

ELECTRONIC DESIGN LABORATORY (6th sem)

Course Code:	Contact Hours	Credits
EE181614	L-0, T- 1, P-4	3

1. Design electronic systems to meet the requirements of society, academia and industry
2. Analyze the performance of electronic system after completion of its design
3. Write technical report after completion and testing of electronic system

One mini project is carried out in the following mixed or single categories:

Sl. No	Title	Topic
1	Microprocessor based design	Develop a microprocessor based system for smart home or industrial control
2	Microcontroller based design	Develop a microcontroller based system for smart home or industrial control
3	FPGA based design	Develop a FPGA based system for smart home or industrial control: Use Xilinx system
4	Testing of designed electronic system	Perform the desired tests and quality checks. Perform market surveys for outsourcing the developed electronic systems. Write technical reports on the developed electronic systems including the feedback from the sites of utility

Electronics Design Lab uses softwares like MATLAB Simulink, Microsim, Proteus, PSPICE, LABVIEW, Xilinx, VHDL, Verilog HDL; and hardwares like Microprocessor based system development kit, Microcontroller based system development kit, FPGA based system development kit like Xilinx and Vivado

RUBRICS FOR ELECTRONIC DESIGN LAB ASSESSMENT

Category	Sub-Category	0-30%	31-60%	61-100%
CONTINUOUS AND COMPREHENSIVE EVALUATION	Attendance and Preparedness (10%)	The student is present with no development projectwise	The student is present with minimum progress	The student is well prepared and has made significant progress
	Weekly Progress review (10%)	No progress	Minimum Progress with partial hardware implementation	Satisfactory progress with requisite hardware implementation and demonstration
RESULT & ANALYSIS	Project Completion and demonstration (30%)	Missing several important details	Missing some important details	Details are well covered
	Reports: (25%)	Results contain errors.	Results are well presented but have some errors	Results are well presented without any corrections.
TEST (Presentation and Viva-Voce)	Final Presentation (using ppt) and Demonstration of the working model and knowledge of related concepts (25%)	Could not present properly and could not answer anything	Mediocre presentation could answer partially	Complete presentation and demonstration with satisfactory answers to questions