Academy Facebook page

Instructors Enrollment and Support

Enroll students and teach Introduction to Cybersecurity in their classrooms through the same process used for other NetAcad courses

No instructor training required

If you need assistance, contact your Academy Support Center (ASC)
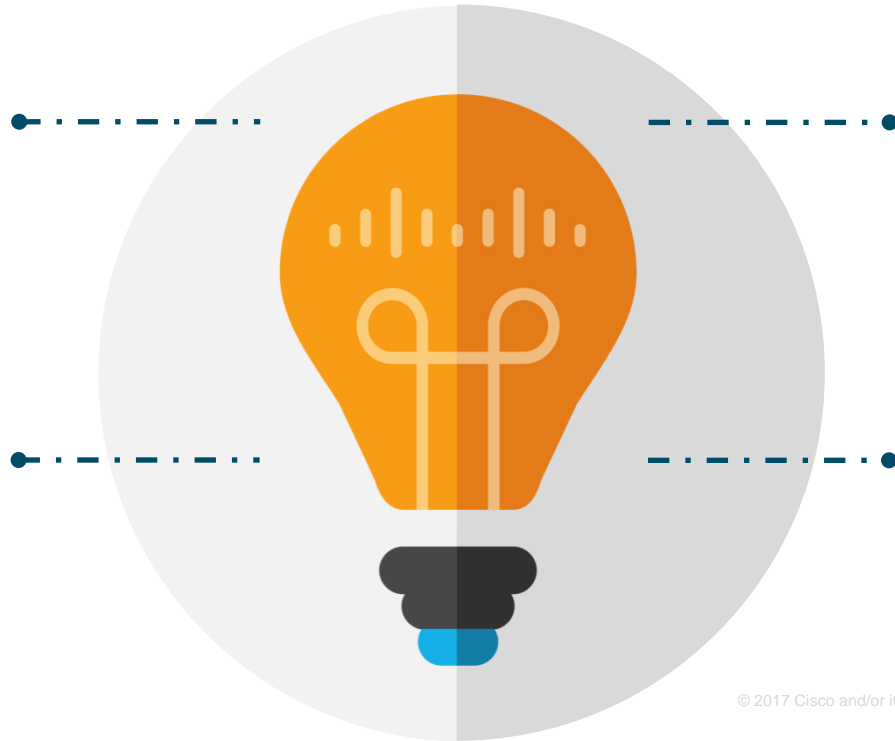
Instructor Resources

https://www.netacad.com/group/resources/cybersecurity/2.1

PPT

Instructor Powerpoints,
Intro to Cyber security
2.1 Overview and Video

S&S

Scope & Sequence
Document

FAQ

Frequently Asked
Questions

Plus

Additional information &
resources

End-of-Life for Introduction to Cybersecurity 2.0

Course	Language	Last Class Start Date
Introduction to Cybersecurity 2.0	English	April 1, 2018

All other available languages are not EOL.