

ME446: MAJOR PROJECT
CREDITS = 30 (L=0, T=0, P=30)

Course Objective:

To develop competency of applying engineering knowledge to real life problems.

Teaching and Assessment Scheme:

Teaching Scheme			Credits	Assessment Scheme				
L	T	P		Theory		Practical		Total Marks
				ESE	CE	ESE	CE	600
0	0	30	30	0	0	360	240	

This subject will be offered to, among the applicants, top 30 final year mechanical engineering students, strictly on merit basis.

The detailed guidelines of Major project is attached in Annexure-A.

Major Project envisages that a student during the final semester will acquire the ability of applying the engineering knowledge to a practical problem. A student is required to carry out the project work related to Mechanical Engineering, under the guidance of a faculty member and the supervisor of the concerned industry/institute/organisation.

The student can undertake the project individually or in a group of not more than two students. The objective of the Project Problem selected should be based on the organization's requirements as well as student's ability and interest.

The project must cover at least any two areas suggested below:

- Design, analysis and/or fabrication,
- Experimentation, Simulations
- Product design and development,
- Industry needs based basic survey or Testing or Analysis etc.
- Physical prototype development

A report comprising literature review, objective, methodology and scope of the project work undertaken, duly signed by project guide(s) and head of the department, will be submitted for the end semester examination.

Course Outcomes (COs):

At the end of this course students will be able to ...

1. Identify an open ended problem, in the area of mechanical engineering, which requires further investigation.
2. Review literature to identify the gaps and define objectives as well as methodology of work.
3. Plan financial activities and team work.
4. Formulate a prototype/models and/or experimental set-up and/or simulation and other systems capable of meeting the objectives.
5. Analyse the results to come out with concrete solutions.
6. Write a technical report citing relevant information of the project apart from developing a presentation.