Program Outcomes (POs) (Engineering Course)

Engineering Learners are expected to know and 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 societal and environmental contexts, 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.

Program Specific Outcomes (PSOs) (Mechanical Engineering)

At the end of program, Mechanical engineering students will be able to:

PSO01: Professional skills – Apply the knowledge and skills in diverse domains of mechanical engineering.

PSO02:Problem solving skills – Identify, formulate, design, investigate and solve engineering problems of machine elements, thermal, manufacturing, industrial and inter-disciplinary fields by using various engineering tools to meet the needs of the industry with best quality practices.

PSO03: Successful career and Entrepreneurship – Work as a professional or to pursue higher studies and/or as an entrepreneur in the area of Thermal, Manufacturing, Design and management practices.

Program Specific Outcomes (PSOs) (Electrical Engineering)

At the end of program, Electrical engineering students will be able to:

PSO01: Develop models, analyze and assess the performance of different types of generation, transmission, distribution and protection mechanisms in power systems.

PSO02: Design, develop, analyze and test electrical and electronic systems; deploy control strategies for power electronics related applications.

PSO03: Measure, analyze, model and control the behavior of electrical quantities associated with constituents of energy or allied systems.

Program Specific Outcomes (PSOs) (Computer Engineering)

At the end of program, Computer engineering students will be able to:

PSO01: Professional Skills: Understand analyses, develop, and test the Algorithms, Software, Frameworks and Models in the domains like Multimedia, Web Design, Machine Learning, Big Data Analytics, Distributed Systems and Networking with varying complexities.

PSO02: Problem-Solving Skills: Apply standard practices, strategies and tools in software project development using open-ended programming environments to deliver a quality product for business success.

PSO03: Successful Career and Entrepreneurship: To employ modern computer languages, environments, and platforms in creating innovative career paths as an employee, an entrepreneur, and a lifelong learner.

Program Specific Outcomes (PSOs) (Information Technology)

At the end of program, Information Technology students will be able to:

PSO01: Apply the fundamentals of mathematics, science and engineering knowledge to understand, analyze and develop computer programs in the areas related to Algorithms, Multimedia, Big Data Analytics, Machine Learning, Artificial Intelligence and Networking for efficient design of IT systems of varying complexity.

PSO02: Apply appropriate techniques and modern engineering hardware and software tools for the design and integration of computer system and related technologies, to engage in lifelong learning for the advancement of technology and its adaptation in multi-disciplinary environments.

PSO03: Implementation of professional engineering solutions for the betterment of society keeping the environmental context in mind, be aware of professional ethics and be able to communicate effectively.

Program Specific Outcomes (PSOs) (Civil Engineering)

At the end of program, Civil Engineering students will be able to:

PSO01: Understand, plan, analyses, design and supervise residential, public, industrial, irrigation structures, transportation facilities and powerhouses.

PSO02: Make use of management tools, optimization and leadership techniques to complete the civil engineering projects within stipulated time and funds.

PSO03: Contribute to the society for sustainable development through environmental awareness and upholding professional ethics.

Program Outcomes (POs) (Management Course)

PO01: Generic and Domain Knowledge - Ability to articulate, illustrate, analyze, synthesize and apply the knowledge of principles and frameworks of management and allied domains to the solutions of real-world complex business issues.

PO2: Problem Solving & Innovation - Ability to Identify, formulate and provide innovative solution frameworks to real world complex business and social problems by systematically applying modern quantitative and qualitative problem solving tools and techniques.

PO03: Critical Thinking - Ability to conduct investigation of multidimensional business problems using research based knowledge and research methods to arrive at data driven decisions.

PO04: Effective Communication - Ability to effectively communicate in cross-cultural settings, in technology mediated environments, especially in the business context and with society at large.

PO05: Leadership and Team Work - Ability to collaborate in an organizational context and across organizational boundaries and lead themselves and others in the achievement of organizational goals and optimize outcomes for all stakeholders.

PO06: Global Orientation and Cross-Cultural Appreciation- Ability to approach any relevant business issues from a global perspective and exhibit an appreciation of Cross Cultural aspects of business and management.

PO07: Entrepreneurship - Ability to identify entrepreneurial opportunities and leverage managerial & leadership skills for founding, leading & managing startups as well as professionalizing and growing family businesses.

PO08: Environment and Sustainability - Ability to demonstrate knowledge of and need for sustainable development and assess the impact of managerial decisions and business priorities on the societal, economic and environmental aspects.

PO09: Social Responsiveness and Ethics - Ability to exhibit a broad appreciation of the ethical and value underpinnings of managerial choices in a political, cross-cultural, globalized, digitized, socio-economic environment and distinguish between ethical and unethical behaviors & act with integrity.

PO10: Life Long Learning – Ability to operate independently in new environment, acquire new knowledge and skills and assimilate them into the internalized knowledge and skills.

Program Specific Outcomes (PSOs) (Management Course)

PSOs for Marketing Management

PSO1: Ability to integrate concepts like product life cycle, adoption, and segmentation, branding, pricing, distribution, and market communication and use it for effective marketing decisions

PSO2: Ability to exhibit Sales professionalism

PSO3: Ability to assess how Technology & connectivity has changed human life and business in the context of real-world commodities, products & services.

PSOs for Financial Management

PSO1: Ability to use financial data to make knowledgeable decisions about the Working performance, resources apportionment and financial position of a company.

PSO2: Ability to remain updated with respect to economic reforms and financial markets **PSO3:** Ability to demonstrate knowledge of the legal framework of International Financial reporting standards, Goods and Services tax, income tax and filing of the returns.

PSOs for HR Management

PSO1: To enable students to become proficient in the key functions of Human Resource Management viz: Human resource planning, Recruitment and selection, Performance management, Learning and development, Career planning, Function evaluation, Rewards and Recognition, Industrial relations, Employee participation and communication, Health and safety, Personal wellbeing and Administrative responsibilities.

PSO2: To familiarize students with the technological interventions in Human Resource Management and the Current trends and Cases in HRM.

PSO3: To acquaint students with real time problems and their probable solutions in the areas of Organizational Behavior, Development and Diagnosis.

PSOs for Operations Management

PSO1: Ability to gain a robust perspective on Six Sigma, lean operations management, innovation, and operational leadership.

PSO2: Ability to be expert in economic order quantity, inventory classification and other inventory management techniques.

PSO3: Ability to understand and process internal and external customer needs within the quality framework

Program Specific Outcomes (PSOs) (Electronics & Computer Engineering)

At the end of program, Electronics & Computer Engineering students will be able to:

PSO1. An ability to identify, formulate and solve real world problems based on sound knowledge of hardware and software aspect of engineering systems.

PSO2. An ability to design electronics circuits, apply programming skills to develop software for embedded systems, IoT applications, desktop and web applications, conduct experiments, analyze and interpret data.

PSO3. Skill to use modern tools, instruments, equipment, integrated development environments, compilers and application softwares.