IoT (Internet of Things) Course Syllabus

Introduction to Internet of Things (IoT)
- Defining IoT and its significance
- Historical context and evolution of IoT
- Real-world applications and case studies
- Basics of IoT ecosystems and components

Sensors and Actuators in IoT
- Understanding the role of sensors in IoT
- Types of sensors and their applications
- Introduction to actuators and their function
- Hands-on activities with basic sensors and actuators

Communication Protocols in IoT
- Overview of communication protocols (MQTT, CoAP, HTTP)
- Wireless communication technologies (Wi-Fi, Bluetooth, Zigbee)
- Choosing the right protocol for IoT applications
- Implementing basic communication setups

IoT Platforms and Applications
- Introduction to IoT platforms (e.g., Arduino, Raspberry Pi)
- Building simple IoT applications
- Cloud computing and its role in IoT
- Final hands-on project: Creating a basic IoT prototype

Final Course Outcomes
- Hands on experience with real time projects
- Industry Recognized Certificate
- Placement Assistance