

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To be well familiar with the concepts of Civil Engineering for leading a successful career in industry or as entrepreneur or to pursue higher education.

PEO2: To develop techno-commercial skills for providing effective solutions to complex problems using domain knowledge of Civil Engineering.

PEO3: To instill lifelong learning approach towards constantly evolving technologies with innovative and ethical mindset.

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, 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 public health and safety and cultural, societal and environmental considerations.

PO4: CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS: The problems:

- that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline.
- that may not have a unique solution.
- that requires consideration of appropriate constraints/requirements not explicitly given in the problem statement.
- which need to be defined (modeled) within appropriate mathematical framework.



• that often require use of modern computational concepts and tools.

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: 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 the 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 life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Ability to apply the civil engineering knowledge for proposing solutions to real world problems through incubation of innovative ideas.

PSO2: To understand modern management and construction techniques to complete projects within stipulated time and budget.



Department of Computer Science and Engineering

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To be well familiar with the computer science and engineering concepts for leading a successful career in industry or as entrepreneur or to pursue higher education.

PEO2: To develop techno-commercial skills for providing effective solutions to complex problems using domain knowledge of computer science.

PEO3: To instill lifelong learning approach towards constantly evolving technologies with innovative and ethical mindset.

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, 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 public health and safety and cultural, societal and environmental considerations.

PO4: CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS: Use researchbased 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.



Department of Computer Science and Engineering

PO6: 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 the 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 life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: The ability to design and develop effective application based solutions and analyzes their associated risks.

PSO2: To develop the ability to solve large complex evolving projects using cutting edge technologies and modern tools.



ENGINEERING Department of Electronics and **Communication Engineering**

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

familiar with the fundamentals of Electronics **PEO1:** To be well and Communication Engineering for leading a successful career in industry or as entrepreneur or to pursue higher education.

PEO2: To develop techno-commercial skills to provide innovative solutions to complex problems related to Electronics and Communication areas.

PEO3: To instill life-long learning approach towards constantly evolving technologies with innovative and ethical mindset.

PROGRAM OUTCOMES (POs)

ENGINEERING GRADUATES WILL BE ABLE TO:-

PO1: ENGINEERING KNOWLEDGE: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.

PO2: PROBLEM ANALYSIS: Identify, formulate, 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 public health and safety, and cultural, societal, and environmental considerations.

PO4: CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS: The problems:

- that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline.
- that may not have a unique solution.
- that requires consideration of appropriate constraints/requirements not explicitly given in the problem statement.
- which need to be defined (modeled) within appropriate mathematical framework.
- that often requires use of modern computational concepts and tools.



Department of Electronics and Communication Engineering

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: 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 the 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 life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Ability to apply the engineering knowledge in the areas of embedded systems, robotics, virtual instrumentation and signal processing to develop solutions to complex real world problems.

PSO2: Demonstrate ideas and follow methodologies using cutting-edge technologies for product development, starting from lowest level of physical devices to the top level of application development.



Department of Electrical and Electronics Engineering

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To be well equipped with the Electrical and Electronics Engineering concepts to design, analyze and optimize the solutions for energy sector challenges and leading a successful career.

PEO2: To develop techno-commercial skills for providing efficient and viable solutions to complex problems, using the domain knowledge of Electrical and Electronics Engineering.

PEO3: To instill lifelong learning approach towards constantly evolving technologies with innovative and ethical mindset.

PROGRAM OUTCOMES (POs)

ENGINEERING GRADUATES WILL BE ABLE TO:-

PO1: ENGINEERING KNOWLEDGE: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.

PO2: PROBLEM ANALYSIS: Identify, formulate, 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 public health and safety, and cultural, societal, and environmental considerations.

PO4: CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS:

The problems:

- that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline.
- that may not have a unique solution.
- that requires consideration of appropriate constraints/requirements not explicitly given in the problem statement.



Department of Electrical and Electronics Engineering

- which need to be defined (modeled) within appropriate mathematical framework.
- that often requires use of modern computational concepts and tools.

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: 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 the 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 life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: The ability to implement Electrical and Electronics Engineering concepts in the field of Industrial Automation, Solar Energy and Smart Cities.

PSO2: To develop the ability to solve large complex evolving projects using cutting edge technologies and modern tools.



Department of Masters in Business Administration

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Analytical skills for effective decision making and resolving business problems related both to Indian and Global competitive environment and business practices.

PEO2: Collaborative working, team work and leadership skills that results in effective business and professional communication skills

PEO3: Entrepreneurial skills Ethical, social and legal conscientiousness of the organization.

PROGRAM OUTCOMES (POs)

MANAGEMENT GRADUATES WILL BE ABLE TO:-

PO1: Apply knowledge of management theories and practices to solve business problems.

PO2: Foster Analytical and critical thinking abilities for data-based decision making.

PO3: Ability to develop Value based Leadership ability.

PO4: Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.

PO5: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

PO6: Demonstrate knowledge and understanding of the 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.



Department of Masters in Business Administration

PO7: 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.

PO8: Apply ethical principles and commit to professional ethics and responsibilities and function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Students should exhibit their knowledge of management principles, demonstrate their critical-thinking and problem solving skills and manifest their leadership qualities.

PSO2: Students should prove an awareness of their own values, shows sense of responsibility and should evince their ability to recognize when change is needed and adapt to change.



Department of Mechanical Engineering

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To be well familiar with the concepts of Mechanical Engineering for leading a successful career in industry or as entrepreneur or to pursue higher education.

PEO2: To develop techno-commercial skills for providing effective solutions to complex problems using domain knowledge of Mechanical Engineering.

PEO3: To instill lifelong learning approach towards constantly evolving technologies with innovative and ethical mindset.

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, 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 public health and safety and cultural, societal and environmental considerations.

PO4: CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS: The problems:

- that cannot be solved by straightforward application of knowledge, theories and techniques applicable to the engineering discipline.
- that may not have a unique solution.
- that requires consideration of appropriate constraints/requirements not explicitly given in the problem statement.
- which need to be defined (modeled) within appropriate mathematical framework.



Department of Mechanical Engineering

• that often require use of modern computational concepts and tools.

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: 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 the 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 life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Ability to apply the engineering knowledge in the areas of pneumatics, electro-pneumatics, robotics, automation, additive manufacturing and laser cutting to develop solutions to complex real world problems.

PSO2: To develop the ability to solve large complex evolving projects using cutting edge technologies and modern tools.