



Peoples Empowerment Group
ISBM COLLEGE OF ENGINEERING, NANDE, PUNE
AI&DS Department Vision Mission Statement



Vision:

- To be a leading centre for education, research, and innovation in artificial intelligence and data science.
- To prepare students to be ethical and responsible leaders in the field of artificial intelligence and data science.
- To make a positive impact on society through the use of artificial intelligence and data science.

Mission:

- To provide students with a world-class education in artificial intelligence and data science.
- To conduct cutting-edge research in artificial intelligence and data science.
- To promote ethical and responsible use of artificial intelligence and data science.
- To prepare students for successful careers in artificial intelligence and data science.
- To collaborate with industry and academia to solve real-world problems using artificial intelligence and data science.

The department specifies the skills that students will develop in the department, such as:

- Problem-solving skills
- Critical thinking skills
- Communication skills
- Teamwork skills
- Data analysis skills
- Artificial intelligence skills

In addition to the above, the department also emphasize the following in its vision and mission statement:

- The need to use artificial intelligence and data science responsibly
- Create awareness about risks of uncontrolled AI development
- The responsibility of artificial intelligence and data science professionals to be ethical and responsible in their work.



Peoples Empowerment Group
ISBM COLLEGE OF ENGINEERING, NANDE, PUNE
AI&DS Department Vision Mission Statement



Program Educational Objective(PEOs)

- PEO1: Graduates Will Have The Capabilities To Apply AI&DS Knowledge To Develop Feasible Systems.
- PEO2: Graduates Will Be Able To Handle The Challenges Of Rapidly Changing Technology.
- PEO3: Equip The Graduates With Strong Technical Knowledge, Competency In Soft Skills, Lifelong Learning Skills That Allow Them To Contribute Ethically To The Need Of Society.

Program Outcomes (POs)

- **PO1 Engineering knowledge** - Apply the knowledge of mathematics, science, Engineering fundamentals, and an Engineering specialization to the solution of complex Engineering problems.
- **PO2 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.
- **PO3 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 considerations.
- **PO4 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.
- **PO5 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.
- **PO6 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 practices.
- **PO7 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.
- **PO8 Ethics** - Apply ethical principles and commit to professional ethics and responsibilities and norms of Engineering practice.
- **PO9 Individual and Team Work** - Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **PO10 Communication Skills** - 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.
- **PO11 Project Management and Finance** - Demonstrate knowledge and understanding of 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.



Peoples Empowerment Group
ISBM COLLEGE OF ENGINEERING, NANDE, PUNE
AI&DS Department Vision Mission Statement



- **PO12 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.

Program Specific Outcomes (PSOs)

- **PSO1 Professional Skills**-The ability to understand, analyse and develop computer programs in the areas related to algorithms, system software, multimedia, web design, networking, artificial intelligence and data science for efficient design of computer-based systems of varying complexities.
- **PSO2 Problem-Solving Skills**- The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.
- **PSO3 Successful Career and Entrepreneurship**- The ability to employ modern computer languages, environments and platforms in creating innovative career paths to be an entrepreneur and to have a zest for higher studies.