

Hacking IoT

Course Duration : 24 Hours

Course code : IOT-HACK

1. Course Overview

The **Hacking IoT** course focuses on identifying and exploiting security weaknesses in Internet of Things (IoT) devices. This course covers real-world IoT attack techniques, device analysis, firmware security, and network-based attacks while following ethical hacking practices. Learners also understand how to secure IoT environments against common threats.

2. What you'll learn?

- IoT architecture and components
- Common IoT vulnerabilities
- Firmware analysis and exploitation
- Network attacks on IoT devices
- Wireless and protocol-based attacks
- IoT security best practices

3. Target Audience

- Ethical hackers
- Penetration testers
- Cybersecurity professionals
- IoT developers and engineers
- Security researchers

4. Pre-Requisites

- Basic networking knowledge
- Understanding of Linux fundamentals
- Familiarity with cybersecurity concepts

5. Course Content (Modules)

Module 1: IoT Fundamentals

- IoT architecture
- Device communication protocols

Module 2: IoT Threat Landscape

- Common vulnerabilities
- Attack surfaces

Module 3: Firmware Analysis

- Firmware extraction
- Reverse engineering basics

Module 4: Network and Protocol Attacks

- MQTT, HTTP, and proprietary protocols
- Man-in-the-middle attacks

Module 5: Wireless Attacks on IoT

- Bluetooth and Zigbee attacks
- Wireless exploitation techniques

Module 6: Securing IoT Devices

- Hardening techniques
- Best practices and monitoring