€TRAINING

Internet of Things IOT

Internet of Things IOT

Introduction:

This training program provides participants with essential knowledge and skills in the Internet of Things IoT. It empowers them to understand and leverage IoT technologies to drive innovation and efficiency in various applications and industries.

Program Objectives:

At the end of this program, participants will be able to:

- Understand the foundational principles and architecture of IoT.
- Learn about IoT communication protocols and data management.
- Explore security challenges and solutions in IoT deployments.
- Analyze real-world IoT use cases and applications.
- Develop strategies for implementing and managing IoT solutions.

Targeted Audience:

- IT Professionals.
- Network Engineers.
- System Administrators.
- Software Developers.
- Technology Managers.

Program Outline:

Unit 1:

Introduction to IoT:

- Overview of IoT and its significance.
- Key components of IoT ecosystems.
- IoT architecture and communication models.

- Common IoT protocols MQTT, CoAP.
- Trends and future directions in IoT.

Unit 2:

IoT Communication and Networking:

- IoT networking technologies Wi-Fi, Zigbee, LoRaWAN.
- IoT device connectivity and interoperability.
- Data acquisition and sensor integration.
- Edge computing in IoT networks.
- Network management and monitoring for IoT.

Unit 3:

IoT Data Management:

- Data collection and storage solutions.
- Processing and analyzing IoT data.
- Cloud platforms for IoT AWS IoT, Azure IoT.
- Big data technologies in IoT.
- Visualization and reporting of IoT data.

Unit 4:

IoT Security and Privacy:

- Security challenges in IoT environments.
- IoT authentication and access control mechanisms.
- Data encryption and integrity.
- Secure IoT device management.
- Privacy considerations in IoT deployments.

Unit 5:

IoT Applications and Implementation:

- Industrial IoT IIoT and smart manufacturing.
- Smart homes and cities.
- Healthcare and wearable IoT solutions.
- Developing and deploying IoT projects.
- Case studies of successful IoT implementations.

info@euro-training.net
+447447999485 - +447492882996