



MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NBA and NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

DEPARTMENT OF MECHANICAL ENGINEERING

2060382 CADD AND MAT LAB

B.Tech.III Year-II Sem

L/T/P/C
0/0/2/1

VISION

The Mechanical Engineering Department strives for immense success in the field of education, research and development by nurturing the budding minds of young engineers inventing sets of new designs and new products which may be envisaged as the modalities to bring about a green future for humanity”.

MISSION

Equipping the students with manifold technical knowledge to make them efficient and independent thinkers and designers in national and international arena. Encouraging students and faculties to be creative and to develop analytical abilities and efficiency in applying theories into practice, to develop and to disseminate new knowledge. Pursuing collaborative work in research and development organizations, industrial enterprises, research and academic institutions of national and international standards, to introduce new knowledge and methods in engineering teaching and research in order to orient young minds towards industrial development.

LIST OF EXPERIMENTS

1. Drawing of a Title Block with necessary text and projection symbol.
2. Creations of various 2D drafting using CAD tools.
3. Drawing of front view and top view of simple solids and dimensioning.
4. Drawing sectional views for simple 3D designs.
5. Drawing of front view, top view and side view of objects for pictorial views.
6. Drawing isometric projection of simple objects.
7. Write MATLAB commands to analyze arithmetic, logical and Boolean operations.
8. Write MATLAB commands to analyze vector operations and magic matrix's.
9. Analyze the following operations in MATLAB.
 - a) Colon operator
 - b) Line Plotting
 - c) 2D plotting
10. Write a MATLAB program to obtain smallest and largest values of integers.
11. Write a program to multiply 3X3 matrix and obtain inverse of the resultant matrix.
12. Write a MATLAB program to obtain smallest and largest of floating point numbers.

COURSE OUTCOMES

CO	Course outcome
ME 382.1	Apply computer methods for solving wide range of engineering problems.
ME 382.2	Generate various drafting designs using computer engineering software.
ME 382.3	Understand computer engineering software to present various drafting designs.
ME 382.4	Use computer engineering software to solve and present problem solutions.
ME 382.5	Illustrate use of programming language software in basic engineering problems.
ME 382.6	Understand the use of various tools for editing and creating designs.



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PROGRAM EDUCATIONAL OBJECTIVES

PEO1	Graduates shall emerge as successful Mechanical engineer's as their career progress
PEO2	Graduates apply fundamentals of engineering, in practical applications and engage in active research.
PEO3	Mechanical Graduates shall have the ability to design products with interdisciplinary skills.
PEO4	Graduates will serve the society with their professional skills

PROGRAM SPECIFIC OUTCOMES

PSO1- Students acquire necessary technical skills in mechanical engineering that make them employable graduate.

PSO2- An ability to impart technological inputs towards development of society by becoming an entrepreneur

LIST OF SOFTWARES

1. Analysis Software: MATLAB
2. Desktop Systems with latest configuration and adequate graphic card.
3. AutoCad Software



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Do's

- Enter laboratory with appropriate laboratory uniform and shoes.
- Keep all your belongings in the book rack or at the place suggested by lab instructor.
- Bring the laboratory manual, observation and record without fail.
- Students must attend the lab with ID cards and in the prescribed uniform.
- Read and understand how to carry the activity thoroughly before coming in to the laboratory.
- Report any broken plugs to your lecturer or laboratory technician immediately.
- Switch off the computers after use and arrange the chairs properly before leaving the lab.

Don'ts

- Do not eat or drink in the laboratory.
- Don't let water drip onto power strips.
- Don't use mobile phones during laboratory hours.
- Don't fool around in the laboratory.
- Don't come with long hair, dangling jewelry and loose or baggy clothing which are a hazard in the laboratory.