



Department of Civil Engineering

Programme Outcome (POs) for U.G. Programme

- Engineering knowledge: Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems
- 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
- 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
- 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.
- 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.
- 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.
- 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.
- Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 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.
- 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.
- 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.



Department of Computer Science & Engineering

Programme Outcome (POs)

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- **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.
- **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.
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- **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **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.
- **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.
- **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.



Department of Electrical Engineering

Programme Outcome (POs)

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- **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.
- **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.
- **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.
- **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.
- **Environment and sustainability:** Understand the impact of the professional engineering solution in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **Ethics:** Apply ethical principles and commitment to professional ethics and responsibilities and norms of the engineering practice.
- **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **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.
- **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.
- **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.



Department of Electrical and Electronics Engineering

Programme Outcome (POs)

- **Engineering Knowledge:** Ability to apply the knowledge of Mathematics, Science and Engineering principles for modeling, analyzing and solving electrical and electronics engineering problems.
- **Problem Analysis:** Ability to identify, formulate and solve problems related to Electrical and Electronics Engineering in the broad areas like Electrical Machines, Power Electronics, Power Systems, Control System, Analog and Digital Electronics, Signal Processing and Instrumentation
- **Design/Development of Solutions:** Configure recent hardware and software tools, apply test conditions, and deploy the solutions on electrical and electronics circuits.
- **Conduct Investigations of Complex Problems:** Ability to design and develop sophisticated equipments and experimental systems for carrying out detailed investigations
- **Modern Tool Usage:** Design and utilize modern engineering tools and softwares for modeling, analyzing and solving Electrical and Electronics Engineering problems.
- **The Engineer and Society:** Apply reasoning informed by the contextual knowledge and identify solutions to various local, global, environmental problems faced by the society.
- **Environment and Sustainability:** Ability to design and develop modern systems of Electrical and Electronics Engineering and understand its impact on health, safety, cultural issues, environment and society for sustainable development.
- **Ethics:** Apply ethical principles, social values and practice the norms of the engineering.
- **Individual and Team Work:** Ability to think independently; function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **Communication:** Ability to communicate effectively, write reports and design documentation and make effective presentations using available techniques
- **Project Management and Finance:** Demonstrate knowledge and understanding of Engineering resource management, Project management with optimum economics in multidisciplinary environments
- **Life-Long Learning:** Recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.



Department of Electronics and Telecommunication

Programme Outcome (POs)

- **Engineering knowledge:** An ability to apply knowledge of Mathematics, Science, and Engineering.
- **Problem analysis:** An ability to identify, formulate, and solve engineering problems.
- **Design/development of solutions:** An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
- **Conduct investigations of complex problems:** An ability to design and conduct experiments, as well as to analyze and interpret data.
- **Modern tool usage:** An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- **The engineer and society:** Apply knowledge of contemporary issues to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice
- **Environment and sustainability:** The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
- **Ethics:** An understanding of professional and ethical responsibility.
- **Individual and team work:** An ability to effectively work as a team member and function on multidisciplinary teams.
- **Communication:** An ability to communicate complex engineering concepts within the profession and with society at large. Such ability includes reading, writing, speaking and listening, and the ability to comprehend and write effective reports and design documentation, and to give and effectively respond to clear instructions.
- **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 interdisciplinary environments.
- **Life-long learning:** Recognition of the need for, and an ability to engage in life-long learning.



Department of Information Technology Engineering

Programme Outcome (POs)

- **Engineering knowledge:** Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **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.
- **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.
- **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.
- **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.
- **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.
- **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.
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- **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.
- **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.



Department of Mechanical Engineering

Programme Outcome (POs)

- **Engineering knowledge:** Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
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Department of Humanities

Programme Outcome (POs)

- **Engineering knowledge:** Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
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Department of Applied Mathematics

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Department of Applied Chemistry

Programme Outcome (POs)

- **Engineering knowledge:** Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
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Department of Applied Physics

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- **Engineering knowledge:** Apply the knowledge of Mathematics, Science, Engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
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Department of Master of Business Administration (MBA)

Programme Outcome (POs)

- **Business Environment and Domain Knowledge (BEDK):** Economic, legal and social environment of Indian business. Graduates are able to improve their awareness and knowledge about functioning of local and global business environment and society. This helps in recognizing the functioning of businesses, identifying potential business opportunities, evolution of business enterprises and exploring the entrepreneurial opportunity.
- **Critical thinking, Business Analysis, Problem Solving and Innovative Solutions (CBPI):** Competencies in quantitative and qualitative techniques. Graduates are expected to develop skills on analysing the business data, application of relevant analysis, and problem solving in other functional areas such as marketing, business strategy and human resources.
- **Global Exposure and Cross-Cultural Understanding (GECCU):** Demonstrate a global outlook with the ability to identify aspects of the global business and Cross Cultural Understanding.
- **Social Responsiveness and Ethics (SRE):** Developing responsiveness to contextual social issues / problems and exploring solutions, understanding business ethics and resolving ethical dilemmas. Graduates are expected to identify the contemporary social problems, exploring the opportunities for social entrepreneurship, designing business solutions and demonstrate ethical standards in organizational decision making. Demonstrate awareness of ethical issues and can distinguish ethical and unethical behaviors.
- **Effective Communication (EC):** Usage of various forms of business communication, supported by effective use of appropriate technology, logical reasoning, articulation of ideas. Graduates are expected to develop effective oral and written communication especially in business applications, with the use of appropriate technology (business presentations, digital communication, social network platforms and so on).
- **Leadership and Teamwork (LT):** Understanding leadership roles at various levels of the organization and leading teams. Graduates are expected to collaborate and lead teams across organizational boundaries and demonstrate leadership qualities, maximize the usage of diverse skills of team members in the related context.



Department of Master of Computer Science

Programme Outcome (POs)

- Student will have analytic and computer science foundation, learn fundamental computing and mathematical functions and understand how these technologies and functions integrate into Information Communication & Technology and business environment.
- Students will have the ability to recognize and formulate the problem statement.
- Students will exhibit the skills to analyze and design system by using formal methods as per industry standards.
- Student will have ability to coordinate and work in teams and manage projects in multidisciplinary environment.
- Students will have ability to implement & deploy software as per user's requirement.
- Students will have familiarity with latest tools and techniques to be used during problem solving process.
- Students will gain professional knowledge and learn ethical responsibilities.
- Students will develop effective verbal and written communication skills, as well as soft skills.
- Students will keep on updating oneself by indulging into self-directed learning and conduct investigation of complex computing problem.
- Students will participate and succeed in competition.
- Students will have the confidence to apply computer based solutions and its contemporary issues in global and societal context, as well as entrepreneurship.