

**DEPARTMENT OF FIRE TECHNOLOGY & SAFETY ENGINEERING  
INSTITUTE OF ENGINEERING & SCIENCE  
IPS ACADEMY INDORE**

**PROGRAM EDUCATIONAL OBJECTIVES**

- PEO 1:** The graduates will earn and pursue personal technical and professional Advancement through their employment.
- PEO 2:** The graduates will continue the pursuit of lifelong learning through membership and participation in professional organization.
- PEO 3:** The graduates will develop expertise with in their selected organization in vocational training.
- PEO 4:** The graduates will successfully apply mathematical analytical and technical skills to solve complex problems in the field of Fire Technology, Safety Engineering and mitigation strategies.
- PEO 5:** The graduates will meet the highest standards of ethical practice in Fire Technology and Safety Engineering profession.

## **PROGRAM OUTCOMES (POs)**

An engineering program defines a set of specific program outcomes that relate to its educational objectives, including the items a-l listed below. We regularly review the courses in our curriculum to make sure that all these items are covered, and try to measure whether our students are successfully attaining the following goals

- a) Ability to apply knowledge of mathematics, science, and basic mechanical engineering, basic electrical engineering and basic civil engineering and engineering mechanics.
- b) Ability to design and conduct experiments hazardous properties of material as well as to analyze and interpret data.
- c) Designs and drafts plans and estimates costs for installation of fire protection systems for facilities and structures, applying knowledge of drafting, physical science, engineering principles, and fire protection codes.
- d) Demonstrate and understanding the principles of accident prevention their root causes and management.
- e) Ability to understand and application of fire, safety and health related software for short and quick response in emergency.
- f) Understand the principles legislation, codes and standards concern with fire, safety, health and environment.
- g) Identify hazardous material, hazardous properties and successful emergency scene operation, using strategic elements of emergency plans.
- h) Ability to communicate effectively and Knowledge of contemporary issues.
- i) Ability to utilize experimental, statistical and computational methods as Quantitative and Qualitative risk assessment tools.
- j) Graduate will able to demonstrate an ability to work as a team in natural/manmade disaster and rehabilitation and contribute in the formulation of risk reduction techniques.
- k) Recognize the importance of building-construction concepts and materials in fire safety, the effects of heat and fire on buildings, and the impact of fire to personal safety of building occupants;
- l) Graduate will demonstrate an ability to design fixed fire fighting installations, life safety systems, accident prevention techniques analyze and interrupt accidental data and able to forecast accident pattern.

## Mapping of PEO's with Outcomes

Program Educational Objective	Program Outcomes											
	a	b	c	d	e	f	g	h	i	j	k	l
PEO-1	✓			✓	✓	✓		✓		✓		✓
PEO-2						✓	✓		✓	✓		✓
PEO-3	✓	✓	✓	✓	✓			✓		✓		✓
PEO-4	✓	✓	✓					✓		✓	✓	✓
PEO-5				✓	✓	✓	✓		✓		✓	✓