## Telecoms & Tech Academy



# IOT SECURITY FUNDAMENTALS

Building your IoT security roadmap Live Virtual Classroom



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## **IOT SECURITY FUNDAMENTALS** PROGRAMME SUMMARY

The growth of IoT and connected devices has resulted in the increase of data at an exponential rate despite persistent concerns around security of endpoints and the mission criticality of many IoT applications. IoT devices and services present security concerns due to the difficulty in encryption and programming as well as lack of prioritising the importance of security as a whole; from designing an IoT device or service to deploying it. Consumer IoT as well as industrial IoT is under threat if the right steps to securing IoT devices are not taken from the beginning of the device design and conception. Businesses are called to be proactive and able to mitigate threats to network security and protect valuable data and IT systems.

This is an important training programme that addresses these concerns and offers the opportunity for an in-depth examination of IoT device security, domain security and E2E Architecture. Attendees will leave with a framework for IoT security architecture and an end-to-end view through governance frameworks for this emerging technology.

#### **LEARNING OUTCOMMES**

#### Key learning outcomes for the attendee:

- Examine in detail IoT device vulnerabilities
- Understand how these vulnerabilities should be addressed and mitigated
- Learn how to secure IoT products and services
- Learn how to build and deploy secure IoT solutions
- Examine End-to-End IoT Security in detail

#### Key learning outcomes for the organisation

- Upskill your team so that potential IoT security risks are researched, identified and addressed
- Identify current and future IoT security vulnerabilities across products and services
- Roll-out a roadmap for your organisation to protect devices and services from possible risks through governance

#### WHO IS IT FOR?

This course is designed for anyone who wishes to understand how to practically create secure IoT ecosystems by deploying security into IoT products and services.

# IOT SECURITY FUNDAMENTALS PROGRAMME AGENDA

AM	PM
Introductions	Recap
IoT Device Security (Part 1)	IoT Domain Security (Part 2)
Break	Exercise/Summary
IoT Device Security (Part 2)	Break
Exercise /Summary	IoT E2E Architecture (Part 1)
Break - 30 Minutes	Break
IoT Domain Security (Part 1)	IoT E2E Architecture (Part 2)

## **Module Details**

#### **IoT Device Security**

- Identifying and addressing current security issues
- Upgrading from Machine to Machine to IoT
- Application Security
- Open Web Application Security Project model

#### IoT Domain security

- Platforms
- Edge Nodes
- Networks
- Control Systems
- Privacy

#### IoT End to End Security Architecture

- Security Lifecycle management
- Correlation of reporting data IoT Devices through Security Zones
- E2E Security management
- E2E encryption
- Holistic Architecture

# **LIVE VIRTUAL CLASSROOM** ENGAGING INSTRUCTOR-LED TRAINING

# All our training programmes are deliverable as engaging online learning courses via our live Virtual Classroom platform.

Our cutting-edge instructor-led online virtual classroom solutions offer an engaging and enjoyable experience that replicates our face-to-face training experience to deliver knowledge and develop the competencies you need to succeed.

Our programmes are designed to ensure an optimal training experience - focusing on practical application of the concepts and topics covered.

We deliver the same market leading programmes online so you can benefit from the flexibility to take the training at a location of your choice without the need to travel!

### Why Choose a Virtual Classroom?

Enjoy the same classroom learning experience online

- Benefit from the same quality training programmes at a location of your choice.
- Minimise downtime with highly impactful training
- Cost effective training that saves on travel expenses and time.
- Experience an intimate class setting
- Interact with your course tutor and fellow students throughout the course including group exercises, file sharing and live Q&A's.
- Review the training material after the course
- All sessions are recorded so you can review the material anytime.



# BESPOKE TRAINING SOLUTIONS

# Flexible and cost-effective way to upskill teams and develop key competencies across your business

Telecoms & Tech Academy is the leading training partner to the TMT industry, having trained more than 30,000 professionals and 500 businesses globally. We were borne out of the telecoms industry and understand the challenges the sector has been facing.

Our training portfolio continues to evolve to help address new and emerging skills gaps telecoms & tech businesses are facing. To provide you with leading-edge knowledge, our learning is influenced by our partners including Omdia. Whether you'd like to utilise our existing programmes or create a completely customised solution, we've got you covered.

### **Flexible delivery methods**



We'll hand pick a leading practitioner to create and deliver a technical or commercially focussed programme, at your location – wherever that may be globally



We develop specialised online learning programmes using our virtual learning platform so your teams can learn anytime, anywhere – both on-demand or through online live classes



A mix of online and faceto-face - your business taps into our leading online learning experience and gets valuable face-time with leading practitioners

"The trainer was very experienced. The Material that was provided was great and we recieved some excellent recommendation on how to handle specific situations." MTN, South Africa

## Why choose the Telecoms & Tech Academy?

The Telecoms & Tech Academy have a track record of delivering cutting edge training programmes, helping to deliver growth and success to businesses. With over 20+ years experience and a team of expert researchers, we are able to customise and deliver the most up to date knowledge and skills.

Don't just take it from us, take a look at what our clients say...

66 The trainer was very experienced. The Material that was provided was great and we recieved some excellent recommendation on how to handle specific situations. - MTN, South Africa

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66 Very recommendable course. They provided the expected knowledge with good organisation and continuted learning after graduating.

- Huawei, China



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