Cybersecurity Essentials At-A-Glance

Cybersecurity risks and threats are ever-present. The Internet and network infrastructures are increasingly vulnerable to a wide variety of physical and cyber attacks. Sophisticated cyber criminals and nations exploit these vulnerabilities stealing information, money, and more. These threats and vulnerabilities are fueling the growing need for skilled cybersecurity professionals.

Learn Cybersecurity Essentials Knowledge and Skills

Cybersecurity leads media headline news – "New malware steals $4 million at U.S., Canada Banks", "Hackers broke into hospitals despite software flaw warnings", "Newer type of ransomware is harbinger of danger" (Source: Cisco 2016 Annual Security Report). Today, cybersecurity concerns everyone, from individuals to private business to country governments. Evolve your online safety knowledge; learn cybersecurity skills and choose a career in cybersecurity.

The Cybersecurity Essentials course covers foundational knowledge in all aspects of security in the cyber world, including information security, systems security, network security, mobile security, physical security, ethics and laws. It builds students' skills in related technologies, procedures, defense and mitigation techniques used in protecting businesses.

The 30 hour course offers the following:

- Interactive, multimedia content
- Activities, lab exercises, Cisco Packet Tracer activities that reinforce learning
- Links to articles and websites for enhanced learning on specific topics
- Quizzes and exams to check students' understanding of the information covered

Cybersecurity Careers

Training a cybersecurity workforce is a national priority for most countries, with a demand for cybersecurity professionals projected to rise to six millions job openings globally by 2019.

There are many opportunities for career growth in this field. As people become increasingly dependent on networks to store their personal, financial, and business data, there's greater incentive for cyber criminals to steal, manipulate, and monetize that data. The world needs specialists to proactively defend and address these threats.

Cybersecurity Essentials is delivered through the Cisco NetAcad.com learning environment. Students can enroll into the self-paced course to take at their own pace or find an academy where instructors enroll students into the course and teach the through the same process used for other Cisco Networking Academy ™ courses.

Module	Learning Objectives
Cybersecurity – A World of Wizards, Heros and Criminals	• Describe the cybersecurity world, criminals, andprofessionals . • Compare how cybersecurity threats affect individuals, business and countries. • Explain the structure and efforts committed to expanding the security workforce.
The Cybersecurity Sorcery Cube	• Explain the three dimensions of the McCumber Cube. • Detail the ISO cybersecurity model. • Explain the principles of confidentiality, integrity, and availability as they relate to data states and cybersecurity countermeasures.
Cybersecurity Threats,	• Describe tactics, techniques and procedures used by

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Vulnerabilities, and Attacks	cyber criminals. • Explain the types of malware, malicious code and social engineering.
The Art of Protecting Secrets	• Outline technologies, products and procedures used to protect confidentiality. • Explain encryption techniques and access control techniques. • Present concepts of obscuring data.
The Art of Ensuring Integrity	• Explain technologies, products and procedures used to ensure integrity. • Detail the purpose of digital signatures and certificates. • Explain the need for database integrity enforcement.
The Realm of Five Nines	• Explain the concepts of five nines. • Name the technologies, products, and procedures used to provide high availability. • Represent how incident response plan and disaster recovery planning improves high availability and business continuity.
Fortifying the Kingdom	• Describe system, servers and data protection • Explain network infrastructure and end device protection • Detail physical security measures used to protect network equipment
Joining the Order of Cybersecurity Specialists	• Discuss cybersecurity domains and controls • Explain ethics and cybersecurity laws. • Name the cybersecurity tools. • Explain how to become a cybersecurity professional.