



HANDS-ON IOT SECURITY LAB

Practical Training for Connected Systems

Learn the fundamentals of IoT security and hands-on practices through practical exercises. This training will guide you in building a simple connected system and secure communication protocols, providing real-world exposure to IoT security challenges. Whether you are an engineer, developer, or enthusiast, this lab provides the ideal environment to experiment with security concepts using free and open-source tools on customizable hardware



**SINGLE-DAY INTENSIVE
SESSION**



Key Learnings:

- IoT Security Fundamentals – Understand key security concepts and challenges in connected devices.
- Encryption & Key Management – Learn how encryption works, how to generate/manage keys, and secure data.
- Securing Communication – Implement and test encrypted messaging systems for secure data transfer.
- Wi-Fi & Bluetooth Security – Identify vulnerabilities and apply best practices to protect IoT networks.
- Hands-on Experience – Work with real-world tools (Raspberry Pi, ESP32, MQTT, TLS) to build and secure IoT systems.

Who It's For:

- Students & New Graduates looking to build a strong foundation in cybersecurity.
- Engineers & Developers wanting to transition into IoT security and connected systems.
- Security Enthusiasts eager to gain hands-on experience in real-world cybersecurity applications.
- System & Embedded Engineers expanding their skill set to include security in development.

The Value It Brings:

- Practical, Hands-On Learning – No fluff, just real-world security challenges and solutions.
- Industry-Relevant Skills – Directly applicable to IoT, embedded systems, and connected product security.
- Interactive & Engaging – Quizzes, discussions, and labs for active participation and deeper understanding.
- Career Growth – Build expertise in a high-demand field, bridging the gap between engineering and cybersecurity

Ready to build your IoT security skills?

Join the hands-on lab and take the next step in your cybersecurity journey!

Contact us to register or learn more.