Computer Science and Engineering Department

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To acquire a deep insight in mathematical, scientific & analytical skills and adopt self-motivating lifelong learning to explore cutting edge technologies.

PEO2: To evolve as responsible citizen having sense of ethics and environment aware attitude.

PEO3: To acquire necessary technical knowledge to pursue successful professional career posing leadership and team spirit.

PROGRAM OUTCOMES (POs)

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 the 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 diverse teams, and in multidisciplinary 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 multidisciplinary 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 (PSOs)

PSO1: Ability to demonstrate the comprehended fundamentals of computer engineering to resolve mathematical and computational problems.

PSO2: Ability to explore evolutionary changes in computing by skills acquired through computer engineering principles and provide solution through innovative ideas.

PSO3: Ability to imbibe knowledge in modern computer environment and languages to gain additional skills for successful career and higher studies.

Information Technology Department

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: Graduates of IT program are prepared to be employed in IT industries and be engaged in learning, understanding, and applying new ideas.

PEO2: The graduates are prepared to perform effectively as individuals and team members in the workplace, growing into highly technical or project management and leadership roles.

PEO3: Graduates are prepared to apply basic principles of practices of computing grounded in mathematics and science for successfully completing software related projects to satisfy customer business objectives and productively engage in research.

PEO4: Graduates are prepared to pursue higher studies so that they can contribute to the teaching profession/research and development of information technology and other allied fields.

PROGRAM OUTCOMES (POs)

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.

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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 team work**: Function effectively as an individual, and as a member or leader indiverse teams, and in multidisciplinary 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 multidisciplinary 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 (PSOs)

PSO1: Ability to understand the principles and working of hardware and software aspects in information technology.

PSO2: Ability to explore and develop innovative ideas to solve real world problem using IT skills.

Electronics & Communication Engineering Department

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To produce ECE graduates with strong foundation in engineering and technology for personal and professional growth.

PEO2: To prepare the graduates who will be able to serve/lead various organizations with acquired skills and knowledge.

PEO3: To prepare the graduates who would attain professional competence through life-long learning in higher studies, research work and other professional activities.

PEO4: To prepare the graduates who will practice their profession with ethics, integrity and social responsibility in global context.

PROGRAM OUTCOMES (POs)

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.

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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 team work**: Function effectively as an individual, and as a member or leader indiverse teams, and in multidisciplinary 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 multidisciplinary 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 (PSOs)

PSO1: Apply fundamentals of basic sciences and Electronics & Communication Engineering to develop core and multidisciplinary technology for industrial and societal needs.

PSO2: Apply the acquired technical knowledge for successful professional career in the field of Electronics & Communication Engineering and qualifying in various competitive examinations held at national and international level.

Electrical & Electronics Engineering Department

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

PEO1: To equip the students of Electrical and Electronics Engineering with fundamental knowledge of science and technology to excel in their career or pursue higher studies.

PEO2: To inculcate creative, analytical and critical reasoning skills for real world challenges.

PEO3: To contribute to society with professional and social ethics.

PEO4: To instill the students with soft skills, team work skills, leadership qualities and lifelong learning for successful career.

PROGRAMME OUTCOMES (POs)

Engineering Graduates will be able to:

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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.

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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 multidisciplinary 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 (PSOs)

PSO1: Apply the principles of basic sciences and Electrical and Electronics Engineering to design, analyze and solve problems in the core/multi-disciplinary areas.

PSO2: Apply the acquired technical knowledge for pursuing higher studies and successful professional career in the field of Electrical and Electronics Engineering.