

## **Program Educational Objective**

**PEO** – **1** Students will be able to pursue higher education, research and development, and other creative and innovative efforts in Automobile engineering

PEO - 2 Students will be able to successfully apply analytical techniques and problem-solving skills necessary to adapt technological changes and for a career in the field of automobile and mechanical engineering.

**PEO – 3** Students will be able to implement their engineering knowledge acquired from projects, laboratory experimentation, classroom lectures and demonstrations to acknowledge the full range of technical and associated environmental issues.

**PEO – 4** Students will be able to efficaciously use their communication skills in oral, written, visual and graphic modes within interpersonal, team, and group environments

**PEO** – **5** Students will be able to retain the intellectual curiosity that motivates lifelong learning making them versatile to the rapidly evolving industrial challenges.

## STUDENTS OUTCOME

**SO1: Engineering knowledge** - Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to solve complex engineering problems.

**SO2: Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**SO3: Design & Development:** Design and Develop system components or processes that meet the specified needs with appropriate consideration for the public health , safety, and the cultural, societal, and environmental considerations.

**SO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.



**SO5:** Modern tool usage: Create, select, and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**SO6: The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**SO7: Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the need for sustainable development.

**SO8: Ethics:** Apply ethical principles and commit to professional responsibilities and norms of the engineering practice.

**SO9: Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.

**SO10: Communication:** Communicate effectively on complex engineering activities at large with the engineering community and society, such as, being able to comprehend, write effective reports and design documentation, make effective presentations and give and receive clear instructions.

**SO11: Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**SO12: Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## **Program Specific Outcome**

**PSO 1:** Ability to implement the knowledge of the design, manufacture, and maintenance of major subsystems and technologies associated with automobiles for sustainable professional career.



**PSO 2:** Ability to comprehend and communicate effectively within a multidisciplinary working environment in the context of the emerging technologies.

	Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modern Tool Usage	Society & Culture	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO - 1	PSO - 2	PSO - 3
PEO - 1	Н	L	М	М	Н	L	L	М	М	Н	L	н	Н	М	М
РЕО -2	Н	Н	М	Н	М	L	L	L	Н	М	М	Н	М	М	Н
PEO - 3	Н	Н	Н	Н	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н
РЕО - 4	L	М	L	L	М	L	М	Н	Н	Н	М	М	М	М	Н
PEO - 5	М	М	М	М	М	Н	М	Н	Н	М	М	М	М	М	М

**PSO 3:** Ability to acquire technical and managerial skill that makes them an employable graduate.