TCET

DEPARTMENT OF ELECTRONICS ENGINEERING (ETRX)

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

CBGS-2012(R)

TCET/FRM/IP-02/10 Revision: A

Semester Plan

(Practical / tutorials / Assignment)

Semester: **SE ETRX - III** Course: **B.E ETRX** Batches: **SE ETRX**

Subject: **ELXL303:Electrical Network and Measurement Laboratory** Class: **S.E ETRX** Batch Size: 20 **students**

Laboratory faculty In-Charge: **Mrs. Archana B./Mrs. Roohi M. /Mr. Sunil K.** Lab Assistant / Attendant: **Ms. Sarita Tiwari**

Note: **Experiments are planned as per University Curriculum**

Basic Experiments

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Planned Date	Completion Date
1	To analyze Lissajous pattern using CRO	**E1, E2 : 24/7**	
		E3, E4 : 28/7	
2	(Tutorial) Study of dependent sources- Voltage controlled voltage source and CCCS	**E1, E2 : 31/7**	
		E3, E4 : 4/8	
3	To measure weight using load cell	**E1, E2 : 7/8**	
		E3, E4 : 11/8	
4	(Tutorial)Verification of Superposition theorem and Thevenin's theorem in AC circuits	**E1, E2 : 14/8**	
		E3, E4 : 18/8	

Design / Development Experiments:

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Planned Date	Completion Date
5	To measure strain using strain gauge	**E1, E2 : 21/8**	
		E3, E4 : 25/8	
6	(Tutorial) Time response of second order system	**E1, E2 : 4/9**	
		E3, E4 : 1/9	
7	To measure displacement using LVDT	**E1, E2 : 11/9**	
		E3, E4 : 8/9	
8	(Tutorial) Find open circuit parameters, short circuit parameters of 2 port network	**E1, E2 : 18/9**	
		E3, E4 : 15/9	
9	To measure air pressure using pressure gauge	**E1, E2 : 25/9**	
		E3, E4 : 22/9	
10	(Tutorial) Obtain the frequency response of R-L circuit and obtain the time constant	**E1, E2 : 9/10**	
		E3, E4 : 29/9	
10	To implement filters using R,L and C components.	**E1, E2 : 16/10**	
		E3, E4 : 6/10	
Group Learning Activity			
1	**Assignment 1:** Mod: Principals of measurement Mod: Measurement of R, L and C Mod: Oscilloscopes	**E1, E2, E3, E4**	

2	**Assignment 2:** Mod: Analog and Digital Instruments Mod: Transducers for Displacement, Temperature, Pressure, Level and Flow Measurement Oscilloscopes	**E1, E2, E3, E4**	
3	**Assignment 3:** Mod: Analysis of DC circuits Mod: Analysis of AC circuits	**E1, E2, E3, E4**	

Mini / Minor Projects Objective: To get hands on experience to execute projects with respect to student choice in the following areas. (**30 I Semester / Student**).

The areas are :

1. Research 2. Core 3. Interdisciplinary 4. Application

Mini /Minor Projects :

S.No	Project Title	Class	Group Size/ Project Hours	Project Type
1	Design of current controlled current source.	SE	3-4	Mini
2	Mini project based on various transducers.	SE	3-4	Mini

	Planned	Completed		Planned	Completed		Planned	Completed
No. of Prac	**Basic Exp: 04 Design Base Exp: 07 Mini Project: 2 Case study: 2**		**No. of Assignments**	**3**		**No. of Tutorial**	**01(Low Profile Student)**	

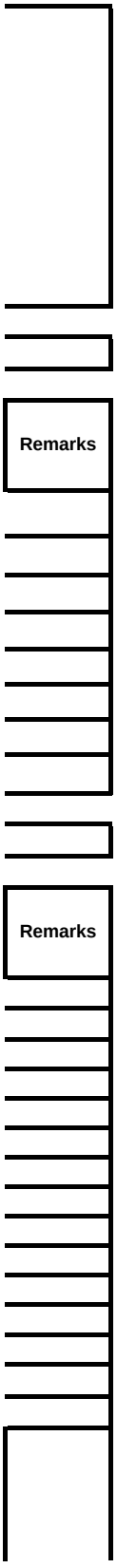
DOSLNE:	DOSLE (engaged in some other dates):

Group activities are required to be added with the practical related to course to enhance the learning activity of the student in the course. Group activity incl Group presentation, new experiment design, mini projects etc.

Note:

1. The practical plan date and completion date shall be in compliance. For any non-compliance reason(s) required to be stated in remark column.
2. Learning objective and outcome shall be clearly stated with each of experiments/ tutorials/ assignments and are required to be mapped at the e semester.
3. Entry for DOSLE (engaged on some other date) shall be done with proper mapping to DOSLNE.

Name & Signature of Faculty	Signature of HOD	Signature of Principal / Dean Academ
Date: 11/01/2017	Date:	Date: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