

Internet Of Things Fundamentals

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