



GOVERNMENT POLYTECHNIC, BALASORE

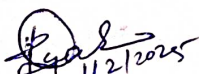
Government of Odisha

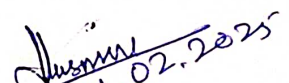
ସରକାରୀ ବହୁବୃତ୍ତି ଅନୁଷ୍ଠାନ, ବାଲେଶ୍ଵର

LESSON PLAN (SUMMER-2025)

Discipline: ELECTRONICS & TELECOMMUNICATION ENGINEERING	Semester: 6th	Name of the Teaching Faculty: PRAKASH CHANDRA DAS
Subject: INTERNET OF THINGS	No of Days /per week class allotted: 4	Semester From date: 4 TH February, 2025 No of Weeks:15
Week	Class Day	Theory / Practical Topics
1st	1st	What is IoT.Architectural Overview,
	2nd	Design principles and needed capabilities,
	3rd	IoT Applications, Sensing, Actuation,
	4th	Basics of Networking, M2M and IoT Technology
2nd	1st	Fundamentals- Devices and gateways,
	2nd	Data management, Business processes in IoT
	3rd	Everything as a Service(XaaS),
	4th	Role of Cloud in IoT, Security aspects in IoT.
3rd	1st	Hardware Components- Computing (Arduino,Raspberry Pi),
	2nd	Communication, Sensing, Actuation
	3rd	I/O interfaces
	4th	Software Components- Programming API's
4th	1st	Software Components- Programming API's
	2nd	Protocols-MQTT,
	3rd	ZigBee, ,
	4th	Bluetooth,
5th	1st	CoAP
	2nd	UDP, TCP.
	3rd	Implementation of Device integration
	4th	Implementation of Device integration
6th	1st	Data acquisition and integration
	2nd	Data acquisition and integration
	3rd	Data acquisition and integration
	4th	Device data storage-
7th	1st	Device data storage-
	2nd	Device data storage-
	3rd	Unstructured data storage on cloud/local server
	4th	Unstructured data storage on cloud/local server
8th	1st	Solution framework for IoT applications
	2nd	Solution framework for IoT applications
	3rd	Authentication, authorization of devices
	4th	Authentication, authorization of devices

9th	1st	Understanding the IoT Big Picture
	2nd	Building the Internet of Things
	3rd	Building the Internet of Things
	4th	Understanding Smart Devices, Building Blocks
10th	1st	Understanding Smart Devices, Building Blocks
	2nd	Understanding Network Connections
	3rd	Understanding IP Addresses
	4th	Understanding IP Addresses
11th	1st	Understanding cellular Network & Mesh Network
	2nd	Understanding cellular Network & Mesh Network
	3rd	Understanding cellular Network & Mesh Network
	4th	What is Smart TV & its use
12th	1st	What is inside Smart TV
	2nd	What is inside Smart TV
	3rd	What a Smart TV does
	4th	What a Smart TV does
13th	1st	Smart TV Operating Systems
	2nd	Smart TV Operating Systems
	3rd	What is Smart TV Set-Top Devices
	4th	Integrating Smart TV in to IOT
14th	1st	Integrating Smart TV in to IOT
	2nd	smart home
	3rd	smart car
	4th	smart cities
15th	1st	smart drone
	2nd	industrial automation
	3rd	industrial automation
	4th	industrial automation


 Faculty
 11/2/2025


 HOD 01.02.2025