

Programme Outcomes:

Engineering Graduates will be able to:

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multi disciplinary settings.
- 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.
- 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 multi disciplinary environments.

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:-

Electronics and Telecommunication

- PSO.1 Professional Skills: An ability to recognize the basic concepts in Electronics & Telecommunication Engineering and to apply them to various areas, like Signal processing, Embedded systems in the design and implementation of systems
- PSO.2 Problem-Solving Skills: An ability to solve complex Electronics and Telecommunication Engineering problems using latest hardware and software tools, along with analytical skills to arrive cost effective and appropriate solutions
- PSO.3 Demonstrate Communication System: Demonstrate concept of data communication networking, OFC networking and wireless technology in various situations, and develop ability to classifying networks, analyzing performance and implementing new communication technologies.
- PSO.4 System Design and implementation: Design embedded system using the domain knowledge in Electronics & Telecommunication engineering and implements the same on embedded platform.

Computer Science and Engineering:

- PSO.1 Engineering Graduates will demonstrate an ability to identify, formulate & solve problems related to computer science and engineering.
- PSO.2 Engineering Graduates will demonstrate an ability to investigate, design and develop software's for industrial and social needs.
- PSO.3 Engineering Graduates will be able to analyze and interpret data so as to work on multidisciplinary projects.
- PSO.4 Engineering Graduates will be able to pursue higher studies or get placed in IT based companies or Government organizations.

Instrumentation Engineering

- PSO.1 Empowered with the design & analysis of basic and advanced Instrumentation concepts & techniques.
- PSO.2 Specify, design, implement and test electronic analog and digital signal processing systems.
- PSO.3 Able to apply the concepts of Automation and controls learnt, by selecting suitable hardware and software tools, to design, develop & simulate for providing industrial solutions and become technology leaders of the future.
- PSO.4 Capable of developing unique & sustainable engineering solutions through execution of inter-disciplinary projects, better documentation and presentation skill sets, with a motive to contribute towards the improvement of industries and environment, by ethical means.

Information Technology

- PSO.1 Engineering Graduates will demonstrate an ability to identify, formulate & solve problems related to Information Technology
- PSO.2 Engineering Graduates will demonstrate an ability to analyze, design and develop software for industrial and social needs.
- PSO.3 Engineering Graduates will be able to analyze and interpret data so as to work on multidisciplinary projects.
- PSO.4 Engineering Graduates will able to pursue higher studies or get placed in IT based companies or Government organizations.

Department of Civil Engineering

- PSO.1 Professional Knowledge:
To educate students in a manner that they should acquire knowledge in mathematics, science and engineering fundamentals to serve the society
- PSO.2 Design capability:
To provide relevant engineering solutions in planning, analyzing, designing and execution of civil engineering projects
- PSO.3 Higher Studies:
To prepare students to pursue post graduation and research in civil engineering and allied fields
- PSO.4 Professionalism:
To train students so that they can consult, work and contribute to the infrastructural development projects under taken by government and private sector by adapting modern trends in civil engineering.

Department of Mechanical Engineering

- PSO.1 Engineering graduates will be able to identify, formulate, analyze and provide technological solution to real life problems.
- PSO.2 Engineering graduates will be able to work in thermal, manufacturing, design and allied industry.
- PSO.3 Engineering graduates will be prepared to pursue post-graduation and research in Mechanical Engineering.