

## Course: Minor Project

<b><u>Course Coordinator:</u></b>	Dr. Vikas Gupta
<b><u>Course Code:</u></b>	PROJ-ME401-P
<b><u>Course Category:</u></b>	Project work, Seminar and Internship in Industry Course
<b><u>Credits:</u></b>	3.0
<b><u>Mode:</u></b>	Practical
<b><u>Contact Hours:</u></b>	6 hours per week
<b><u>Course Outcomes:</u></b>	

Sr. No.	Course Outcome	RBT Level
CO1	Students will be able to trace out the problem using literature survey/ industry survey to draw an outline for the development or improvement in the existing system of mechanical engineering field.	L1
CO2	Students will be able to summarise various interdisciplinary ideas and technologies which could be used to achieve the desired solution.	L2
CO3	Students will be able to demonstrate an innovative working mechanical system or product which could be the requirement of new generation.	L3
CO4	Students will be able to compare various techniques which could be used to solve the identified problem.	L4
CO5	Students will be able to select the most optimum solution for the identified problem.	L5

**Course Assessment Methods (internal: 30; external: 70):** Internal practical evaluation is to be done by the course coordinator. The end semester practical examination will be conducted jointly by external and internal examiners.

**Course Objectives and Outcomes:** The objectives of this course are to:

1. Enable the students to identify a problem in mechanical engineering field using literature survey/ industry survey.
2. Generate innovative ideas for the solution of identified problems or improvement in the existing system of mechanical engineering field.
3. Participation in any technical event/ competition to fabricate and demonstrate an innovative machine or product could be encouraged under this course.

**By the end of the course a student is expected to:**

1. Analyze and identify the problems in the mechanical systems.
2. Select and apply proper modern tools.
3. Find solution for problems.
4. Make use of the benefits of team work.

**Lab Content:**

Project involving design/ fabrication/ testing computer simulation/ case studies etc. which is commenced in VIIIth Semester, will be completed in VIIIth Semester. The student will be required to submit his ideas/objectives in the form of a synopsis to project coordinator and to project guide. Group of 5-6 students choose a project guide and works on the development of any new ideas in the field of Mechanical Engineering Note: The design work should also be practiced through latest tools such as ANSYS, solid modeling CAD• packages (e.g. AutoCAD, Solidworks, Pro-E, CATIA etc.)