

## **B.TECH (MECHANICAL ENGINEERING)**

### **Program Outcomes (POs):**

- PO 1.** Able to apply Mathematics, Science, Computing and Engineering knowledge to Mechanical Engineering problems.
- PO 2.** Able to design, set up, and conduct Engineering Experiments and analyze the output.
- PO 3.** Graduates will acquire strong fundamental concepts in design, synthesis and optimization of various fields of Mechanical Engineering.
- PO 4.** An ability to carry out projects and research in interdisciplinary areas like Mechatronics, Bio-Fuels, Operations Research, CIM, Management etc.
- PO 5.** Acquire excellent programming, analytical, logical and problem solving skills.
- PO 6.** Graduates will possess managerial and leadership skills with best professional ethical practices and social concern through origins of National Conferences, Seminars, MEA, Quiz's and Workshops by various professional bodies. And also graduates will understand the proper use of technical papers, copyrights, and patents, recent advances in engineering field and shall acknowledge develop by participation in Seminars/Conferences, Workshops organized by high learning institutions like IISC, IIT's, NIT's and so on .
- PO 7.** An ability to develop and communicate effectively through communicative English and Language lab.
- PO 8.** Able to understand the impact of Mechanical Engineering solutions relating to economic, environmental, and societal context by participating at National Level Competitions like Technical Paper Presentation, Quiz Programs, Essay Writing Competitions, Cultural Activities, Industrial Tours, NSS and NCC, Alumni association so as to meet the global needs.
- PO 9.** By arranging guest lecturers by the experts from industry through Industry Institution Interaction programs under TEQIP-II and Mechanical Engineering Association (MEA).
- PO 10.** Graduates will Acquaintance of with emerging technologies and current professional issues. For thus able to gain insight into the recent advancements and the current changes in Industrial Scenario and Research Scenario.
- PO 11.** Ability to understand and use the techniques, skills, and modern engineering tools necessary for engineering practice.
- PO 12.** Project Management and Finance: Coordination, Participation, Mobilizing the finances from various sources/sponsorship.

### **Program Specific Outcomes (PSOs):**

- PSO 1.** Ability to apply mechanical engineering knowledge for achieving excellence in ic engines, design optimization, robotics, automation, manufacturing to develop solutions to complex real world problems.
- PSO2.** Ability to function effectively as an individual or a member/ leader of a team to manage different projects in multidisciplinary environments.

## **M.TECH (INDUSTRIAL ENGINEERING)**

### **Program Outcomes (POs):**

- PO 1.** To apply scholarly knowledge of Industrial Engineering and Management Sciences in problem solving.
- PO 2.** To study and analyze Complex Engineering / Management problems critically and offer appropriate solutions
- PO 3.** To identify problems in the area of Industrial / Systems Engineering in Complex Environment and provide effective solutions so as to meet the Global Standards.
- PO 4.** To carry out effective research in the areas of Manufacturing/Service Sectors.
- PO 5.** To apply the state of the art tools and techniques to Model and solve Complex problems.
- PO 6.** To undertake effective collaborative and multidisciplinary team work for decision making with open mindedness.
- PO 7.** To manage complex projects considering financial and other risk factors.
- PO 8.** To prepare desired documentation and communicate effectively to target audience.
- PO 9.** To engage themselves in lifelong learning independently with commitment and competence.
- PO 10.** To practice profession with ethics and meet social responsibilities.
- PO 11.** To introspect critically and take corrective actions.

### **Program Specific Outcomes (PSOs):**

- PSO 1.** Ability to identify, define, formulate, and analyze engineering problems in reaching substantiated conclusions using industrial engineering tools and techniques for effective use of resources.
- PSO 2.** Ability to function effectively as an individual or a member/ leader of a team to manage different projects in multidisciplinary environments.

## **M.TECH (PRODUCTION ENGINEERING)**

### **Program Outcomes (POs):**

- PO 1.** Formulate and Solve production / manufacturing related problems by applying fundamental principles.
- PO 2.** Design and conduct experiments, interpret and analyzes data and report results.
- PO 3.** Independently analyze complex problems with their course background and dissertation work carried out during program.
- PO 4.** Familiar with CAD, CAE and PLM Tools for production applications.
- PO 5.** Able to apply engineering solutions in global and societal contexts.
- PO 6.** Ability to design and evaluate a manufacturing system/process which is environment friendly with appropriate consideration for public health and safety.

- PO 7. Able to demonstrate and understanding of their professional ethical responsibilities.
- PO 8. Ability to function effectively individually and also as a team member in multidisciplinary activities.
- PO 9. Communicate effectively in both verbal and written forms.
- PO 10. Capable of self-education and clearly understand the value of life-long learning in continuing professional development.
- PO 11. To employ effective project management skills to develop a project plan.

**Program Specific Outcomes (PSOs):**

**PSO1** Ability to apply advanced engineering knowledge in critical evaluations, design, analysis of production process, robotics, automation, manufacturing to develop solutions to complex real world problems.

**PSO2** Ability to function effectively as an individual or a member/ leader of a team to manage different projects in multidisciplinary environments.