Department of Computer Science & Engineering
Tezpur University

IoT Laboratory

In the IoT Laboratory the students are introduced to basic working of IoT sensors.

(a) Equipment(s)

Sl. No.	Equipment (with specification) and Year of Purchase	Quantity
1	PCs : Dell (2015-16)	25
2	Projector	1
3	Wifi Router (D-Link 4G LTE Modem)	4
4	Arduino UNO Board	10
5	Arduino UNO R3	15
6	Arduino Mega	5
7	Arduino Wifi shield	5
8	Raspberry Pi 4	5
9	Raspberry Pi 3	3
10	ESP8266 NodeMCU CP2102 Board	10
11	LCD Display 16*2	10
12	OLED Display	8
13	IoT sensors and equipments	-
14	UPS : 10 KVA	1
15	Automated Wheelchair	0
16	Printer : HP	0
17	Function Generator	0
18	Power Lab 26T	0
19	Switch Rack	1

(b) Types of Experiments Conducted

Sl. No.	Experiments Conducted/Performed
1	Understanding of basic working of IoT sensors
2	Sensor data acquisition
3	Transmission of sensor data to cloud platform
4	Develop a web application to visualize the real time sensor data
5	IoT prototype building

(c) Open-source tools/software used:

Name of tool/software	Utility
NodeMCU	for development of IoT applications/prototype
Arduino IDE	to write code and upload it to the IoT board

(d) People working in the Laboratory:

Faculty members, research scholars and major/minor project students work in this lab.

1. Dr. Debojit Boro – Faculty member
2. Mr. Devajit Das – Research scholar
3. Mr. Rajesh Saikia – Research scholar