Course Number and Name

BEC6L2 - ELECTRONICS SYSTEM DESIGN LAB

Credits and Contact Hours

2 and 45

Course Coordinator's Name

Dr E.Kanniga

Text Books and References

LAB MANUAL

Course Description

- To understand the design procedure of different power supplies.
- To know to design transreceiver and voltage regulator.
- To understand the working of Microprocessor and DSP based system design

Prerequisites	Co-requisites
Electronics Circuits and Communication engineering I Lab	Control system

required, elective, or selected elective (as per Table 5-1)

Required

Course Outcomes (COs)

CO1: Design different forms of power supply.

CO2: Design Voltage regulators

CO3: AM/FM transreceiver.

CO4: Know the design procedure of Instrumentation amplifier and Digital Indicator.

CO5: Learn CAD based PCB layout design.

CO6: Understand the working of modems and timers.

Student Outcomes (SOs) from Criterion 3 covered by this Course

COs/SOs	a	b	c	d	e	f	g	h	i	j	k
CO1	H					M					
CO2	M	L	H				H	H	L	H	
CO3	M	H		H		M		L	M	M	H
CO4	M	H		M	H			M	M		
CO5	M	M	M		H	M	M				
CO6	M			M		H				M	M

List of Topics Covered

1. Design of high current linear variable DC Power supply.
2. Design of Switched Mode power supply.
3. Design of AC / DC Voltage regulator using SCR.
4. Design of Programmable Logic controller.
5. Design of process control timer.
6. Design of AM / FM transreceiver
7. Design of wireless data Modems
8. Design of Instrumentation amplifier and Digital Indicator
9. PCB layout Design using CAD
10. Microprocessor based system design.
11. DSP based system design.