DEPARTMENT OF MECHANICAL ENGINEERING

M.Tech. (Production and Industrial Engineering))

Program Outcomes (POs) and its Attributes

S.No.	Program Outcomes	Attributes
1.	Development of technical competence, in-depth knowledge and understanding of the methodologies and technologies of Production and Industrial Engineering.	Development of Knowledge
2.	Application of knowledge of Statistics, Production Engineering, Maintenance Management, Quality Management and Advance Material Science. Understanding, Analyzing and Solving the issues pertaining to the above said topics.	Practical Analysis
3.	Ability to identify, investigate, understand and analyze complex problems pertaining to Production and Industrial Engineering and identify effective solution strategies for implementation.	Problem Solving
4.	Enhance the role of research in developing research skills and knowledge of the state-of-the-art in various industrial technologies. Acquire the skill to design, develop and modify systems in industries to meet desired needs.	Research Skill and Knowledge
5.	Develop and apply appropriate techniques, resources, modern engineering to complex engineering problems in the field of Production and Industrial Engineering	Application of Modern techniques
6.	Inculcate the capacity to learn and summarize complex information pertaining to various fields of engineering in industries. Lead effectively as a leader or as a efficient member of the team	Knowledge and Leadership Skill
7.	Develop specifications, implement and critically assess projects and their outcomes. Demonstrate effective management, leadership and entrepreneurial skills, and apply these to routine work, as a member and a leader in a team to manage projects in industrial environment.	Project Management
8.	Effective communication in both oral and written form of technical papers, dissertation reports, design documents and seminar presentations.	Communication Skill
9.	Identify the need to acquire the ability to engage in self-improvement through continuous professional development and learning to maintain an up-to-date knowledge of technical matters in various fields of	Continuous Learning Process

	engineering.	
10.	Adherence to professional ethics and responsibilities of engineering practices. Understand the importance of sustainability and cost effectiveness in design and development of engineering solutions for industries and their impacts on society and environment. Exhibit awareness of social, safety, health, legal and cultural issues relevant to professional engineering practices.	Ethics and Responsibilities
11.	To develop eagerness to conduct investigation and research on specific fields of study and help in achieving advance research, innovations and patents.	Advanced Learning
12.	Design and validate technological solutions to defined problems and express clearly and effectively for the practical utilization of the work.	Research Documentation

PROGRAMME EDUCATION OBJECTIVES (PEOs)

PEO1. Introduction to students about the latest technical development of production and industrial engineering so that the opportunities in dealing with advanced topics of the subjects are effectively available to the students.

PEO2. To provide a positive and healthy environment which helps in better learning, growth and encourages to work with other groups in professional, industrial and research organization.

PEO3. To enhance the capabilities of the students in analytical and research methodology for academic compilation and presentation.

PEO4. Effective guidance to students to help them make a better choice in research/ professional/industrial career outlook

PEO5. To educate the students to have a good communication skill, ability to work in a team & develop leadership quality and continuous learning

PROGRAMME SPECIFIC OUTCOMS (PSOs)

PSO1. Understand the production and industrial systems and its effective implementation.

PSO2. Analyze and solve problems pertaining to industrial organization and engineering.

PSO3. Work with professional ethics in research and industrial organizations.