

## CN-CIOTSP



# CERTIFIED INTERNET OF THINGS (IOT) SECURITY PRACTITIONER

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
3 Days	Intermediate	Internet of Things (IoT)	Classroom , Virtual or Onsite	NA

## 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.

## AUDIENCE PROFILE

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 (ClotSP) certification.

## PREREQUISITES

To ensure your success in this course you should have a fundamental understanding of IoT ecosystems, which you can obtain by attending MIE's Certified Internet of Things (IoT) Practitioner training course.

## COURSE TOPICS

### 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
- 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 Firmware

### Lesson 8: Promoting Physical Security

- Protect Local Memory and Storage
- Prevent Physical Port Access

## ASSOCIATED CERTIFICATIONS & EXAM

The Certified Internet of Things exam #ITS-110 will certify that the successful candidate has the knowledge of IoT concepts, technologies, and tools that will enable them to become a capable IoT Security practitioner in a wide variety of IoT-related job functions.

Upon completion of this course, delegates will receive a MIE attendance certificate.