SASI INSTITUTE OF TECHNOLOGY & ENGINEERING (A)
KADAKATLA, TADEPALLIGUDEM-534101, W.G. Dt., (A.P)

Program Outcomes (POs),

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of Various Departments in the Institute

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Principal

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Program Outcomes (POs)

Common for all Programs

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.

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 valued conclusion.

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 practice.

PO7 Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contest and demonstrate knowledge of and need for 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 multi-disciplinary settings.

PO10 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.

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 lifelong learning in the broadest contest of technological change.

B.Tech. - Civil Engineering

Program Educational Objectives (PEOs)

1. To perform duties in private and public sector and work in a multi-disciplinary environment contributing significantly to the field of Civil Engineering.
2. Able to apply the technical knowledge to pursue a career and contribute towards research.
3. To demonstrate ability to provide innovative infrastructure solutions to society problems with a sense of integrity and ethics.

Program Specific Outcomes (PSOs)

1. Capable of effectively applying principles, techniques, skills, and modern engineering tools in the field of civil engineering and research.
2. Apply fundamental civil engineering skills to provide robust infrastructural solutions in the field of Hydraulics, Hydrology, Structural, Geotechnical, Environmental and Transportation Engineering

B.Tech. - Electrical & Electronics Engineering

Program Educational Objectives (PEOs)

1. Apply Engineering knowledge, skills and modern tools to solve real world problems in Electrical & Electronics Engineering.
2. Exhibit research capabilities to achieve success in their chosen fields with team work.
3. Succeed as engineers with lifelong learning, right attitude and ethics.

Program Specific Outcomes (PSOs)

1. Able to apply knowledge and skill sets that solve problems and develop solutions to challenges in the field of power systems, power electronics, control systems and evolving technologies.
2. Able to adapt to the contemporary advancements in technology and provide low-cost solutions to the needs of society at large.

B.Tech. - Mechanical Engineering

Program Educational Objectives (PEOs)

1. Able To Apply Multi-Disciplinary Skill Sets And Solve Engineering Problems In The Field Of Mechanical Engineering.
2. Able To Pursue Higher Education And Make Significant Contribution To Research In Emerging Technologies.
3. Contribute Significantly Towards The Wellbeing Of The Society Exhibiting Impeccable Integrity And Ethics.

Program Specific Outcomes (PSOs)

1. Thermal And Production Engineering Practice: Students Will Beable To Specify, Fabricate, Test, Operate And Document The Thermal And Production Systems Or Processes
2. Use Of AutoCAD, SOLIDWORKS And ANSYS: Students Will Beable Design, Analyse and Develop Machine Components

B.Tech. - Electronics & Communication Engineering

Program Educational Objectives (PEOs)

1. Graduates will apply the skills to recognize, articulate, and address complex problems within the realm of Electronics and Communication Engineering.
2. Graduates will gain the professional competencies to pursue a career in academia or research.
3. Graduates will be groomed to be effective leaders with a strong grounding in ethics.

Program Specific Outcomes (PSOs)

1. Apply the knowledge to design and optimize wired and wireless communication systems, embedded systems, signal and image processing, and Internet of Things (IoT) solutions.
2. Design and develop cost effective solutions to communication at higher frequency using modern simulators and latest hardware.

B.Tech. - Computer Science & Engineering

Program Educational Objectives (PEOs)

1. Graduates will enhance workplace contributions by creating sophisticated computer applications that address the dynamic requirements of society.
2. Graduates will be research oriented and industry ready professionals with a sense of intellectual and social commitment.
3. Graduates will be highly professional with unquestionable integrity and ethics

Program Specific Outcomes (PSOs)

1. Apply modern tools to analyze, design and develop computer programs/applications across diverse domains, addressing sustainability issues in society.
2. Ability to work as team in project management by professional communication and ethics.

B.Tech. - Computer Science & Technology

Program Educational Objectives (PEOs)

1. Graduates will stand out in their careers by actively contributing to the development of cutting-edge technologies in Computer Science and Technology.
2. Graduates will thrive in research and development through advanced studies in institutions of repute.
3. Graduates will actively contribute to societal progress and explore entrepreneurial ventures with a sense of integrity and ethics.

Program Specific Outcomes (PSOs)

1. Able to apply problem-solving techniques and build robust algorithms through mathematical models and use competency to develop web and mobile applications.
2. Able to exhibit diverse expertise in Cyber Security, Cloud Computing, Data Analytics and Project Management, enabling readiness for a range of industry positions.

B.Tech. - Information Technology

Program Educational Objectives (PEOs)

1. Graduate will have proficient knowledge and skills to make significant contributions in the emerging fields of information technology.
2. Graduates will pursue successful careers in information technology and allied industries, innovate and provide solutions for global needs.
3. Graduates will have an attitude towards life-long learning and practice professional ethics.

Program Specific Outcomes (PSOs)

1. Able to demonstrate a high level of proficiency in core IT skills, including programming, software development, database management, networking, and cyber security.
2. Apply technical knowledge in diverse areas of IT and provide innovative solutions to industry problems.

B.Tech. - Electronics & Communication Technology

Program Educational Objectives (PEOs)

1. Apply knowledge gained to comprehend engineering principles in the field of Electronics and Communication Technology.
2. Able to pursue highly education and excel in research to provide solution in emerging technological trends.
3. To apply lifelong learning to solve societal problem with highest level of intensify.

Program Specific Outcomes (PSOs)

1. Able to provide innovative solutions to engineering challenges in the realms of communication, signal processing, VLSI, and embedded systems.
2. Graduates will able to mathematically model, simulate and develop prototypes using modern simulators.

B.Tech. - Artificial Intelligence and Machine Learning

Program Educational Objectives (PEOs)

1. Graduates will be able to apply the domain knowledge and the technological skills to gain meaningful employment and adapt to the ever demand of technological landscape.
2. Graduates will be able to pursue and excel in higher education and research.
3. Graduates will be able to evolve as leaders exhibiting highest level of ethics.

Program Specific Outcomes (PSOs)

1. Students will be able to utilize core principles of Artificial Intelligence Engineering for the design, development and prototyping of AI Subsystems.
2. Students will be able to employ acquired knowledge in data storage, data analytics, and Machine Intelligence to address and solve practical business challenges.

PG - Master of Business Administration

Program Educational Objectives (PEOs)

1. Student will be able to apply managerial skills and make significant contribution to the work place providing real time solutions to complex problems.
2. Students will be able to pursue careers globally and contribute to research in solving complex industry problems.
3. To inculcate the habit of sense of ethical and professional attitude.

Program Specific Outcomes (PSOs)

1. Ability to apply the fundamental knowledge of management science to solve the complex business problems
2. Able to apply multidisciplinary knowledge through simulated problems, case analysis, internships, industrial training, and projects.