

CertNexus Certified Internet of Things Security Practitioner (CIoTSP) v1.0

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. This course may earn a Credly Badge.

Prerequisite Comments

To ensure your success in this course you should have a fundamental understanding of IoT ecosystems

Target Audience

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.

Course Objectives

This program will validate that the candidate has the knowledge, skills, and abilities to secure network environments for IoT devices, analyze vulnerabilities and determine reasonable controls against threats, and effectively monitor IoT devices and respond to incidents.

Course Outline

1 - Managing IoT Risks

Map the IoT Attack Surface
Build in Security by Design

2 - Securing Web and Cloud Interfaces

Identify Threats to IoT Web and Cloud Interfaces
Prevent Injection Flaws
Prevent Session Management Flaws
Prevent Cross-Site Scripting Flaws
Prevent Cross-Site Request Forgery Flaws
Prevent Unvalidated Redirects and Forwards

3 - Securing Data

Use Cryptography Appropriately
Protect Data in Motion
Protect Data at Rest
Protect Data in Use

4 - Controlling Access to IoT Resources

Identify the Need to Protect IoT
Implement Secure Authentication
Implement Secure Authorization
Implement Security Monitoring on IoT Systems

5 - Securing IoT Networks

Ensure the Security of IP Networks
Ensure the Security of Wireless Networks
Ensure the Security of Mobile Networks
Ensure the Security of IoT Edge Networks

6 - Ensuring Privacy

Improve Data Collection to Reduce Privacy Concerns
Protect Sensitive Data
Dispose of Sensitive Data

7 - Managing Software and Firmware Risks

Manage General Software Risks
Manage Risks Related to Software Installation and Configuration
Manage Risks Related to Software Patches and Updates
Manage Risks Related to IoT Device Operating Systems and Firmware

8 - Promoting Physical Security

Protect Local Memory and Storage
Prevent Physical Port Access

Related Courses, Certifications, Exams

- CertNexus Certified Internet of Things Practitioner (CIoTP)