

Department of Electronics and Telecommunication Engg.

Lecture Plan for EC45301, B.Tech. IV year

INTERNET OF THINGS

Session June – Dec 2024

Lecture No.	Topic Covered	Remark
1.	UNIT 1 Introduction: definition characteristics of IOT	
2.	IOT conceptual framework,	
3.	IOT architectural view	
4.	Physical design of IOT	
5.	logical design of IOT	
6.	Application of IOT	
7.	UNIT 2 Machine to machine	
8.	SDN (software defined network) and NFV (Network function virtualization) for IOT	
9.	NFV (Network function virtualization) for IOT	
10.	Data storage in IOT	
11.	IOT cloud-based services	
12.	UNIT 3 Design principles for web connectivity	
13.	Web communication for protocols for connected devices	
14.	Message communication protocols for connected devices	
15.	SOAP, REST, HTTP restful and Web sockets	
16.	Internet connectivity principles internet connectivity	
17.	Internet based communication	
18.	IP addressing in IOT, Media access control	
19.	UNIT 4 Sensor technology, participatory sensing	
20.	Industrial IOT and Automotive IOT	
21.	Actuator, sensor data communication protocols	
22.	Radio frequency identification technology	
23.	wireless sensor network technology	
24.	UNIT 5 IOT design methodology	
25.	Specification, requirement, process, model, service	
26.	Functional & operational view	
27.	IOT privacy and security solution	

28.	Raspberry pi and Arduino devices	
29.	IOT case studies	
30.	Smart city street light control & monitoring	