TCET

DEPARTMENT OF INFORMATION TECHNOLOGY (IT)

Credit Based Grading Scheme(Revised - 2012) - University of Mumbai

CBGS-2012(R)

TCET/FRM/IP- **Semester Plan** **Revision: A**

Semester: VII **Course: IT**

Subject: ITC- 704: Wireless Technology **Class: BE IT -B**

S.No.	Prerequisite/ Bridge course:	Duration (Week /Hrs)	Modes of Learning	Recommended Sources
1	Fundamentals of wireless communication, LAN &WAN topology ,Layered architecture ,WLAN	6 hours	Self Learning/ Revision	**Textbooks:** 1. Fundamentals of Wireless Communication by Tse, Pearson 2. Computer Networks by Tanenbaum, Pearson

Class Room Teaching

Sr. No	Module No.	Lesson No	Topics Planned (Technology to be used)	Teaching Aids Required	Planned /Completion Date	Resource Book Reference	Remarks
1	---	L1.1	SOP-Theory Introduction to Wireless Communication	Power point presentation, Chalk & Board	7/10/2017	1.6.1	
2	----	L1.2	SOP-OBE	Power point presentation, Chalk & Board	7/12/2017	1.6.2	
3	Module 3	L2.1	**Wireless in local loop(WLL) :**User requirements of WLL systems, WLL system architecture	Power point presentation, Chalk & Board	7/18/2017	3.6.1, 3.6.2	
4	Module 3	L2.2	LMDS, MMDS	Power point presentation, Chalk & Board	19/07/207	3.6.3, 3.6.4	
5	Module 3	L3.1	WLL subscriber terminal, WLL interface to the PSTN	Power point presentation, Chalk & Board	7/24/2017	3.6.5, 3.6.6	
6	Module 3	L3.2	local area Networks, WLAN Equipment	Power point presentation, Chalk & Board	7/25/2017	3.6.7, 3.6.8	
7	Module 3	L4.1	WLAN topologies and Technologies	Power point presentation, Chalk & Board	7/31/2017	3.6.9	
8	Module 3	L4.2	IEEE 802.11 WLAN : Architecture	Power point presentation, Chalk & Board	8/1/2017	3.6.10	
9	Module 3	L5.1	IEEE 802.11 WLAN : Physical Layer,Data Link Layer	Power point presentation, Chalk & Board	8/7/2017	3.6.11, 3.6.12	
10	Module 3	L5.2	MAC Layer, Security	Power point presentation, Chalk & Board	8/8/2017	3.6.13, 3.6.14	

11	Module 3	L6.1	Latest developments of IEEE 802.11 standards	Power point presentation, Chalk & Board	8/14/2017	3.6.15	
12	Module 4	L6.2	**Wireless personal area networks (WPAN)** Introduction to Wireless personal area Network	Power point presentation, Chalk & Board	8/19/2017	4.6.1	
13	Module 4	L6.3	WPAN technologies an Protocols	Power point presentation, Chalk & Board	8/19/2017	4.6.2	
14	Module 4	L7.1	Bluetooth (802.15.1)(Protocol stack)	Power point presentation, Chalk & Board	9/4/2017	4.6.3	
15	Module 4	L8.1	Bluetooth (802.15.1)(network connection establishment, security aspects)	Power point presentation, Chalk & Board	9/11/2017	4.6.4	
16	Module 4	L8.2	HR –WPAN (UWB) (IEEE 802.15.3)	Power point presentation, Chalk & Board	9/12/2017	4.6.5	
17	Module 4	L9.1	LR-WPAN (IEEE 802.15.4)	Power point presentation, Chalk & Board	9/16/2017	4.6.6	
18	Module 4	L9.2	Zigbee (Stack architecture)	Power point presentation, Chalk & Board	9/18/2017	4.6.7	
19	Module 4	L9.3	Zigbee components, Network Topologies, Applications)	Power point presentation, Chalk & Board	9/19/2017	4.6.7	
20	Module 5	L10.1	**Wireless metropolitan area networks:**Wireless Sensor networks(Network model and protocol stack,]	Power point presentation, Chalk & Board	9/25/2017	5.6.1	
21	Module 5	L10.2	Wireless Sensor networks(routing algorithms,applications]	Power point presentation, Chalk & Board	9/26/2017	5.6.2	
22	Module 5	L11.1	IEEE 802.16 [Protocol Architecture]	Power point presentation, Chalk & Board	10/3/2017	5.6.3	
23	Module 5	L11.2	IEEE 802.16a [Wimax], Wimax and LTE /3GPP comparison	Power point presentation, Chalk & Board	10/7/2017	5.6.4, 5.6.5	
24	Module 3-5	L11.3	Revison / Practice Session	Power point presentation, Chalk & Board	10/7/2017	----	

25	Module 3-5	L12.1	University Paper Discussion	Chalk & Board	10/16/2017	----	

Remark: Course:	Syllabus Coverage:	Practice Session: 2	**Content Beyond Syllabus:** Case Study on 4G

No. of (lectures planned)/(lecture taken): 25

Advanced course: Wireless communication	20 Hours	Online NPTEL videos with Hands on Training in Laboratory	**Web sources:** 1. Http://nptel.ac.in/courses/117102062 2. www.tutorialpoint.com1.

Text Books:

Name & Signature of Faculty
Ms. Shital H. More
Date:

Signature of HOD
Date:

Signature of Principal /Dean (Academics)
Date:

Note:

1. Plan date and completion date should be in compliance
2. Courses are required to be taught with emphasis on resource book, course file, text books, reference books, digital references etc.
3. Planning is to be done for 15 weeks where 1st week will be AOP, 2nd -13th for effective teaching and 14th -15th week for effective university examination oriented teaching, mock practice session and semester consolidation.
4. According to university syllabus where lecture of 4 hrs/per week is mentioned minimum 55 hrs and in case of 3 lectures per week minimum 45 lectures are to be engaged are required to be engaged during the semester and therefore accordingly semester planning for delivery of theory lectures shall be planned.
5. In order to improve score in NBA, faculty members are also required to focus course teaching beyond university prescribed syllabus and measuring the outcomes w.r.t learning course and programme objectives.
6. Text books and reference books are available in syllabus. Here only additional references w.r.t. non –digital/ digital sources can be written (if applicable)
7. Technology to be used in class room during lecture shall be written below the topic planned within the bracket.