

PADMASHREE KRUTARTHA ACHARYA INSTITUTE OF
ENGINEERING & TECHNOLOGY, BARGARH



LESSON PLAN
Session-2022-2023

Discipline: Computer Science & Engg.

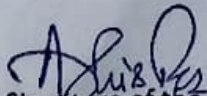
Semester: 6th

Subject: Internet of Things

Name of the Teaching Faculty: Ashis Behera

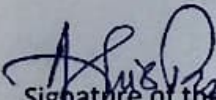
Subject: IOT No. of Days/per week class allotted: 4Semester From Date: 14-02-2023 To Date: 28-05-2023 No. of Weeks: 15

Week	Class Day	Theory / Practical Topics
	Day 1	Introduction to IOT.
	Day 2	Characteristics, Application & Category of IOT.
1	Day 3	IOT Enable and Connectivity layers.
	Day 4	Baseline Technology.
	Day 1	Types of Sensors and Actuators.
	Day 2	IOT components, Implementation and Challenges.
2	Day 3	IOT Networking & Technology.
	Day 4	Gateway Prefix Allotment.
	Day 1	multihoming [Mobility and Addressing]
	Day 2	Multihoming.
3	Day 3	IOT identification and data Protocol.
	Day 4	data Protocol.


Signature of the Faculty

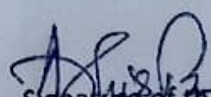
Subject: IDT No. of Days/per week class allotted : 04Semester From Date : 14-02-2023 To Date : 23-5-2023 No. of Weeks : 15

Week	Class Day	Theory /Practical Topics
	DAY 1	Introduction to Connectivity Technology [IEEE 802..]
	DAY 2	Zigbee Protocol
4	DAY 3	6LowPan Protocol
	DAY 4	RFID, HART Protocol
	DAY 1	NFC & BLUETOOTH
	DAY 2	Zwave and ISO 500.11-9.
5	DAY 3	Introduction to WSN and Components of sensors.
	DAY 4	Mode of detection and Challenges in WSN.
	DAY 1	Cooperation and behavior of nodes in WSN, sensing and self-mgmt of WSN.
	DAY 2	APPLICATION of WSN.
6	DAY 3	WSN Coverage.
	DAY 4	Stationary and Mobile WSN.


Signature of the Faculty

Subject: IOT No. of Days/per week class allotted: 4Semester From Date: 14-02-2023 To Date: 23-5-2023 No. of Weeks: 15

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

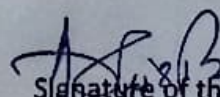


Signature of the Faculty

Subject: IOT No. of Days/per week class allotted: 4

Semester From Date: 14-02-2023 To Date: 28-5-2023 No. of Weeks: 15

Week	Class Day	Theory /Practical Topics
	Day 1	
	Day 2	Pin configuration of Raspberry Pi
	Day 3	Implementation of IOT with Raspberry Pi
10	Day 3	Case study.
	Day 4	
	Day 1	Introduction to SDN & it's Architecture.
	Day 2	Rule Placement
	Day 3	Open Flow Protocol
11	Day 3	Controller Placement
	Day 4	
	Day 1	Security on SDN.
	Day 2	Introducing Integrating SDN to IOT. Introduction to Smart home.
	Day 3	Smart technology Example
12	Day 3	Smart home Implementation.
	Day 4	Home Area Network (HAN)


Signature of the Faculty

Subject: IOT No. of Days/per week class allotted: 4Semester From Date: 14-02-2023 To Date: 23-5-2023 No. of Weeks: 15

Week	Class Day	Theory / Practical Topics
	Day 1	HOME AREA NETWORK
	Day 2	Smart home benefits and issues.
13	Day 3	Introduction to Smart Cities.
	Day 4	Smart City Framework.
	Day 1	Challenges, Datafusion.
	Day 2	Introduction to Smart Parking.
14	Day 3	Smart Parking.
	Day 4	Energy mgmt in Smart Cities.
	Day 1	Introduction to 5GOT and its requirements.
	Day 2	Design of 5GOT.
15	Day 3	Application of 5GOT.
	Day 4	Benefits and Challenges of 5GOT.

Dr. P. S.
Signature of the Faculty