Certnexus - Certified Internet of Things Security Practitioner

Course code: CIoTSP

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.

Who is the course for

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.

Riquired skills

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.

Teaching materials

Official guide book for this course

Course outline

Lesson 1: Managing IoT Risks

- Map the IoT Attack Surface
- Build in Security by Design

Lesson 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

Lesson 3: Securing Data

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

Lesson 4: Controlling Access to IoT Resources

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

Lesson 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

Lesson 6: Ensuring Privacy

- Improve Data Collection to Reduce Privacy Concerns
- Protect Sensitive Data

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- Dispose of Sensitive Data

Lesson 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

Lesson 8: Promoting Physical Security

- Protect Local Memory and Storage
- Prevent Physical Port Access

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