ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodbidri, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

PROGRAM OUTCOMEs (POs), PROGRAM SPECIFIC OUTCOMEs (PSOs) and PROGERAM EDUCATIONAL OBJECTIVEs (PEOs) for all the Programmes offered by the institution.

POs, PEOs and PSOs FOR ALL UG PROGRAMMES

PROGRAM OUTCOMEs (POs) for all the UG PROGRAMMES

PO1	**Engineering Knowledge**: Apply the knowledge of mathematics, science, fundamentals, and an engineering specialization to the solution of complex engineering problems related to automobile engineering.
PO2	**Problem Analysis:** Identify, formulate, 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 in automobile.
PO5	**Modern Tool Usage:** Create, select, and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
PO6	**The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess automobile based societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
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 the 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:** Communicate effectively on complex automobile 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 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
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) for all UG PROGRAMMES

PROGRAMME	**Artificial Intelligence and Machine Learning**
A graduate of the AIML Program will exhibit the ability to:	
PSO1	Understand, analyse, and demonstrate the knowledge of human cognition, Artificial Intelligence (AI), and Machine Learning (ML) in terms of real-world problems to meet the challenges of the future.
PSO2	Incorporate AI and ML techniques for industrial applications in the areas of Autonomous Systems, IoT, Cloud Computing, Robotics, Natural Language Processing, and emerging areas.
PSO3	Develop computational knowledge and project development skills using innovative tools and techniques to solve problems in the areas related to Deep Learning, Machine learning, Artificial Intelligence.
PSO4	Provide solutions to complex problems, using the latest hardware and software tools, along with analytical skills to arrive at cost-effective and appropriate solutions through AI & ML dimensions.
PSO5	Work as a part of the team through effective communication on multidisciplinary projects and successful careers in the computer and information technology industry that meets the needs of a society enriched with professional ethics.

PROGRAMME:	**Civil Engineering**
PSO1	The graduates will be able to plan, analyse, design and execute cost effective civil engineering structures without over exploitation of natural resources.

PSO2	The graduates will have the ability to take up employment, entrepreneurship, research and development for sustainable civil society.
PSO3	The graduates will be able to pursue opportunities for personal and professional growth, higher studies and engage in lifelong learning in civil engineering profession.
PSO4	The graduates will be able to demonstrate professional integrity and an appreciation of ethical environmental, regulatory and issues related to civil engineering projects.

PROGRAMME:	**Computer Science and Engineering**
A graduate of the Computer Science and Engineering Program will exhibit:	
PSO1	Professional Skills: The ability to understand & implement the computer programs in the areas of Computer Architecture, System Software, Database Management Systems, Web Design, Multimedia and Computer Networking.
PSO2	Problem-Solving Skills: The ability to solve real-world problems by the suitable mathematical model with strong technological concepts in the rapidly growing arena of computer technology.
PSO3	Successful Career and Entrepreneurship: Knowledge in diverse areas of Software Engineering and Management & Entrepreneurship for IT Industry, conducive in cultivating skills for successful career development

PROGRAMME	**Electronics and Communication Engineering**
PSO1	Understand and apply the principles of Electronics and Communication Engineering in various domains of Analog and Digital systems.
PSO2	Design and implement systems using the concepts of Electronics, signal processing, Embedded systems and Semiconductor Technology.
PSO3	Apply modern hardware and software tools to analyse and solve engineering problems.

PROGRAMME	Information Science and Engineering
PSO1	Design, develop, test and maintain the software systems that satisfy the needs of the IT industry.
PSO2	Apply the knowledge of computer networking, database and computations to provide solutions to real-world engineering problems.
PSO3	Develop programs and projects using different modern software tools for industrial & scientific applications.

PROGRAMME	Mechanical Engineering
PSO1	Will be able to analyze, interpret and provide solutions to engineering and social problems.
PSO2	Adapt to the dynamic challenges and scenario in the industries.

PROGERAM EDUCATIONAL OBJECTIVEs (PEOs) for all the UG Programmes

PROGRAMME	Artificial Intelligence and Machine Learning
PEO1	Expand knowledge in the field of AI & ML.
PEO2	Develop a continuous learning attitude, ethics, and values.
PEO3	Inculcate abilities and talents, leading to creativity and productivity in the professional and industrial field beyond the curriculum and enhancing employability skill.
PEO4	Self-educate and expand to the innovative entrepreneurship dimension.
PEO5	Provide solutions for technical and social problems through research and innovation.

