

Semester: **BE(VII**)

Semester Plan (Practical / tutorials / Assignment) Course: **BE(ETRX)** Batches: (BEETRX) Subject: Optical Fiber Communication EXC7054 Class: (BEETRX) Batch Size: 20 students

Laboratory faculty In-Charge: Dr. S.C.PATIL

Lab Assistant / Attendant: Ms. Priyanka Sawant

Revision: A

Note: Experiments are planned as per University Curriculum

Basic Experiments

	TITLES			
	Experiments / Tutorials / Assignment		Completion	Remar
Sr. No	(Planning with use of Technology)	Planned Date	Date	ks
1	To Implement660nm Fiber Optic ANALOG Link	27.07.17		
2	To Implement660nm Fiber Optic DIGITAL Link	03.08.17		
3	Measurement of NA of Optical fiber using 660nm LED	10.08.17		
4	Measurement of propagation loss and bending loss for two different length fiber (1meter &5 meter)	24.08.17		
Design	n /Development Experiments			
	TITLES			
	Experiments / Tutorials / Assignment		Completion	Remar
Sr. No	(Planning with use of Technology)		Date	ks
1	To WAP on calculation of material dispersion of optical fiber using	31.08.17		
2	Setting of Optic Voice Link using FM System	07.09.17		
3	To Study switched faults in FM System	14.09.17		
4	To establish optic voice link using PWM	21.09.17		
5	To Study switched fault in PWM system	28.09.17		
6	Design of LED Characteristics using MATLAB	05.10.17		
7	Design of Responsivity GaAs and InGaAs photodetector using	12.10.17		

Experiments / Tutorials / Assignment

	1,			
Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)		Completion Date	Remar ks
1	Assignment 1: Mod-1 Overview of Optical Fiber Communication Mod-2 Optical Sources and Detectors	11.08.17		
2	Assignment 2: Mod-3 Components of Optical Fiber Networks Mod-4 Transmission Characteristic of Optical Fiber	1109.17		

	Assignment 3:		
	Mod-5 Optical Networks		
	Mod-6 Network Design and Management		
3		10.10.17	

II.

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)		Completion Date	Remar ks
1	Case study of the use of various Optical Source & Detectors	11.08.17		
2	Case study of Filters ,Isolators Optical Switches	1109.17		
3	Case study of SONET&SDH,OTN,SOLITONS	10.10.17		
	III. Mini Project			

Sr. No	TITLES Experiments / Tutorials / Assignment (Planning with use of Technology)	Type of Project	Modes of Learning	Referen ce
			paper	s must
1	Design of Link Power Budget &rise Time Budgets	Research	Publication	refer
			Technical	and
	Developing Wavelength Stabilisation ,Network management		paper	study
2	Function	Research	Publication	technic
			Technical	al
	Design of Fault Management, Optical Safty and Service		paper	papers /
3	Interface	Research	Publication	articles

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	Remar ks
1	Photonic integrated circuits	24/07/17-27/07/17		
	Prof. T. Srinivas	31/07/17-01/07/17		
	Department of Electrical Communication	07/08/17-12/08/17		
	Last Date for Enrollment:July 24, 2017	14/08/17-19/08/17		
		21/08/17-26/08/17		
		28/08/17-02/09/17		
		04/09/17-09/09/17		
		11/09/17-16/09/17		
		18/09/17-23/09/17		
		24/09/17		
	V. Project			

	TITLES			
	Experiments / Tutorials / Assignment		Modes of	Referen
Sr. No	(Planning with use of Technology)	Type of Project	Learning	ce
	Gain flattening of EDFA using hybrid EDFA/RFA with			
1	reduced channel spacing	Research		
2	The Design of a Optical Network	Research		

No. of Practical		No. of Assignments		No. of Tutorial	
Planned	d	Planned	Conducted	Planned	Conducted
Basic : 04					
Design Base					
Experiment : 07					
Group Learning : 03					
Bridge Course : 01					
Minor Project : 03					
Project ::: 02		3		0	

DOSLNE:

DOSLE (engaged in some other dates):

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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:

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.

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3. Entry for DOSLE (engaged on some other date) shall be done with proper mapping to DOSLNE.

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Name & Signature of Faculty	Academic	•
Date: 07/07/2017	Date:	

