



IPS Academy Indore

Institute of Engineering & Science

An Autonomous Institute, Affiliated to RGPV Bhopal

Department of Mechanical Engineering

Program Outcomes (POs)

PO1: Engineering Knowledge

Apply knowledge of mathematics, natural sciences, computing, engineering fundamentals, and an engineering specialization to develop solutions for complex engineering problems.

PO2: Problem Analysis

Identify, formulate, review research literature, and analyze complex engineering problems to reach substantiated conclusions with consideration for sustainable development.

PO3: Design / Development of Solutions

Design creative solutions for complex engineering problems and develop systems, components, or processes that meet identified needs with due consideration for public health and safety, whole-life cost, net-zero carbon, culture, society, and environmental factors.

PO4: Conduct Investigations of Complex Problems

Conduct investigations using research-based knowledge, including design of experiments, modeling, analysis, and interpretation of data to provide valid conclusions.

PO5: Engineering Tool Usage

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, while recognizing their limitations in solving complex engineering problems.

PO6: The Engineer and the World

Analyze and evaluate societal and environmental aspects while solving complex engineering problems, considering sustainability in relation to economy, health, safety, legal frameworks, culture, and environment.

PO7: Ethics

Apply ethical principles and commit to professional ethics, human values, diversity, and inclusion; adhere to national and international laws.

PO8: Individual and Collaborative Teamwork

Function effectively as an individual, and as a member or leader in diverse and multidisciplinary teams.

PO9: Communication

Communicate effectively and inclusively within the engineering community and society at large, including the ability to comprehend and write effective reports and design documentation, and make effective presentations considering cultural, language, and learning differences.

PO10: Project Management and Finance

Apply knowledge and understanding of engineering management principles and economic decision-making, and apply these to individual work, as a member or leader in a team, and to manage projects in multidisciplinary environments.

PO11: Life-Long Learning

Recognize the need for and demonstrate the preparation and ability for:

- i) Independent and life-long learning
- ii) Adaptability to new and emerging technologies
- iii) Critical thinking in the broadest context of technological change