**Vision**

* To become the world-class student-centered department which fosters high quality learning and research for both undergraduate and graduate students of Computer Science Engineering Artificial Intelligence and Machine Learning to cater to the ever-changing industrial demands and social needs in Artificial Intelligence and Machine Learning through excellence in education and research.

**Mission**

* M1: To create a healthy environment for the development of innovative academician professionals in the areas of computing and artificial intelligence.
* M2: To create a healthy environment for the development of entrepreneur pursuit & researchers in Artificial Intelligence & Machine Learning
* M3: To develop a healthy environment to fulfil its commitment to research & education of the highest quality with industry requirement and social acceptance at large.

[**GROUP PHOTOGRAPH**](https://abes365-my.sharepoint.com/:i:/g/personal/pranshi_verma_abes_ac_in/ESN-Lz9Y0I9Dn2JRYhQuA1EBOgfESkqg0bsG2vFXzmF-kQ?e=C94Qdx)

### Programme Educational Objectives (PEOs)

* To impart knowledge about modern AI tools and techniques and building strong foundation in science, mathematics and engineering fundamentals, knowledge and capability.
* To develop the ability to comprehend, understand, and analyze computer science and AIML verticals and relate them with real life.
* To develop lifelong learning by imparting in-depth knowledge through project-based learning, certification programs and professional educational activities.

### Programme Outcomes (POs) Engineering Graduates will be able to:

PO 1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2: 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.

PO 3: 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.

PO 4: 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.

PO 5: 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.

PO 6: 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.

PO 7: Environment and sustainability: Understand the impact of the professional engineering solutions in soc ietal and environmental contex ts, and demonstrate the knowledge of, and need for sustainable development.

PO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10: 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.

PO 11: 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.

**PO 12:** 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.

### Programme Specific Outcomes (PSOs)

* Apply fundamentals of science, engineering and mathematics to understand, analyse and develop solutions in area related to artificial intelligence for optimal design of intelligent systems.
* The ability to understand evolutionary changes in machine learning, apply evolutionary algorithm, optimization technique and analytic tools for integration of intelligent system with view of engaging lifelong learning for betterment of society.
* The ability to employ modern machine learning tools, language and platform in creating suitable career path to be an entrepreneur, also practice professional ethics in applying scientific method to model and support multidisciplinary facets of artificial intelligence and its societal implications.