

Certified Internet of Things Security Practitioner (CIoTSP™): Exam ITS-110

This document includes instructor led class overview and objectives, identifies target student and prerequisites, course outline, and course specific software and hardware requirements.

Course Length:

3 Days

Overview:

This course is designed for practitioners who are seeking to demonstrate a vendor-neutral, cross-industry skill set that will enable them to design, implement, operate, and/or manage a secure IoT ecosystem.

Target Student:

This course is designed for IoT practitioners who are looking to improve their skills and knowledge of IoT security and privacy. This course is also designed for students who are seeking the CertNexus Certified Internet of Things Security Practitioner (CIoTSP) certification and who want to prepare for Exam ITS-110.

Prerequisites:

To ensure your success in this course you should have a fundamental understanding of IoT ecosystems, which you can obtain by taking the following CertNexus course: Certified Internet of Things (IoT) Practitioner (Exam ITP-110)

Course Content

Lesson 1: Managing IoT Risks

- Topic A: Map the IoT Attack Surface

- Topic B: Build in Security by Design

Lesson 2: Securing Web and Cloud Interfaces

- Topic A: Identify Threats to IoT Web and Cloud Interfaces

- Topic B: Prevent Injection Flaws

- Topic C: Prevent Session Management Flaws

- Topic D: Prevent Cross-Site Scripting Flaws

- Topic E: Prevent Cross-Site Request Forgery Flaws

- Topic F: Prevent Unvalidated Redirects and Forwards

Lesson 3: Securing Data

Topic A: Use Cryptography Appropriately

Topic B: Protect Data in Motion

Topic C: Protect Data at Rest

Topic D: Protect Data in Use

Lesson 4: Controlling Access to IoT Resources

Topic A: Identify the Need to Protect IoT Resources

Topic B: Implement Secure Authentication

Topic C: Implement Secure Authorization

Topic D: Implement Security Monitoring on IoT Systems

Lesson 5: Securing IoT Networks

Topic A: Ensure the Security of IP Networks

Topic B: Ensure the Security of Wireless Networks

Topic C: Ensure the Security of Mobile Networks

Topic D: Ensure the Security of IoT Edge Networks

Lesson 6: Ensuring Privacy

Topic A: Improve Data Collection to Reduce Privacy Concerns

Topic B: Protect Sensitive Data

Topic C: Dispose of Sensitive Data

Lesson 7: Managing Software and Firmware Risks

Topic A: Manage General Software Risks

Topic B: Manage Risks Related to Software Installation and Configuration

Topic C: Manage Risks Related to Software Patches and Updates

Lesson 8: Promoting Physical Security

Topic A: Protect Local Memory and Storage

Topic B: Prevent Physical Port Access