

#### 5 G

#### Duration - 5 Days / 40 Hours

# **Program Description**

This program provides a comprehensive overview of 5G technologies, including the Radio Access Network (RAN) and core network architecture. Participants will explore 5G protocols, spectrum management, carrier aggregation, and the integration of IoT.

The course also addresses security and privacy concerns, examines various 5G applications, and discusses industry standards and future trends.

### **Learning Goals**

- Grasp the key concepts and significance of 5G technologies.
- ❖ Analyze the structure and function of the RAN in 5G networks.
- Understand core network architecture and relevant protocols.
- Explore spectrum management and carrier aggregation techniques.
- \* Examine the impact of IoT on 5G connectivity.
- ❖ Assess security and privacy issues in 5G deployment.
- Identify diverse applications and use cases for 5G.
- Recognize industry standards influencing 5G development.
- ❖ Discuss future trends and advancements beyond 5G.

# **Course Topics**

- Introduction to 5G Technologies
- \* Radio Access Network (RAN) in 5G
- Core Network Architecture
- ❖ 5G Protocols and Interfaces
- Spectrum Management and Carrier Aggregation
- ❖ IoT and 5G
- Security and Privacy in 5G
- 5G Applications and Use Cases
- Industry and Standardization
- Future Trends and Beyond 5G