

Internet of Things (IoT)

Duration - 4 Days / 32 Hours

Program Description

This program offers a thorough introduction to the Internet of Things (IoT), exploring its fundamental concepts, progression from individual devices to complex systems, and underlying architecture.

Participants will learn about the key software and hardware protocols used in IoT, as well as the role of edge computing and fog infrastructure. The course will highlight real-world applications and provide case studies to illustrate the transformative impact of IoT across various industries.

Learning Goals

- ❖ Understand the core concepts of IoT, including its significance and functionalities.
- ❖ Explore the evolution of IoT from simple devices to interconnected systems of systems.
- ❖ Identify and describe the IoT reference architecture and high-level data flow processes.
- ❖ Gain insights into software and hardware protocols essential for IoT implementation.
- ❖ Learn the principles of edge computing and fog infrastructure and their importance in IoT.
- ❖ Analyze real-world applications of IoT across different sectors and industries.
- ❖ Examine case studies to understand practical IoT applications and their impact

Course Topics

- ❖ Introduction to IoT
- ❖ What, Why and How of IoT
- ❖ IoT Progression: Things to System of Systems
- ❖ IoT Reference Architecture, How IoT Works? High Level Data Flow in IoT.
- ❖ Software and Hardware protocols in IoT
- ❖ Edge computing, Fog Infrastructure
- ❖ Real world applications of IoT
- ❖ Case Studies of IoT Applications