Branch Name:	Electrical Engineering
Program Code:	ET109
Course Name:	Minor Project
Course Code:	1ET1090701
Pre-requisite Course:	Basic Knowledge of Electrical Engineering

These guidelines for successful completion of B.Tech. Projects are to facilitate effective and uniform regulation of projects being carried out by undergraduate students in 7th/8th semester. All B. Tech final year students are required to go for minor and major project work as a compulsory component of their course curriculum. Students cannot merge Minor project (7th semester) and Major Project (8th Semester) however in certain cases they may continue their project work in the final semester upon recommendation of concerned.

Course Objectives:

To obtain hands-on experience in converting a small novel idea / technique into a working model/prototype involving multi-disciplinary skills and/or knowledge and working in a team. (Development of prototype Design / Product / Hardware / software / 3D-Model / Simulation / Coding / Blueprint for a larger project and any other development work (except study project) are permitted.)

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)								
				Theory				Practical				Total
				University Assessment		Continuous Assessment		University Assessment		Continuous Assessment		
Lecture	Tutorial	Practical	Credit	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
00	00	08	04	00	00	00	00	24	60	16	40	100

1. **Formation of Project Groups:** In order to ensure participation of each student, the team size should preferably be 3 and not more than 5 students. Project group formation must be carried out within 10 days of the starting of the Term. Department will designate one faculty member as the Project Coordinator who will take care of all activities pertaining to project work and keep all records.
2. **Assigning Faculty Supervisors:** Faculty supervisor/Project Guide must be assigned to each project group.

3. **Project Monitoring:** The B. Tech. project work activity being spread over one semester needs regular monitoring. Predefining the schedule of the project work related activities is desirable to ensure continuous monitoring/progress of the project work.

- **First Presentation**: First presentation related to identification of the work / project to be carried out must be completed within two weeks after project group formation. For this brief power point presentation of a tentative topic, proposed work and methodology to be adopted for carrying out the project may be done in the department/industry in the presence of faculty member/industry guide involved. This presentation should specifically include a work plan chart for the proposed work. The faculty members will approve the topic and give suggestions/modifications/comments, if any.

- **Mid Semester Presentation**: Second presentation for reviewing the progress may be held after about four weeks from the date of first presentation. In the second presentation, students should be asked to make a power point presentation of the progress made till date.

- **Final Presentation**: Final presentation of the minor project work must be before the academic term end. In this presentation, students should be asked to make a power point presentation of the work completed during the whole semester and also demonstrate the working model of the project.

The evaluation for this presentation should be made by the Project Evaluation Committee (PEC) composed of Project Coordinator and Faculty supervisors / Project Guide of the department.

Continuous assessment would be on the basis of continuous evaluation during the semester. Two copies of the project report certified by the Faculty supervisor/Project Guide shall be submitted to the Department. The format of the report can be downloaded from the website.

Presentation	**Assessment**	**Continuous Assessment (Marks)**
First Presentation	• Project identification • Objective and methodology • Expected outcome of the proposed work	05
Mid Semester Presentation	• Presentation of the proposed work design • Implementation • Partial results and demonstration	10
Final Presentation	• Presentation of complete project work with results and discussion. • Demonstration of project work	15
Minor Project Report		10
Total Marks		40

University Assessment will be carried out by the panel of examiners including external examiners. Students need to demonstrate the project work carried out during the whole semester including project report.

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	To conceptualize a novel idea / technique into design/Model/Product.	5 Analyze, 6 Creating
CLO2	Apply the acquired knowledge to carry out a capstone project having substantial multidisciplinary components.	3 Applying, 4 Evaluate,
CLO3	To understand the management techniques of implementing a project.	2 Understanding, 4 Evaluate, 5 Analyze,
CLO4	To take on the challenges of teamwork, prepare a presentation in a professional manner, and document all aspects of design work.	1 Remembering, 2 Understanding, 6 Creating

Mapping of CLOs with POs & PSOs:

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes(PSOs)			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CLO1	M	H	H	H	M	H	L	H					M	H		
CLO2	M	H	H	H	M	M								H		
CLO3					L	M	M	H	H	M	H	L	M	L		
CLO4		L			L	M		H	H	M		M	L	M		

H: High, M: Medium, L: Low