Faculty of Engineering and Technology

Bachelor of Technology

Effective from Academic Year: 2019-20

Branch Name:	Mechanical Engineering
Semester/Year:	Semester VII / Forth Year
Subject Title:	Minor Project
Subject Code:	1ET1010711
Pre-requisite:	Fundamental and Practical Knowledge of Mechanical Engineering

The guidelines for successful completion of B.Tech. project are to facilitate in 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 carry out minor and major project work as a compulsory component of their course curriculum. Students can't merge Minor project (7th semester) and Major Project (8th Semester) however in certain cases they may continue their project work in 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 at team.

(Development of prototype Design/Product/Hardware/3D-Model/Simulation/Coding/Blueprint for a larger project and any other development work (except study project) are permitted.)

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)				
				Theory (Marks)		Practical (Marks)		Total (Marks)
Lecture (L)	Tutorial (T)	Practical (P)	Credit	University Assessment	Continuous Assessment	University Assessment	Continuous Assessment	
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1. Formation of Project Groups:

In order to ensure participation of each student, the number of students in each group should be preferably be 3 and not more than 4 students, however looking to the nature/necessity of project work, the recommendation(s) of the project review committee shall be final. Formation of project groups should be done such that each group has representation of students with varying academic merit from best to average. Project group formation must be carried out within two weeks from the starting of the academic term.

Department will designate one faculty member as the Project Coordinator who will look after all activities pertaining to project work.

2. **Assigning Faculty Supervisors:**

Faculty supervisor/Project Guide must be assigned to each project group based on faculty expertise and/or choice of students.

3. **Project Monitoring:**

The B.Tech. project work activity being spread over one semester needs regular monitoring. Predefine 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 title to be carried out must be completed within two weeks after project group formation. For this brief power point presentation of tentative topic, proposed work and methodology to be adopted for carrying out the project work may be done in the department/Industry in the presence of faculty members/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 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 power point presentation of the work completed during the whole semester.

The evaluation for this presentation should be made by the Project Evaluation Committee (PEC) comprising of Project Coordinator, and two 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 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 result	10
Final Presentation	• Presentation of complete project work with results and discussion. • Demonstration of project work	15
Minor Project Report		10
	Total Marks	**40**

Course Outcome:

(1). To conceptualise a novel idea / technique into a design/Model/Product

(2). Apply the acquired knowledge to carry out a capstone project having substantial multidisciplinary component.

(3). To understand the management techniques of implementing a project.

(4). To take on the challenges of teamwork, prepare a presentation in a professional manner, and document all aspects of design work