



**SOLAPUR UNIVERSITY, SOLAPUR**  
**FACULTY OF ENGINEERING & TECHNOLOGY**  
**Mechanical Engineering**

**Programme Educational Objectives and Outcomes**

**Program Educational Objectives**

The Program Educational Objectives for Mechanical Engineering program are designed to produce competent mechanical engineers who are ready to contribute effectively to the advancement of Mechanical Engineering and to fulfil the needs of the community. These objectives are as follows:

1. Graduates will be prepared with strong engineering fundamentals leading to excellent performance in professional career in mechanical engineering to produce various mechanical systems that meet the societal needs.
2. Graduates will be enabled to innovate, design and develop various Mechanical Engineering and allied systems using modern engineering skills, techniques and tools.
3. Graduates will exhibit excellent interpersonal communication and resource-management skills as leaders while working as a part of multidisciplinary team.
4. Graduates will be prepared with sound foundation in mathematics, science and in Mechanical Engineering to prepare them for higher studies and research.
5. Graduates will possess a breadth of knowledge and engage themselves in the life-long learning to meet challenges of globalisation.
6. Graduates will be sensitive towards ethical, societal and environmental issues while accomplishing their professional work.



### **Program Outcomes**

Students attain the following outcomes:

- a. an ability to apply knowledge of mathematics, science, and engineering
- b. an ability to design and conduct experiments, as well as to analyze and interpret data,
- c. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- d. an ability to function on multidisciplinary teams
- e. an ability to identify, formulate, and solve engineering problems
- f. an understanding of professional and ethical responsibility
- g. an ability to communicate effectively
- h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- i. a recognition of the need for, and an ability to engage in life-long learning,
- j. a knowledge of contemporary issues
- k. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

