## **COURSE CONTENT**

Day	Session	Topic	Content
1	1	Introduction to IOT	·What is IOT?
			·Basics of IOT
			·Applications of IOT
1	1	Introduction to	What is Arduino?
		Arduino	·What is Open Source
			Microcontroller Platform?
			·Basics of Electronics
			·Sensors and Actuators
1	1	Hands on Arduino	• Fundamentals of C
			programming
			·Hello to the
			Microcontroller World
			(Your First Arduino Sketch)
			·Interfacing Sensors With
			Arduino
			·Reading From Sensors
1	2	Basics of Networking	Networking Fundamentals
			·Types of Networks
			·Network Topologies

			·Network Topologies
2	3	Arduino with  Bluetooth  Arduino with Esp8266	·Interfacing Bluetooth  Module With Arduino ·Controlling Arduino With  Android Device Making  Android App Using Online  Tools ·Intro to MIT App inventor ·Making your first Android  App ·Control Arduino With Your  First App
2	3	Arduino with Esp8266	·Interfacing With Ethernet ·Interfacing With Ethernet ·Creating program for Local host Web Server Hello to the Online World ·What are cloud Servers ·Cloud computing and IOT
2	4	Send Voltage & Analog Data on Cloud Server.	<ul> <li>Cloud Computing</li> <li>Communicating with the Cloud using Web Services.</li> </ul>

2	4	Project 1: Creating	<ul> <li>Cloud Computing &amp; IoT.</li> <li>Popular Cloud Computing Services for Sensor Management.</li> </ul>
	4	own Android App using MIT App Inventor & controlling Arduino connected devices.  Project 2: Being Social on Twitter & update status on Twitter through Arduino	<ul> <li>Make Electronics         Gadget Talk to         Internet</li> <li>Integrating Ethernet         Module</li> <li>Creating App on         Twitter</li> </ul>
2	4	Project 3: Send Voltage & Analog Data on Cloud Server.  Project 4: Use Arduino to Upload free data from Environmental Sensors to Cloud Server.	<ul> <li>Cloud Computing</li> <li>Communicating with the Cloud using Web Services.</li> <li>Cloud Computing &amp; IoT.</li> <li>Popular Cloud Computing Services</li> </ul>

Project 5:	for Sensor
Automatically Tweet	Management.
Sensor Data on	
Twitter.	
<b>Project 6:</b> Receive	
Automatic Call	
Notification on Mobile	
Phone for Burglar	
Alarm using IoT	
Platform.	