

## EP-Mechanical Engineering, Program Educational Objectives

| EP-MS<br>PEO | Student Outcomes |   |   |   |   |   |    |    |   |   |   |   |    |
|--------------|------------------|---|---|---|---|---|----|----|---|---|---|---|----|
|              | a                | b | c | d | e | f | g1 | g2 | h | i | j | k | IM |
| PEO 1        | x                | x | x | x | x | x | x  | x  | x | x | x | x | x  |
| PEO 2        |                  |   |   | x |   |   | x  | x  | x |   |   |   | x  |
| PEO 3        |                  |   |   |   |   | x |    |    | x | x | x | x | x  |

### Program Educational Objectives (PEO) for Engineering Physics-Mechanical Engineering

Graduates of Engineering Physics-Mechanical Engineering will be able to:

1. Practice as an engineer in mechanical or related fields.
2. Assume positions of leadership and greater responsibility through teamwork within an organization.
3. Sustain adherence to professional development and post graduate continuing education.

### Student Outcomes (SO) for Engineering Physics-Mechanical Engineering

Graduates of Engineering Physics-Mechanical Engineering will:

- (a) Be able to apply knowledge of mathematics, science, and engineering.
- (b) Be able to design and conduct experiments, as well as to analyze and interpret data.
- (c) Be able 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) Be able to function on multidisciplinary teams.
- (e) Be able to identify, formulate and solve engineering problems.
- (f) Be able to demonstrate an understanding of professional and ethical responsibility.
- (g1) Be able to communicate effectively in oral form.
- (g2) Be able to communicate effectively in written form.
- (h) Have the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- (i) Recognize the need for and have an ability to engage in life-long learning.
- (j) Be able to demonstrate a knowledge of contemporary issues.
- (k) Be able to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- (IM) Be able to work professionally in both thermal and mechanical systems areas including the design and realization of such systems.