Institute Vision

To be an institute of eminence, to produce highly skilled, globally competent technocrats.

Institute Mission

- ✓ Providing high quality, real world, industry relevant, career oriented, professional education to rural students towards their excellence and growth.
- ✓ Serving as a center of technical excellence, creating globally competent, human resources with ethical and moral values.

DEPARTMENT OF CSE

Department Vision

Strive to be a center of eminence for developing holistic computer science professionals.

Department Mission

- To contribute to the advancement of knowledge, in both fundamental and applied areas of Computer Science Engineering.
- To promote a sense of excitement among the students in research, design, development and entrepreneurship.
- To nurture communication skills, leadership, ethics and entrepreneurship among students' for their sustained growth.
- To forge mutuality beneficial relationship with industries and governmental entities to develop sustainable computing solutions for the benefits of the society.

PROGRAMME EDUCATIONALOBJECTIVE

PEO1: Acquire, Apply and exhibit the skills required to design, develop and implement solutions for real life problems.

PEO2: Excel in professional career, higher education and research.

PEO3: Demonstrate professionalism, entrepreneurship, ethical behavior, communication skills and collaborative team work to adapt the emerging trends by engaging in lifelong learning.

PROGRAMME OUTCOMES

PO 1.Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO 2.Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO 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.
PO 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.

PO 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.
PO 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
PO 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.
PO 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO 9. Individual and team work: Function effectively as an individual, and as amember or leader in diverse teams, and in multidisciplinary settings.
PO 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.
PO 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.
PO 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

PSO1: An ability to qualify in National Level Competitive examinations for successful higher studies and employment.

PSO2:An ability to deal with real time models, languages and operating system.

Vision

To be a Center of eminence for quality education and knowledge in civil engineering and technology, to produce globally competent, ethically strong engineers, who can contribute to our Nation through their innovation and creativity

Mission

M1 - Providing exemplary learning environment and quality professional education to produce highly competent, technically sound civil engineers.

M2 - Providing ample opportunities to learn moral and ethical values to serve the society and nation.

M3 - To forge mutuality beneficial relationship with industries and governmental entities to address issues related to infrastructure, public health and environmental protection for sustainable development.

PROGRAMME EDUCATIONALOBJECTIVE

The graduates of Civil Engineering shall have:

PEO1: PREPARATION: Sound foundation in mathematical and scientific courses which are necessary prerequisites for a clear and sound understanding of Civil Engineering as a whole.

PEO2: CORE COMPETENCE: Construction plans, designs, constructs and maintains physical infrastructures; ensures compliance with relevant building codes, standards and safety regulations.

PEO3: BREADTH: Comprehensive and balanced understanding of the several domains of Civil Engineering to create innovative products and solutions for the real life problems.

PEO4: PROFESSIONALISM: Understanding of professionalism, ethics, quality performance, sustainability and allow them to be professional leaders and contributors to society through their problem solving capabilities and executing the work.

PEO5: LIFELONG LEARNING: Exhibit interest in lifelong learning including studies leading to professional degree or higher studies in engineering that provides continuous development of technical ability and management skills.

PROGRAMME OUTCOMES

PO 1.Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2.Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 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.

PO 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.

PO 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.

PO 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

PO 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.

PO 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 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.

PO 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.

PO 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

PSO1: An ability to work on projects towards infrastructure development, environment and sustainability.

PSO2: Capable of qualifying in national level competitive examinations for successful higher studies and employment.

VISION

To be a Centre of Eminence in Electrical and Electronics Engineering to produce technically competent professionals.

MISSION

1. To provide vibrant learning environment and resources to achieve student's personal and professional growth.
2. To make rural students professionally skillful and intellectually proficient and to promote a sense of excitement among the students in research, design, development and entrepreneurship.
3. To nurture communication skills, leadership, ethics and entrepreneurship among student's for their sustained growth.
4. To forge mutuality beneficial relationship with industries and governmental entities to develop sustainable solutions for the benefits of the society.

