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: **TE(V)** Course: **BE(ETRX)** Batches: **(TEETRX E3&E4)**

Subject: Design with Linear Integrated circuits **EXC502** Class: (TEETRX) Batch Size: **20 students**

Laboratory faculty In-Charge: **Mrs. Poorva W.** Lab Assistant / Attendant:**Ms. Sulbha Kashid**

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	Remarks
1	To study and calculate performance parameters of	25.07.17		
2	To implement Comparator & Schmitt Trigger using uA741	1.08.17		
3	Using Orcad implement Integrator& differtiator using	8.08.17		
4	To implement the Wein bridge oscillator	22.08.17		
5	To implement 555 timer as astable multivibrator	5.09.17		

Design /Development Experiments

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)		Completion Date	Remarks
1	Using Orcad –PSPICE tool Window detector using uA741	12.09.17		
2	To design inverting amplifier& non inverting amplifier using	19.09.17		
3	To design Adder –Subtractor using uA741.	26.09.17		
4	Implement NonInverting and Inverting amplifier using ORCAD	3.10.17		
5	To implement Instrumentation amplifier using Texas kit.	10.10.17		

Experiments / Tutorials / Assignment

I.

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)		Completion Date	Remarks
1	**Assignment 1:** **Mod-1 Fundamentals of Operational Amplifier** **Mod-2 Applications of Operational Amplifier**	11.08.17		
2	**Assignment 2:** Mod-3**Non-Linear Applications of Operational Amplifier** **Mod-4 Data Converters**	11.09.17		
3	**Assignment 3:** Mod-5Special Purpose Integrated Circuits **Mod-6 Voltage Regulators**	10.10.17		

II.

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)		Completion Date	Remarks
1	Case Study: Audio applications of Linear Integrated Circuits			
2	Case Study: Use of PLL in electronic applications			

III. Mini Project

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Type of Project	Modes of Learning	Reference
1	**Applications of 555 timer**	**Mini**		**Technology Based Learning**
2	**Voltage regulator design required for Mini projects**	**Mini**		
3	**Use of Texas kit for linear applications**	**Mini**		

IV. Bridge Course

Bridge courses Objective: Bridging of gaps with respect to prerequisites and industry skills or to carry out research in that particular field. (**30 Hrs / Semester / student**)

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Planned Date	Completion Date	Remarks
1				

V. Project

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Type of Project	Modes of Learning	Reference

No. of Practical		No. of Assignments		No. of Tutorial	
Planned	d	Planned	Conducted	Planned	Conducted
Basic :5					
Design Base Experiment :5					
Group : **03**					
Bridge Course :1					
Minor Project :2					
Project : **02**		**3**		**1**	

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 includes: 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 end of the semester.
3. Entry for DOSLE (engaged on some other date) shall be done with proper mapping to DOSLNE.

Name & Signature of Faculty Academic

Date: 07/07/2017	Date: