Overview

This course covers a wide variety of IT security concepts, tools, and best practices. It introduces threats and attacks and the many ways they can show up. We’ll give learners some background of encryption algorithms and how they’re used to safeguard data. Then, we’ll dive into the three As of information security: authentication, authorization, and accounting. We’ll also cover network security solutions, ranging from firewalls to WiFi encryption options. The course is rounded out by putting all these elements together into a multi-layered, in-depth security architecture, followed by recommendations on how to integrate a culture of security into an organization or team.

What You’ll Learn

- How various encryption algorithms and techniques work as well as their benefits and limitations
- Various authentication systems and types
- The difference between authentication and authorization
- How to evaluate potential risks and recommend ways to reduce risk
- Best practices for securing a network
- How to help others to grasp security concepts and protect themselves

How to Succeed

To be successful in this course, we recommend English language fluency and computer literacy. We also encourage you to make sure your laptop or desktop computer meets the technical requirements. Required prerequisites for this course:

- CIS 194 Business Technology Fundamentals
- CIS 194 Computer Networking in Organizations
- CIS 194 Operating Systems Management for Business
- CIS 294 System Administration and IT Infrastructure Service

Earn College Credit

This course appears on your transcript identically to how it appears on the transcript of an enrolled ASU student.

This course satisfies 3 credit hour at Arizona State University. It is strongly encouraged that you consult with your institution of choice to determine how these credits will be applied.

In order to receive academic credit for this course, you must earn a grade of "C" or better. You have one year to add the course to your transcript.

This course is the fifth in a series that will prepare you for a Google IT Certificate.

Exams and Grading

- 43% Google Module Completion
- 25% Quizzes
- 32% Writing Assignment