

<b>INSTITUTE</b>	<b>FACULTY OF TECHNOLOGY</b>
<b>PROGRAM</b>	<b>BACHELOR OF TECHNOLOGY (MECHANICAL ENGINEERING)</b>
<b>SEMESTER</b>	<b>8</b>
<b>COURSE TITLE</b>	<b>PROJECT/INTERNSHIP</b>
<b>COURSE CODE</b>	<b>01ME3802</b>
<b>COURSE CREDITS</b>	<b>15</b>

### Objective:

- 1 The objective of the final-year project in Mechanical Engineering is to integrate the knowledge and skills acquired throughout the program to solve complex engineering problems. The project should emphasize innovation, research, and practical applications of mechanical engineering principles.

**Course Outcomes:** After completion of this course, student will be able to:

- 1 Students will be able to identify real-world mechanical engineering problems, analyze them, and propose effective solutions.
- 2 Students will be able to design and develop mechanical systems or components using modern tools and techniques.
- 3 Students will be able to conduct experiments and analyze data to validate engineering solutions.
- 4 Students will be able to demonstrate teamwork, leadership, and project management skills.
- 5 Students will be able to communicate technical findings effectively through documentation and presentations.
- 6 Students will be able to exhibit professional ethics, environmental responsibility, and safety awareness in engineering practice.

**Pre-requisite of course:**Students should have a fundamental understanding of mechanical engineering principles, Students should have a fundamental understanding of mechanical engineering principles, Students should have a fundamental understanding of mechanical engineering principles, including basic concepts in mechanics, thermodynamics, materials science, and engineering mathematics. Prior experience with design tools, basic CAD software, and experimental including basic concepts in mechanics, thermodynamics, materials science, and engineering mathematics. Prior experience with design tools, basic CAD software, and experi methods will also be beneficial.

## Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	30	0	0	0	100	100
<b>Contents : Unit</b>	<b>Topics</b>						<b>Contact Hours</b>

<b>Total Hours</b>	
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#### Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	<b>Project Planning and Literature and Literature Review</b> Project Planning and Literature and Literature Review	8
2	<b>Design and Methodology Methodology</b> Design and Methodology Methodology	8
3	<b>Implementation and Development</b> Implementation and Development	6
4	<b>Testing, Analysis, and and Evaluation</b> Testing, Analysis, and and Evaluation	4
5	<b>Documentation and Presentation</b> Documentation and Presentation	4
<b>Total Hours</b>		<b>30</b>

#### Textbook :

- 1 Applied Mechanical Engineering Projects: Design, Analysis, and Applications , R.K. Rajput , wiley, 2010

#### References:

- 1 Research Methodology Methods and Techniques, Research Methodology Methods and Techniques, C. R. Kothari, New Age International Pvt Limited Publishers, 2013

#### Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery and evaluation					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
10.00	15.00	20.00	30.00	15.00	10.00

#### Instructional Method:

- 1 Presentation

#### Supplementary Resources:

- 1 <http://www.sciencedirect.com/>
- 2 <http://www.asme.org/>
- 3 <http://www.springer.com/>