PROGRAMME	Civil Engineering
PEO1	To provide the students a strong foundation in fundamentals that will enable them to identify and solve real time problems in civil engineering for industries and research activities.
PEO2	To develop abilities and talents, leading to the creativity and productively in professional and industrial field beyond the curriculum and enhance the employability skill.

PEO3	To explore and apply the modern engineering tools for planning, design, execution and maintenance of works those are technically and economically viable and socially acceptable.

PROGRAMME	**Computer Science and Engineering**
PEO1	Exhibit the knowledge and skillsets to adapt to the dynamic technological transformations and developments in the field of Computer Science and Engineering.
PEO2	Get adapted to a corporate working environment discharging entrusted duties competently and be able to stay updated on the emerging technological changes to initiate start-ups.
PEO3	Get engaged in an innovative career to exploit new ideas for gaining social and economic values or to pursue higher studies in the field of research.

PROGRAMME	**Electronics and Communication Engineering**
PEO1	Apply Mathematical, Scientific and Engineering skills for solving problems in the area of Electronics and Communication Engineering.
PEO2	Expose to Emerging Technologies and excel in Industries/Higher studies/research.
PEO3	Apply analytical skills in the area of Electronics and Communication Engineering to become competent and Employable.
PEO4	Inculcate professional ethics, human values, team work for solving engineering problems and contribute to societal needs.

PROGRAMME	Information Science and Engineering
PEO1	Apply the principles of Information Science & engineering and fundamentals of mathematics to provide solutions to societal needs.
PEO2	Pursue higher education and engage in research to meet the challenges of cutting edge technologies.
PEO3	Design and develop reliable software systems to satisfy industrial needs through multidisciplinary projects.
PEO4	Able to work in various IT related fields and contribute to society.

PROGRAMME	Mechanical Engineering
PEO1	Provide an opportunity for the students to expand knowledge in mechanical engineering.
PEO2	Be able to provide solutions for technical and social problems through research and innovation.
PEO3	Educate students to develop continuous learning attitude, ethics and values.

PRINCIPAL
PRINCIPAL
Alva's Institute of Engg. & Technology,
Mijar. MOODBIDRI - 574 225, D.K

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodbidri, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

POs, PEOs and PSOs FOR PG PROGRAMME

PROGRAM OUTCOMEs (POs) for PG PROGRAMME-MBA

Management Graduates will be able to:

PO1	**Sound Theoretical knowledge**: Students are given sufficient theoretical knowledge and are enabled to apply them to solve practical problems in business and other organizations / institutions of importance
PO2	**Communication Skills with Lateral and Critical Thinking Ability**: Students are provided effective communication skills with a high degree of lateral and critical thinking that enhances learning ability, developed for being continuously employable.
PO3	**Ethical leadership and Social Consciousness**: Students are instilled with leadership qualities, ethically sound, enabled with decision making skills that reflect a high degree of social consciousness.
PO4	**Research Orientation**: Students are trained for sustained research orientation to comprehend a growingly complex, economic, legal and ethical environment
PO5	**Self-sustaining Entrepreneurial Qualities:** Students are equipped with self-sustaining entrepreneurship qualities that encourages calculated risk taking.

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY
Shobhavana Campus, Mijar, Moodbidri, D.K – 574225
Phone: 08258-262725, Fax: 08258-262726

PROGRAM SPECIFIC OUTCOMEs (PSOs) for MBA

PSO1	**Data-based decision making** :Graduates will be able to understand, analyze and work with quantitative and qualitative data and provide desired solutions to the stakeholders
PSO2	**Use of Technology**: Graduates will be able to use technology with ease in their specific domain of expertise
PSO3	**Continuous Learning with Research Outlook**: Graduates will be endowed with life-long learning skills, critical thinking skills and research outlook
PSO4	**Entrepreneurial and ethical Leadership**: Prepare graduates for entrepreneurship, ethical leadership and social value creation
PSO5	**Corporate Jobs with Global Outlook:** Develop graduates for corporate jobs with global outlook

PROGERAM EDUCATIONAL OBJECTIVEs (PEOs) for MBA

PEO1	Develop management graduates with theoretical knowledge, skills and attitude to be effective managers
PEO2	Transform graduates for leadership and management roles in corporate world and for starting enterprises.
PEO3	Equip graduates with systems and design thinking approach to survive and excel in a *complex* and *ever*-changing *global* environment
PEO4	Imbibe a strong commitment to embrace cross cultural diversity and an entrepreneurial mindset

PRINCIPAL
PRINCIPAL
's Institute of Engg. & Technology,
Mijar, MOODBIDRI - 574 225, D.K