Program Outcomes (POs)

Engineering Graduates will be able to:

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 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 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: **Lifelong 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 (PSO's)

Department of Information Technology

PSO1: Graduate will demonstrate an ability to identify, formulate & solve computer science and Information Technology Engineering problems.

PSO2: Graduate will demonstrate an ability to investigate, design and develop software programs, analyze & interpret the data and work on multidisciplinary projects.

PSO3: Graduate who can pursue higher studies or get placed in Computer Science and IT based companies

Computer Engineering

PSO1: Ability to select and apply appropriate open source tools to complex engineering activities, with an awareness of the assumptions and limitations.

PSO2: Ability to developed Hardware and IOT based solutions for the Societal Problem.

PSO3: Ability to learn and Apply Industry 4.0 Technology and standards such as Artificial Intelligence, Machine Learning, Deep Learning, Data Analytics, Big Data and High-Performance Computing.

Electronics & Telecommunication

PSO1: Graduate will be able to demonstrate in depth understanding of Signal Processing, Communication, VLSI & Embedded and Semiconductor technology concepts.

PSO2: Graduate will be able to apply the knowledge of Semiconductor technology, Software & Hardware tools, Signal processing, Embedded and Communication to arrive at solutions to real world problems.

Mechanical Engineering

PSO1: Ability to identify, formulate and solve engineering problems in three core streams of Mechanical Engineering, i.e. design engineering, thermal and fluids engineering and manufacturing engineering

PSO2: Ability to design, develop and test an energy efficient system for required engineering application

PSO3: Ability to use CAD/CAM/CAE/Computational tools to solve engineering problems.

PSO4: Ability to represent and read an engineering idea physically by means of a 2D / 3D drawing.

PSO5: Ability to prepare and execute the plan to manufacture components / assembly.