Laxdu Singh Charitable Trust's (Regd.)
THAKUR COLLEGE OF ENGINEERING & TECHNOLOGY
(Approved by AICTE, Govt. of Maharashtra & Affiliated to University of Mumbai*)
(Accredited Programmes by National Board of Accreditation, New Delhi**)
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*Permanent Affiliated UG Programmes :• Computer Engineering • Electronics & Telecommunication Engineering • Information Technology (w.e.f.: A.Y. 2015-16 onwards)
**1st time Accredited UG Programmes :• Computer Engineering • Electronics & Telecommunication Engineering • Information Technology
**2nd time Accredited UG Programmes :• Computer Engineering • Electronics & Telecommunication Engineering • Information Technology • Electronics Engineering (3 years w.e.f.: 01-07-2016)
ISO 9001 : 2008 Certified

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

Semester Plan
(Practical)

Semester: **VII** Course: **EXTC** **Batches: B1-B2**
B3-B4

Subject: Advanced Communication Engineering LabI Class: **B.E EXTC** Batch size: 40 Students
(ETL-302)
Laboratory faculty in charge: Ms. Aradhana Manekar Lab Assistant: Ms. Kinjal

Note: **Experiment planned as per University Curriculum**

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Basic Experiments:

Sr. No.	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Batches	Planned Date	Completion Date	Remarks
1.	Setting up for fiber optioc analog link	B1	28/07/2017		
		B2	28/07/2017		
		B3	25/07/2017		
		B4	25/07/2017		
2.	Study of klystron oscillator using Microwave bench . Identify different modes of klystron oscillator	B1	04/08/2017		
		B2	04/08/2017		
		B3	01/08/2017		
		B4	01/08/2017		
3.	Study of numerical aperture of optical fiber	B1	11/08/2017		
		B2	11/08/2017		
		B3	08/08/2017		
		B4	08/08/2017		
4.	Measurement of frequency of klystron oscillator using slotted line.	B1	18/08/2017		
		B2	18/08/2017		
		B3	05/09/2017		
		B4	05/09/2017		
5.	To measure Bending losses for different wavelengths	B1	01/09/2017		
		B2	01/09/2017		
		B3	12/09/2017		
		B4	12/09/2017		
6.	Study of variable attenuator using Microwave bench. .	B1	08/09/2017		
		B2	08/09/2017		
		B3	19/09/2017		
		B4	19/09/2017		

Issued By: MR	Approved By: Principal

7.	Study of OPTSIM Software with an design example	B1	15/09/2017		
		B2	15/09/2017		
		B3	26/09/2017		
		B4	26/09/2017		
Design/ Development Experiments:					
8.	Design a matched circuit to match a load with source using lumped components	B1	22/09/2017		
		B2	22/09/2017		
		B3	03/10/2017		
		B4	03/10/2017		
9.	Design a fiber optic link using Diode and PIN diode and vary the Fiber length and do performance evaluation.	B1	06/10/2017		
		B2	06/10/2017		
		B3	03/10/2017		
		B4	03/10/2017		
Group Learning Activity:					
10.	**Mini Project** :Design a matched circuit to match a load with source using stub. Used different dielectric constant 1) 2.2 2) 4.4 3) 10.2	B1	13/10/2017		
		B2	13/10/2017		
		B3	17/10/2017		
		B4	17/10/2017		
	Case study on On Long Hual Optical Fiber Transmission Network	B1	13/10/2017		
		B2	13/10/2017		
		B3	17/10/2017		
		B4	17/10/2017		

1. **Mini /Minor Projects Objective:** To get hands on experience to execute projects with respect to student choice in the following areas. **(30 Hrs / Semester / Student). (Total 120 Hrs)**

The areas are :

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

Mini/ Major project : As per University Scheme

S.No	Project Title/Group Size	Class	Type / Project Hours	Modes of Learning	Reference
	Comparative analysis of defected ground structure	B.E EXTC-A	Research	Project Based Learning	http://ieeexplore.ieee.org/document/1433839/

2.	A Fiber-Optic Memory Store			B.E EXTC-A	Research Application	Project Based Learning	http://www.electro-tech-online.com/threads/project-based-on-optical-fiber.95766/	
	Planned	Completed		Planned	Completed		Planned	Completed
No. of Prac	**Basic Exp:** 07 **Design Base Exp**: 02 **Group Learning:** 2 **Bridge Course:** 01 **Major Project:** 02		No. of Assignments	02		No. of Tutorial	00	--

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.

SD	SD	SD
(Ms.Aradhana Manekar)	**(Dr. Vinitkumar Dongre)**	**(Dr. R. R. Sedamkar)**
Name & Signature of Faculty	Signature of HOD	Signature of Principal / Dean Academic
Date:20/07/2017	Date: 20/07/2017	Date: /07/2017