PROGRAM OUTCOMES, PROGRAM SPECIFIC OUTCOMES AND COURSE OUTCOMES FOR ALL PROGRAMS OFFERED BY THE INSTITUTION

PROGRAM OUTCOMES (POs): Common to all branches of Engineering

1	**Engineering Knowledge:** Apply the knowledge of basic sciences and engineering fundamentals to solve engineering problems.
2	**Problem Analysis:** Analyze the complex engineering problems and give solutions related to chemical & allied industries.
3	**Design/ development of solutions:** Identify the chemical engineering problems, design and formulate solutions to solve both industrial & social related problems.
4	**Conduct investigations of complex problems:** Design & conduct experiments, analyze and interpret the resulting data to solve Chemical Engineering problems.
5	Modern tool usage: Apply appropriate techniques, resources and modern engineering & IT tools for the design, modeling, simulation and analysis studies.
6	**The engineer and society:** Assess societal, health, safety, legal and cultural issues and their consequent responsibilities relevant to professional engineering practice.
7	**Environment and sustainability:** Understand the relationship between society, environment and work towards sustainable development.
8	Ethics: Understand their professional and ethical responsibility and enhance their commitment towards best engineering practices.
9	**Individual and team work:** Function effectively as a member or a leader in diverse teams, and be competent to carry out multidisciplinary tasks.
10	**Communication:** Communicate effectively in both verbal & non-verbal and able to comprehend & write effective reports.
11	**Project management and finance:** Understand the engineering and management principles to manage the multidisciplinary projects in whatsoever position they are employed.
12	**Life-long learning:** Recognize the need of self education and life-long learning process in order to keep abreast with the ongoing developments in the field of engineering.

PROGRAM SPECIFIC OUTCOMES (PSOs)

Department of Chemical Engineering

1	The graduate will be competent in applying basic sciences & Chemical engineering principles to multi-disciplinary fields namely biotechnology
2	2The graduate will be able to apply the technical knowledge to solve the problems of chemical allied industries and society

Department of Civil Engineering

1	**Civil Engineering Knowledge:** Analyse & design solutions to complex problems by applying fundamentals of sciences and civil engineering in one or more of its major areas such as structural, geo-technical, water resources, transportation and environmental engineering.
2	**Conduct investigations of complex civil engineering problems:** Use modern techniques and tools to design and conduct experiments, prepare and interpret plans and reports with valid conclusions and recommendations.
3	**Civil engineer and society:** Develop civil engineering solutions based on societal, health, safety, legal, cultural and environmental considerations for sustainable development.

Department of Computer Science & Engineering

1	Programming and software Development skills: Ability to acquire programming efficiency to analyze, design and develop optimal solutions, apply standard practices in software project development to deliver quality software product.
2	Computer Science Specific Skills: Ability to formulate, simulate and use knowledge in various domains like data engineering, image processing and information and network security, artificial intelligence etc., and provide solutions to new ideas and innovations.

Department of Electrical Electronics & Engineering

1	Design modern power system components to meet the identified needs within economical and environmental constraints.
2	Design, simulation, fabrication and testing of power switching devices, electrical drives and their control for industrial and research applications.

Department of Electrical Electronics & Engineering

1	Design & Implement several Image & signal processing techniques using modern tools.
2	Design and analyze Communication systems using emerging techniques.
3	Solve real time problems with expertise in Embedded Systems.

Department of Information Technology

1	The ability to analyze, design and develop computer based information systems leveraging the concepts of computing techniques, data analytics, software engineering and networking.
2	The ability to apply the knowledge of computing skills in building the Software Systems that meet the requirements of Industry and Society.

Department of Mechanical Engineering

1	The student will be able to apply the principles of mathematics, sciences and engineering fundamentals to formulate, review & analyze the problems in the fields of manufacturing and machine design.
2	The student will be able to develop solutions through experimental investigation & simulation using modern software tools & further analyze the data obtained to arrive at valid conclusions in manufacturing & machine design streams.