PROGRAMME EDUCATIONALOBJECTIVE

The graduates of Electrical and Electronics Engineering shall:

PEO1: Excel in chosen career by utilizing the knowledge acquired through the program.

PEO2: Demonstrate technical competence in solving engineering problems that are economically feasible and socially acceptable.

PEO3: Exhibit professionalism, ethical attitude, communication skills, team work and adapt to Current trends by engaging in lifelong learning.

PROGRAMME OUTCOMES

PO 1.Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO 2.Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO 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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PO 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
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PO 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.
PO 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

PSO1: A competence in one or more technical specialties that meet the needs of Silicon Valley companies.

PSO2: Ability to find appropriate solutions, conclusions or approaches to electrical problems.

Department of Mechanical Engineering

DEPARTMENT – VISION & MISSION

VISION

To emerge as a Center of Eminence in Mechanical Engineering to produce quality mechanical engineering graduates who are globally competent with innovation and creativity
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MISSION

M1: To provide vibrant learning environment and resources to achieve student's personal and professional growth.

M2: To make rural students professionally skillful and intellectually proficient and promote a sense of excitement among the students in research, design, development and entrepreneurship.

M3: To nurture communication skills, leadership, ethics and entrepreneurship among student's for their sustained growth

PROGRAMME EDUCATIONAL OBJECTIVES

PEO1: **PREPARATION:** To acquire new knowledge and expertise through professional development opportunities or advanced education

PEO2: CORE COMPETENCE: To practice Mechanical Engineering in a broad range of industries

PEO3: BREADTH: To get engaged in workplace, professional or civic communities.

PEO4: PROFESSIONALISM: To conduct themselves in a responsible, professional and ethical manner.

PEO5: LIFELONG LEARNING: To pursue advanced education, research and development and other creative and innovative efforts in Science, Engineering and technology, as well as other professional careers

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PROGRAM OUTCOMES (POs)
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PROGRAM SPECIFIC OUTCOMES (PSOs)

PROGRAM OUTCOMES (POs)

PO.1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO.2. Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO.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.

PO.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.

PO.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.

PO.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.

PO.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.

PO.8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO.9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO.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.

PO.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.

PO.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)

PSO.1 Shall have the responsibility of optimum design, development and implement of solutions in the view of sustainability and environmental issues**.**

PSO.2 . Capable of qualifying in national level competitive examinations for successful higher studies and employment.

Department of Electronics & Communication of Engineering

VISION

To be a Center of eminence in electronics and communication engineering and to produce highly skilled, competent professionals who can contribute to our Nation through their innovation and creativity.

MISSION

1. To impart quality electronics and communication Engineering Education through quality infrastructure and environment to equip students with fundamental and advanced knowledge.
2. Strengthening of soft skills of students especially those coming from rural arena, through curricular, co-curricular and extra-curricular activities.
3. To promote a sense of excitement among the students in research, design, development and entrepreneurship.
4. To nurture communication skills, leadership, ethics and entrepreneurship among student's for their sustained growth.
5. To forge mutuality beneficial relationship with industries and governmental entities to develop sustainable solutions for the benefits of the society.

PROGRAMME EDUCATIONALOBJECTIVE

The graduates of Electronics and Communication Engineering shall:

PEO1: Acquire, Apply and exhibit the skills required to design, develop and implement solutions for real life problems.

PEO2: Excel in professional career, higher education and research.

PEO3: Demonstrate professionalism, entrepreneurship, ethical behavior, communication skills and collaborative team work to adapt the emerging trends by engaging in lifelong learning.

PROGRAMME OUTCOMES

PO 1.Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO 2.Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
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projects and in multidisciplinary environments.
PO 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

PSO1: Capable of qualifying in national level competitive examinations for successful higher studies and employment.
PSO2: An ability to deal with real-time models, languages and operating systems.
PSO3: An ability to take challenges associated with implementations of adhoc and sensor network applications.