

PROGRAM GOAL
MECHANICAL ENGINEERING
HIGHER DIPLOMA PROGRAM

Program Goal

Provide high quality education and training in the field of mechanical engineering through relevant theoretical and practical courses designed at a technologist level to equip the vital knowledge, understanding and skills to a high level of competence that will ensure success in the work place and also adapt to constant changes in rapidly developing society. Furthermore, it enables graduate to progress towards B.Tech program.

PROGRAM OBJECTIVES
MECHANICAL ENGINEERING
HIGHER DIPLOMA PROGRAM

The program should enable the student to:

1. Contribute professionally to the society through wide range of careers in mechanical engineering sector.
2. Work individually or part of a team on multi-disciplinary project.
3. Make use of available computer communication resources in the field of mechanical engineering.
4. Acquire sufficient breadth and depth in knowledge to enhance life long learning or progress towards higher studies.
5. Develop technical skills to cope with rapidly developing technological world.
6. Master linguistics ability to communicate effectively in wide market environment.

PROGRAM OUTCOMES
MECHANICAL ENGINEERING
HIGHER DIPLOMA PROGRAMME

On completing the program the graduate should be able to

1. Maintain an appropriate mastery of the knowledge, techniques, skills, and tools necessary for modern mechanical engineering environment including the use of computer drafting systems and design packages.
2. Apply knowledge of:
 - a. Science and engineering to analyze the process and the performance mechanical systems.

- b. Probability, Statistics, engineering economic analysis, CAD\CAM, control engineering, to analyze complex engineering systems.
 - c. Material science, computer science, mechanics of solids/fluids, thermodynamics, engineering design, and electricity/ electronics, engineering drawings to gain strong background in the area of mechanical engineering
- 3. Conduct experiments in mechanical engineering, make engineering measurements, analyze and interpret data and apply experiment result to improve process.
- 4. Act creativity with critical thinking in:
 - a. Performing drafting tasks associated with mechanical component, plant layout and general engineering work
 - b. Carrying out economic analysis and cost estimation related to maintenance of mechanical systems.
 - c. Dealing with Management, and implementation of various mechanical systems.
- 5. Function independently or part of a team on multi-disciplinary project.
- 6. Identify, analyze, and solve mechanical engineering problems.
- 7. Effectively commit to quality, time line and continuous improvements
- 8. Communicate effectively through series of peer and faculty reviews to include oral and written reports.
- 9. Work on different phases of major – scale projects such as planning, Manufacturing and maintenance under supervision of senior mechanical engineers.