# Government Polytechnic, Miraj Vision of Institute

[How shall we be after 10 years]

To develop technologically competent industry-ready technicians having high values and national concern.

## **Mission of Institute**

[Broad detailing of vision and approach to achieve it]

- To develop intellectual competency and a life-long learning attitude through the teaching-learning process.
- To inculcate technical skills through effective experimental work and industrial exposure.
- To encourage entrepreneurship and preserve the environment.
- To instill professional and moral values and national concern through academic ambiance.

## Mechanical Engineering Program Vision

#### [How shall we be after 10 years]

To be the centre of excellence that nurtures technologically competent and industry ready mechanical technicians having high values and national concern.

### Mission

[Broad detailing of vision and approach to achieve it]

- To impart technical education using productive learning resources to develop intellectual competency and life long learning attitude.
- To adopt well coordinated state of art tools and technology to develop technical, ethical and eco-friendly skills.
- To provide advanced practical tools to solve broad based problems and develop motor skills.

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

(POs = What diploma student will be able to do at the entry point of industry soon after the diploma program)

- 1. **PO1: Basic and discipline specific knowledge**: Apply the knowledge of basic mathematics, science, engineering fundamentals, and an engineering specialization to the solve the engineering problems.
- 2. **PO2: Problem analysis**: Identify and analyze well-defined engineering problems using codified standard methods.
- 3. **PO3: 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. **PO4: Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements
- 5. **PO5: Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.
- 6. **PO6: 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. **PO7: Life-long learning**: Ability to analyse individual needs and engage in updating in the context of technological activities.

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

[What s/he will be able to do in the Mechanical engineering specific industry soon after the diploma program]

- PSO 1. Modern Software Usage: Use latest Mechanical engineering related software's for simple design, drafting, manufacturing, maintenance and documentation of mechanical engineering components and processes.
- PSO 2. Equipment and Instruments: Maintain equipment and instruments related to Mechanical Engineering.
- PSO 3. Mechanical Engineering Processes: Manage Mechanical engineering processes by selecting and scheduling relevant equipment, substrates, quality control techniques, and operational parameters.

### **Program Educational Objectives (PEOs)**

[PEO = what s/he will continue to do even after 3-5 years of working in the industry]

- PEO 1. Provide socially responsible, environment friendly solutions to Mechanical engineering related broad-based problems adapting professional ethics.
- PEO 2. Adapt state-of-the-art Mechanical engineering broad-based technologies to work in multidisciplinary work environments.
- PEO 3. Solve broad-based problems individually and as a team member communicating effectively in the world of work.

