



AISSMS
COLLEGE OF ENGINEERING
अपना, स्वयंकार्य



Department of Chemical Engineering

Program Outcomes (PO)

Engineering Graduates will be able to:

- **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental
- **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments
- **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



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ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY'S
COLLEGE OF ENGINEERING
KENNEDY ROAD, PUNE-411 001

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 Program Outcome (PO)

Engineer by 2020 will be able to:

Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization in the solution of complex engineering problems.

Program specific: Identify, research, analyze, design, develop, and test an AISSMS engineering system, modify, evaluate, and improve it, and design a solution to meet the needs of the community, environment, and the development of society.

Design/development of solution: Design solution to complex engineering problems and design system components or processes that meet the specified requirements, with appropriate consideration of public health, safety, and the environment, and the manufacturability, and cost of the production process.

Modern tool usage: Apply modern tools, techniques, and skills to enhance knowledge, innovation, and design engineering and to solve complex engineering and technology problems requiring knowledge with an understanding of the limitations.

The engineer and society: Apply reasoning related to the professional responsibilities in society, health, safety, legal and ethical issues and the environment, and contribute to the development of the community.

Professional and ethical: Maintain honor of the profession, and professional engineering standards to provide safe and sound services, and to contribute to the knowledge of the world for the improvement of humanity.

Team spirit: Apply effective and efficient communication skills and responsibilities and ethics of the engineering practice.

Individual and team work: Perform effectively as an individual and as a member or leader in teams, in multidisciplinary settings.

Continual education: Understand the importance of continuous learning, and apply the knowledge to solve complex engineering problems in the future, and to participate in research and development activities, and to contribute to the knowledge of the world for the improvement of humanity.

Project management and finance: Determine feasibility and estimate the cost of the engineering project, and manage the project and its resources, and to contribute to the development of the community.

Life long learning: Recognize the need for, and have the preparation and ability to acquire new knowledge and skills to enhance the level of technological competence.

AISSMS
 Department of Chemical Engineering

Value

- To be a leader in Chemical Engineering education globally, service to society.

Mission

- To prepare graduates for responsible positions in chemical industry, academia and research.
- To prepare graduates to analyze and solve problems of chemical industry, academia and research.
- To strengthen industry-academia interaction to develop industry oriented graduates like startups, start-ups, team work and leadership.

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