

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF
ENGINEERING & TECHNOLOGY, BARGARH



LESSON PLAN
Session-2023-2024

Discipline: Computer & Engg. Semester: 6th

Subject: Internet of Things [IOT]

Name of the Teaching Faculty: Ashis Behara

Subject: IOT No. of Days/per week class allotted : 04Semester From Date : 16-01-2024 To Date : 26-04-2024 No. of Weeks : 15

Week	Class Day	Theory / Practical Topics
	Day 1	Introduction to IOT.
1	Day 2	Characteristics, Application and Category of IOT.
	Day 3	IOT Enablers and Connecting Layers.
	Day 4	Baseline Technology.
	Day 1	Types of sensors and detectors.
2	Day 2	IOT components, implementation, Challenges.
	Day 3	IOT Networking and Terminology.
	Day 4	Gateway, prefix allotment.
	Day 1	Multihoming, Mobility or Addressing.
3	Day 2	Multihoming.
	Day 3	IOT Identification and data Protocol.
	Day 4	data Protocol.

Abhishek
Signature of the Faculty

Subject: IoT No. of Days/per week class allotted : 04Semester From Date : 16-01-2024 To Date : 26-04-2024 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
	Day 1	Introduction to Connectivity Technology [IEEE 802.15.4]
4	Day 2	Zigbee Protocol.
	Day 3	6LoWPan Protocol.
	Day 4	RFID, HART Protocol.
	Day 1	NFC and Bluetooth Bluetooth.
5	Day 2	2-Wave and ISA 180.11.A.
	Day 3	Introduction to WSN and Components of a Sensor Network.
	Day 4	Mode of detection and Challenges.
	Day 1	Node behaviours, social sensing, self mgmt of WSN.
6	Day 2	Applications of WSN.
	Day 3	WSN Coverage.
	Day 4	Stationary and Mobile WSN.

Shri Beha
Signature of the Faculty

Subject: IOT No. of Days/per week class allotted : 04Semester From Date : 16-01-2024 To Date : 26-04-2024 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
	Day 1	Introduction to M2M Communication.
7	Day 2	M2M Ecosystem.
	Day 3	M2M Service platform.
	Day 4	Interoperability.
	Day 1	Interoperability cont.
8	Day 2	Introduction to Arduino.
	Day 3	Components of Arduino Board.
	Day 4	Arduino IDE.
	Day 1	Programming on Arduino.
9	Day 2	Case Study.
	Day 3	Raspberry Pi
	Day 4	Architecture of Raspberry Pi

Shiv Behr
Signature of the Faculty

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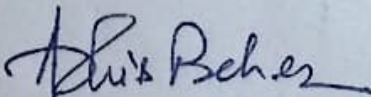
Week	Class Day	Theory /Practical Topics
	Day 1	Pin configuration of Raspberry Pi
10	Day 2	Implementation of IOT with Raspberry Pi
	Day 3	Case Study.
	Day 4	Introduction to SDN and SDN Architecture.
	Day 1	Router Placement.
11	Day 2	Open flow Protocol.
	Day 3	Controller Placement.
	Day 4	Security in SDN.
	Day 1	Integration of SDN in IOT.
12	Day 2	Smart home and Smart Technology.
	Day 3	Smart home implementation.
	Day 4	Home Area Network.

Abhishek
Signature of the Faculty

Subject: IOT. No. of Days/per week class allotted : 04

Semester From Date : 16-01-2024 To Date : 26-04-2024 No. of Weeks : 15

Week	Class Day	Theory / Practical Topics
	Day 1	Home Area Network. Cont.
10	Day 2	Smart home benefits and issues.
13	Day 3	Smart Cities.
	Day 4	Smart Cities framework.
	Day 1	Data Fusion.
14	Day 2	Smart Parking.
	Day 3	Smart Parking cont.
	Day 4	Energy mgmt in Smart City.
	Day 1	Industrial IOT and it's Requirement.
15	Day 2	Design of IIOT.
	Day 3	Application of IIOT.
	Day 4	Benefits and Challenges of IIOT.


Signature of the Faculty