

إنترنت الأشياء - مستوى أساسي

Internet of Things Foundation

About Course:

This course provides an overview and insight into the emerging technology of Internet of Things (IoT). It covers the basic concepts, terminology, and key components of IoT. Explains the business perspectives of IoT including the advantages of early adoption and monetization models. It further expands on the technologies enabling IoT and the various challenges to expect. Several scenarios describe the use cases and applications of IoT that result in smart applications and services to inspire organizations making the move to IoT. The course provides future insights in IoT and forecasts the status of the connected world in 2020.

Course Objectives:

Upon successful completion of the course, delegates will understand:

- Define concepts and terminologies of IoT.
- Examine new devices and interfaces that are driving IoT growth.
- Relate to business perspectives of IoT (advantages of early adoption of IoT technologies).
- Predict implications of IoT for your business.
- Examine the role of enabling technologies for IoT, such as cloud computing and Big Data.
- Identify security and governance issues with IoT.
- Examine future growth opportunities of IoT in the coming years.

Course Outlines:

Course Introduction

Concepts and Terminologies

- Introduction: Internet, Things, and IoT
- IoT Types, History and Evolution of IoT
- Cyber-Physical Systems and Differences Among IoE,
- M2M, and IoT
- Facts and Figures Around IoT and IoT Application Areas

Business Orientation

- Drivers of IoT
- Benefits of a Connected World
- IoT Business: Opportunities, Benefits, and Challenges
- IoT Monetization Strategies and Models

Basic Building Blocks of IoT–Architecture

- Architecture of IoT Components
- Network Protocols Within IoT

Enabling Technologies of IoT + Lab Activities

- Role of Social Media and Mobility in IoT
- Defining SMACT
- Role of Big Data and Analytics in IoT
- Role of Cloud Computing in IoT

IoT Security and Top Governance Issues

- IoT Security Challenges
- Causes of IoT Security Breaches
- IoT Security Risks

IoT Case Studies and Future Predictions

- IoT Usage Scenarios
- IoT Growth Perspectives
- IoT Future Predictions

Audience

Business and management professionals, including:

- Application consultant
- Business analyst
- Business process architect
- Developer
- Developer consultant
- Enterprise architect
- Program / project manager
- Solution architect
- System administrator
- System architect
- Technology consultant
- User