

# **LESSION PLAN**

**Name of the faculty-Bhimsen Tudu**

**Session-2020-2021**

**Discipline-Electronics and Telecommunication**

**Semester-6th**

**Subject- IoT (internet of Things)**

**No of Weeks-17**

**No of period /week allotted-04**

## Subject- IoT (internet of Things)

Week	Class	Topic	Remark
20/04/2021 to 24/04/2021	1 <sup>st</sup>	<b>What is IoT-Architectural Overview Smart Technology (Chapter-01)</b>	21/04/2021-Holiday
	2 <sup>nd</sup>	Design principles of IoT Network	
	3 <sup>rd</sup>	Need of IOT-Advantages and Dis advantages	
	4 <sup>th</sup>	Design principles and needed capabilities	
26/04/2021 to 01/05/2021	1 <sup>st</sup>	IoT Applications, Sensing, Actuation	
	2 <sup>nd</sup>	Basics of Networking, M2M and IoT Technology	
	3 <sup>rd</sup>	Fundamentals- Devices and gateways	
	4 <sup>th</sup>	Data management, Business processes in IoT	
03/05/2021 to 08/05/2021	1 <sup>st</sup>	Everything as a Service (XaaS)	
	2 <sup>nd</sup>	Role of Cloud in IoT, Security aspects in IoT	
	3 <sup>rd</sup>	Revision Of Chapter 01	
	4 <sup>th</sup>	<b>Elements of IoT Smart Technology (Chapter-02)</b>	
10/05/2021 to 15/05/2021	1 <sup>st</sup>	Hardware Components	14/05/2021-Holiday
	2 <sup>nd</sup>	Hardware Components- Computing (Arduino, Raspberry Pi)	
	3 <sup>rd</sup>	Communication in IoT network	
	4 <sup>th</sup>	Sensing and Actuation in IoT network	
17/05/2021 to 22/05/2021	1 <sup>st</sup>	I/O interfaces in IoT network	
	2 <sup>nd</sup>	Revision Of Chapter 02	
	3 <sup>rd</sup>	<b>Discussion of MCQs from Chapter 01 and Chapter 02</b>	
	4 <sup>th</sup>	Software Components- Programming API's (using Python)	
24/05/2021 to 29/05/2021	1 <sup>st</sup>	for Communication	
	2 <sup>nd</sup>	Software Components- Programming API's (using Node.js)	
	3 <sup>rd</sup>	for Communication	
	4 <sup>th</sup>	Software Components- Programming API's (using Arduino)	
31/05/2021 to 05/06/2021	1 <sup>st</sup>	for Communication	
	2 <sup>nd</sup>	Protocols-MQTT, ZigBee	
	3 <sup>rd</sup>	Protocols- Bluetooth, CoAP, UDP, TCP	
	4 <sup>th</sup>	Revision of Chapter 03	
07/06/2021 to 12/06/2021	1 <sup>st</sup>	<b>IoT Application Development Smart Technology (Chapter-03)</b>	
	2 <sup>nd</sup>	Solution framework for IoT applications	
	3 <sup>rd</sup>	Framework by IoT service Provider	
	4 <sup>th</sup>	Implementation of Device integration	
14/06/2021 to 19/06/2021	1 <sup>st</sup>	Data acquisition	15/06/2021-Holiday
	2 <sup>nd</sup>	Data integration	
	3 <sup>rd</sup>	Data acquisition and integration	
	4 <sup>th</sup>	Device data storage	
21/06/2021 to 26/06/2021	1 <sup>st</sup>	Unstructured data storage on cloud	
	2 <sup>nd</sup>	Unstructured data storage on local server	
	3 <sup>rd</sup>	Authentication of IoT Devices	

	4 <sup>th</sup>	Authorization of IoT Devices	
28/06/2021 to 03/07/2021	1 <sup>st</sup>	Authentication, authorization of devices in IoT network	
	2 <sup>nd</sup>	Revision of Chapter 03	
	3 <sup>rd</sup>	<b>Smart Technology (Chapter-04)</b>	
	4 <sup>th</sup>	Understanding the IoT Big Picture	
05/07/2021 to 10/07/2021	1 <sup>st</sup>	Building the Internet of Things	
	2 <sup>nd</sup>	Understanding Smart Devices, Building Blocks	
	3 <sup>rd</sup>	Understanding Network Connections	
	4 <sup>th</sup>	Understanding IP Addresses	
12/07/2021 to 17/07/2021	1 <sup>st</sup>	Understanding cellular Network & Mesh Network	12/07/2021-Holiday
	2 <sup>nd</sup>	Revision of Chapter 04	
	3 <sup>rd</sup>	<b>INTERNAL ASSESMENT</b>	
	4 <sup>th</sup>	<b>Smart TVs (Chapter-05)</b>	
19/07/2021 to 24/07/2021	1 <sup>st</sup>	What is Smart TV & its use	21/07/2021-Holiday
	2 <sup>nd</sup>	What is inside Smart TV	
	3 <sup>rd</sup>	What a Smart TV does	
	4 <sup>th</sup>	Smart TV Operating Systems	
26/07/2021 to 31/07/2021	1 <sup>st</sup>	What is Smart TV Set-Top Devices	
	2 <sup>nd</sup>	Integrating Smart TV in to IoT	
	3 <sup>rd</sup>	<b>IoT Case Studies (Chapter-06)</b>	
	4 <sup>th</sup>	Smart Home	
02/08/2021 to 07/08/2021	1 <sup>st</sup>	Smart car	
	2 <sup>nd</sup>	Smart Cities	
	3 <sup>rd</sup>	Smart Drones	
	4 <sup>th</sup>	Industrial automation	
09/08/2021 to 14/08/2021	1 <sup>st</sup>	Doubt Clearing Class-Chapter 1 <sup>st</sup> , 2 <sup>nd</sup> & 3 <sup>rd</sup>	
	2 <sup>nd</sup>	Doubt Clearing Class-Chapter 4 <sup>th</sup> , 5 <sup>th</sup> & 6 <sup>th</sup>	
	3 <sup>rd</sup>	Discussion of MCQs from All chapter	
	4 <sup>th</sup>	VST for Semester Exam	