

Unit I	Topic
Introduction to IoT	Physical Design of IOT
	Logical Design of IOT
	IOT Enabling Technologies
	IOT Levels & Deployment Templates
	IoT and M2M (Self Study)
Unit II	
IOT Platform Design Methodology	IoT Design Methodology Steps
	Home Automation Case Study
	Health Care
	Agriculture
	Smart Cities (Self Study)
	Manufacturing and Logistics (Self Study)
Unit III	
IoT Devices	IoT System Design Cycle
	Sensors - Terminologies, Callibration, Types, Specification, Use
	Actuators - Types and Use
	Prototype Development Platform - Arduino / Raspberry pi / Node MCU
	Interface with Embedded System
Unit IV	
Introduction to Wireless Sensor Network	Sensor Node, Smart Sensor Network
	Wireless Sensor Network
	RFID - Principles and Components
Unit V	
Connectivity Technologies	Network Configuration in IoT
	IoT Stack and Web Stack
	IEEE 802.15.4 Standard
	Zigbee
	Bluetooth
	MQTT
	Cloud Architecture and Types
	Cloud Service Providers
Unit VI	
Case Studies	Any Two case Studies from following List to be covered:
	Smart lighting
	Home Intrusion Detection
	Smart Parking
	Weather Monitoring System
	Weather Report Bot
	Air Pollution Monitoring
	Forest fire Detection
	Smart Irrigation
	IoT Printer

	IoT in Manufacturing Industry
	IoT in Process Industry
	IoT in Quality Control Applications in Industry
	IoT in Material Handling System in Industry
	IoT in Automobile Industry
	Navigation System
	Connected Vehicles
	Industry 4.0