

Course Module for Level 0 – Foundation Course

<u>Course Module Level:</u>	Level 0 - Foundation Course
<u>Course Objective:</u>	<ol style="list-style-type: none"> 1. Students will learn about Internet of Things (IoT) and its architecture, Protocols 2. Hands-on session on basic board like Arduino
<u>Course Outcome:</u>	<ol style="list-style-type: none"> 1. Student will be able to clear the basic concepts of IoT and Arduino Board 2. After successful completion of this course, student will be able to program and develop the physical layer in IoT architecture
<u>Course Duration:</u>	1 or 2 days

<u>SI No</u>	<u>Lecture /Lab Wise Breakup</u>	
	<u>Chapters</u>	<u>Contents</u>
1	Introduction to the Internet of Things (IoT)	What is IoT?
		IoT Architecture
		Advantages and Disadvantages of IoT
		Building blocks of IoT
		Introduction to Embedded Systems
2	Introduction to Protocols	What is Gateway?
		What is Protocol Architecture?
		What is MQTT Protocol?
3	Introduction to Arduino	Arduino Hardware
		Arduino Software
		Arduino Programming
		Interfacing Sensors and Actuators using Arduino Simulator