EC-Council IoT Security Essentials (ISE)

Category: Networking & Security | **Vendor:** EC-Council

Duration: 16.00 hours (2 days) **13.0 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

EC-Council’s IoT Security Essentials Series provides comprehensive coverage of essential topics in securing Internet of Things (IoT) systems. From understanding the fundamental concepts of IoT to addressing advanced security threats, students will gain the knowledge and skills necessary to design, deploy, and maintain secure IoT solutions. Through a combination of theoretical learning and hands-on exercises, participants will explore IoT fundamentals, networking and communication protocols, cloud integration, threat intelligence, incident response, and security engineering principles. Put your newly acquired abilities to the test with an exhilarating Capture the Flag (CTF) Exercise seamlessly integrated in our Capstone project. This CTF is seamlessly integrated by live virtual machines, genuine software, and real networks, all delivered within a secure and regulated sandbox environment. With these exclusive hands-on, human-versus-machine CTF challenges you will develop the hands-on proficiencies essential for success in your cyber professional role. Ultimately, students will be equipped with the expertise needed to effectively identify, assess, and mitigate security risks in IoT environments, ensuring the integrity, confidentiality, and availability of IoT systems and data.

About This Course

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Who Should Attend

- School students, graduates, professionals, career starters and changers, IT / Technology / Cybersecurity teams with little or no work experience.
- Individuals who want to start a career in cybersecurity and are interested in IoT Security.
- Anyone interested in gaining in-depth knowledge on safeguarding their smart devices or those within their organization.

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Gain insights into the emergence of the Internet of Things (IoT). Learn about the devices that make your home a smart home. Dive deep into IoT communication models. Gain a deep understanding of IoT networking and communication. Understand cloud computing in depth. Learn about the different types of threats to IoT

Detailed Course Outline

Module 1: IoT Fundamentals

- This module will introduce you to the basics of IoT and the different sectors where IoT is established.

Module 2: IoT Networking and Communication

- This module will provide insights into the basics of networking concepts, the OSI Model, and the TCP Model. It will also cover the IEEE IoT Standards List.

Module 3: IoT Processors and Operating Systems

- This module will help you understand the hardware devices, processors, and operating systems used in IoT.

Module 4: Cloud and IoT

- This module will teach you about cloud computing, its characteristics, and the types of cloud services.

Module 5: IoT Advanced Topics

- This module will brief you about web communications, mobile applications, and native applications.

Module 6: IoT Threats

- This module will introduce you to some of the common IoT attacks, such as Mirai, BrikerBot, Sybii, and Blackhole attacks.

Module 7: Basic Security

- This module will discuss the CIA triangle, Wired Equivalent Privacy (WEP), Wi-Fi Protected Access (WPA), and IoT security measures.

Module 8: Cloud Security

- This module will discuss the state of cloud security, cloud vulnerabilities, NSA guidance, and secure cloud computing.

Module 9: Threat Intelligence

- This module will start with the topic of the National Vulnerability Database, covering US Cert, Shodan, STRIDE, DREAD, PASTA, and CVSS.

Module 10: IoT Incident Response

- This module will provide information on incident response in IoT, including standards, processes, procedures, tools, and indicators of compromise.

Module 11: IoT Security Engineering

- This module will cover the 12 practices of the Microsoft Secure Development Lifecycle and Threat Modeling

Frequently Asked Questions

Q: What delivery options are available for EC-Council IoT Security Essentials (ISE)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 2-day EC-Council IoT Security Essentials (ISE) course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the EC-Council IoT Security Essentials (ISE) training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for EC-Council IoT Security Essentials (ISE)?

Yes, we provide corporate training, dedicated training, and closed classes for EC-Council IoT Security Essentials (ISE). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: Why choose Nexus Human for EC-Council IoT Security Essentials (ISE)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your EC-Council IoT Security Essentials (ISE) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

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