

Cybersecurity Fundamentals for Engineers

COURSE OVERVIEW

This course introduces engineers to foundational cybersecurity concepts, including threats, vulnerabilities, and risk management. It covers basics of cryptography, network security, and safe computing practices. Participants will learn how to protect systems and data, recognize common attacks, and apply best practices to maintain secure environments, preparing them for advanced cybersecurity challenges.

WHO SHOULD ATTEND?

This course is ideal for engineers, software developers, system architects, and IT professionals responsible for designing, developing, or maintaining secure systems. It also suits embedded systems engineers, IoT developers, automation specialists, and technical teams who need to understand cybersecurity principles. Other individuals seeking practical skills in threat analysis, risk mitigation, and secure system design will also find this course valuable.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Identify and analyze potential cybersecurity threats and vulnerabilities in engineering systems.
- Implement cryptographic techniques and secure communication protocols.
- Design and develop secure software and hardware architectures.
- Apply network security principles and defence mechanisms.
- Conduct security testing and vulnerability assessments.
- Develop incident response and risk management strategies.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- Fundamental cybersecurity principles and threat landscapes.
- Cryptography fundamentals and secure implementation practices.
- Secure software development lifecycle and coding practices.
- Network security protocols and defence-in-depth strategies.
- Security testing methodologies and vulnerability assessment tools.
- Security compliance standards and regulatory requirements.
- Incident response planning and digital forensics basics.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded