

Mechanical Engineering Diploma (DME)

Program Educational Objectives (PEOs)

1. Diploma graduates will **apply practical technical knowledge and skills**, complemented by a foundational theoretical understanding, to **operate, maintain, and optimize** mechanical systems and manufacturing processes effectively.
2. Diploma graduates will **acquire, adapt, and apply** knowledge of emerging technologies to **enhance employability, pursue entrepreneurship, and engage in lifelong learning for higher education and become ready to take on industry challenges**.
3. Diploma graduates will **develop and demonstrate** effective communication and teamwork skills while **adopting** ethical responsibility in their professional practices.

Program Specific Outcomes (PSOs)

1. Diploma graduates will **apply, demonstrate, and implement** fundamental principles of mechanical system design while **operating, maintaining and optimizing** manufacturing processes to improve sustainability and performance.
2. Diploma graduates will **install, operate, maintain and troubleshoot** industrial machinery and mechanical systems while **identifying and implementing** innovative industrial applications to enhance efficiency and productivity.

Program Outcome (POs)

1. Basic and Discipline specific knowledge: Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
2. Problem analysis: Identify and analyse well-defined engineering problems using codified standard methods.
3. Design/ development of solutions: Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
4. Engineering Tools, Experimentation and Testing: Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
5. Engineering practices for society, sustainability and environment: Apply appropriate technology in context of society, sustainability, environment and ethical practices.
6. Project Management: Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
7. Life-long learning: Ability to analyse individual needs and engage in updating in the context of technological changes.