

LESSON PLAN

SUB: INTERNET OF THINGS

BRANCH:- COMPUTER SCIENCE & ENGG.

SEMESTER: 5th

NAME OF FACULTY: SRI LAXMIDHAR SETHY (Sr. Lect. in CSE)



GOVERNMENT POLYTECHNIC, BHADRAK

SESSION: 2026-27

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Hod, CSE

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Academic Co-ordinator
Academic Co-ordinator

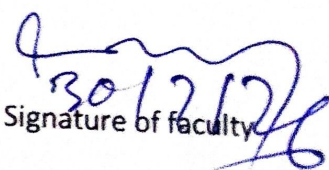
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Govt. Polytechnic, Bhadrak

DEPARTMENT OF COMPUTER SCIENCE & ENGG.,

Discipline: Computer Science&Engineering	Semester: 5th	Name of the Faculty: Sri Laxmidhar Sethy Email ID: ldsathy@gmail.com
Subject: InternetofThings (Th-1)	No . of Days/week: 03	StartDate: 01/07/2026 EndDate: 05/11/2027

Week	ClassDay	TheoryTopics
1st	1st	Introduction to Internet of Things (IoT) - Overview of IoT - Definition and significance of IoT, Historical evolution and future prospects, Applications across various industries, IoT Architecture and Components
	2nd	Applications across various industries, IoT Architecture and Components
	3rd	Applications across various industries, IoT Architecture and Components
2nd	1st	Basic architecture - sensors, actuators, connectivity, and data processing, Hardware components: microcontrollers (e.g., Arduino, Raspberry Pi),
	2nd	Software components: operating systems and middleware.
	3rd	Basic architecture - sensors, actuators, connectivity, and data processing, Hardware components: microcontrollers (e.g., Arduino, Raspberry Pi),
3rd	1st	Microcontrollers, Data Acquisition and Processing - Analog and digital data acquisition methods, Signal conditioning and filtering techniques, Introduction to data processing and storage
	2nd	Signal conditioning and filtering techniques, Introduction to data processing and storage
	3dr	Signal conditioning and filtering techniques, Introduction to data processing and storage
4th	1st	IoT Platforms and Cloud Integration - IoT Platforms, Overview of popular IoT platforms (e.g., AWS IoT, Google Cloud IoT), Data analytics and visualization tools, Edge computing concepts, Cloud Computing for IoT, Introduction to cloud services: IaaS, PaaS, SaaS,
	2nd	Data analytics and visualization tools, Edge computing concepts,
	3dr	Introduction to cloud services: IaaS, PaaS, SaaS, Integration of IoT devices with cloud platforms, Data storage,
5th	1st	, devices with cloud platforms, Data storage, processing, and
	2nd	QuizTest

	3rd	Wireless Sensor Networks: Introduction, Components of a sensor node, Modes of Detection
6th	1st	Cooperation and Behavior of No design WSN, Self Management of WSN, Social sensing WSN
	2nd	Application of WSN, Wireless Multimedia sensor network, Wireless Nano sensor Networks
	3rd	Underwater acoustic sensor networks, WSN Coverage
	2nd	M2ME ecosystem
	3rd	M2M service Platform
8th	1st	Question Answer Discussion
	2nd	Programming with Arduino: Features of Arduino
	3rd	Components of Arduino Board
	2nd	Question Answer Discussion
	3rd	Programming with Raspberry Pi: Architecture
10th	1st	Case studies
	2nd	Case studies
	3rd	Implementation of IoT with Raspberry Pi
11th	1st	SDN Architecture
	2nd	Rule Placement, Openflow Protocol
	3rd	Controller placement, Security in SDN, Integrating SDN in IoT
12th	1st	Quiz Test
	2nd	Smart Homes: Origin and example of Smart Home Technologies
	3rd	Smart Home Implementation
13th	1st	Home Area Networks (HAN) (Cont..)
	2nd	Smart Home benefits and issues
	3rd	Smart Cities: Characteristics of Smart Cities, Smart city Frameworks
14th	1st	Data Fusion
	2nd	Smart Parking, Energy Management in Smart cities
	3rd	Industrial IoT: IoT requirements, Design considerations
	4th	Applications of IOT, Benefits of IoT
15th	1st	Challenges of IoT
	2nd	Question Answer Discussion
	3rd	Previous year Question Answer Discussion


 30/12/2026
 Signature of faculty