COURSE OVERVIEW

Course Name:
(CN-CIoTSP+)
CertNexus Certified
Internet of Things
(IoT) Security
Practitioner

COURSE DURATION: 3 Days

Gauteng:
3rd Floor, 34 Whitely Road
Melrose Arch
Johannesburg
2196

Gauteng:
192 on Bram
192 Bram Fischer Drive
Ferndale, Randburg
Johannesburg
2160

Cape Town:
3rd Floor, Thomas Pattullo Building
19 Jan Smuts St
Cape Town
8000

Durban:
9 Mountview Close
Broadlands
Mount Edgecombe
Durban
4302

087 941 5764
sales@impactful.co.za
impactful.co.za

INTRODUCTION

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.

DELIVERY METHOD

Our courses have flexible delivery options:
- In-person classroom training at the Impactful training facilities
  - Johannesburg, Durban, Cape Town
- Virtual instructor-led training
- Nationally: on-site at the client

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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

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 OBJECTIVES

In this course, you will learn to enable you to design, implement, operate, and/or manage a secure IoT ecosystem.

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

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ASSOCIATED EXAMS & CERTIFICATION

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
- Topic D: Manage Risks Related to IoT Device Operating Systems and Firmware

Lesson 8: Promoting Physical Security
- Topic A: Protect Local Memory and Storage
- Topic B: Prevent Physical Port Access

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