



# THEEM COLLEGE OF ENGINEERING DEPARTMENT OF AUTOMOBILE ENGINEERING

## Program Outcomes PO

Engineering Graduates will be able to:

**PO1. Engineering Knowledge:** Apply the knowledge of science, mathematics, engineering fundamentals and engineering specialization for research, innovation and solving automobile engineering problems.

**PO2. Problem Analysis:** Use the basic principles of natural science, mathematics and engineering for identifying and analyzing the automobile engineering problems to reach the suitable conclusions.

**PO3. Design/Development of Solutions:** Design solutions for automobile engineering problems to meet the specified needs with appropriate consideration to the environment, public health and safety.

**PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge including design of experiments, interpretation and synthesis of information to provide conclusions.

**PO5. Tool Usage:** Select the appropriate techniques,

resources, modern engineering including modelling and prediction for automobile engineering activities with an understanding of the limitations.

**PO6. The Engineer and Society:** Apply reasoning and logical thinking relevant to automobile engineering with understanding of consequent responsibilities towards societal, health, safety, legal and cultural issues.

**PO7. Environment and Sustainability:** Understand the cause of professional engineering solutions in societal and environmental contexts to conserve suitable environment for sustainable development.

**PO8. Ethics:** Apply ethical principles, commit to professional ethics and responsibilities and norms of the automobile engineering.

**PO9. Individual and Teamwork:** Function effectively as an individual or as a member or leader in diverse teams and in multidisciplinary settings.

**PO10. Communication:** Communicate effectively with engineering community in automobile engineering activities, be

able to comprehend, write effective reports, design documentations and make effective presentation with clear instructions.

**PO11. Project Management and Finance:** Manage projects in multidisciplinary environment with the skill of handling monetary resources in one's own work.

**PO12. Life-long Learning:** Recognize the need for life-long learning in the broadest context of technological change.

## Program Specific Outcomes PSO

**PSO1.** Engineering Graduates will be able to utilize the principles of designing, machine manufacturing and thermal engineering to meet the automobile engineering requirements.

**PSO2.** Engineering Graduates will be able to provide sustainable solution to automobile engineering problems.



## THEEM COLLEGE OF ENGINEERING

# DEPARTMENT OF CIVIL ENGINEERING

### Program Outcomes PO

#### Engineering Graduates will be able to:

- PO1. Engineering Knowledge:** Apply the knowledge of science, mathematics, engineering fundamentals and engineering specialization for research, innovation and solving civil engineering problems.
- PO2. Problem Analysis:** Use the basic principles of natural science, mathematics and engineering for identifying and analyzing the civil engineering problems to reach suitable conclusions.
- PO3. Design/Development of Solutions:** Design solutions for civil engineering problems to meet the specified needs with appropriate consideration to the environment, public health and safety.
- PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge including design of experiments, data interpretation and synthesis of the information to provide valid conclusions.
- PO5. Modern Tool Usage:** Select the appropriate techniques,

resources, modern engineering technology including modeling and prediction for civil engineering activities with an understanding of the limitations.

- PO6. The Engineer and Society:** Apply reasoning and logical thinking relevant to civil engineering with understanding of consequent responsibilities towards societal, health, safety, legal and cultural issues.
- PO7. Environment and Sustainability:** Understand the impact of professional engineering solutions in societal and environmental contexts to conserve suitable environment for sustainable development.
- PO8. Ethics:** Apply ethical principles, commit to professional ethics and responsibilities and norms of the civil engineering.
- PO9. Individual and Teamwork:** Function effectively as an individual or as a member or leader in diverse teams and in multidisciplinary settings.
- PO10. Communication:** Communicate effectively with engineering community in civil engineering activities,

be able to comprehend and write effective reports, design documentations to make effective presentation with clear instructions.

- PO11. Project Management and Finance:** Manage projects in multidisciplinary environment with the skill of handling monetary resources in one's own work.
- PO12. Life-long Learning:** Recognize the need for life-long learning in the broadest context of globally changing and challenging environment.

### Program Specific Outcomes PSO

- PSO1.** Engineering Graduates will be able to utilize the principles, methods and code of practice to excel in the area of drawing, designing and analysis related to civil engineering system.
- PSO2.** Engineering Graduates will be able to provide sustainable solution to civil engineering problems.



*Vision*

“To become a center of excellence in information technology discipline and to create technically capable and intellectual IT professionals.”

*Mission*

- » To nurture an effective teaching-learning process to provide in-depth knowledge of principles and its applications pertaining to information technology
- » To provide an environment to students and faculty for continuous-learning to apply and explore the knowledge to meet global challenges
- » To inculcate creative thinking through industry sponsored projects and innovative exercises to become employable

*Program Educational Objectives*

- PEO1.** To provide wide knowledge of mathematics, science, basic computing engineering to pursue advanced study for research.
- PEO2.** To impart core professional skills with latest technologies for immediate employment.
- PEO3.** To prepare students to identify, formulate and solve IT problems.
- PEO4.** To inculcate ethical values, interpersonal skills, leadership qualities to become successful in professional career.



THEEM COLLEGE OF ENGINEERING

# ELECTRONICS & TELECOMMUNICATION ENGINEERING

## Program Outcomes PO

Engineering Graduates will be able to:

- PO1. Engineering Knowledge:** Apply the knowledge of science, mathematics, engineering fundamentals and engineering specialization for research, innovation and solving electronics and telecommunication engineering problems.
- PO2. Problem Analysis:** Use the basic principles of science, mathematics and engineering for identifying and analyzing the electronics and telecommunication engineering problems to reach the suitable conclusions.
- PO3. Design/Development of Solutions:** Design algorithm, circuit and system to meet specified needs and solutions with appropriate consideration to the environment, public health and safety.
- PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge to conduct experiments, analyze and interpret the data of analog and digital system for substantiated conclusion.
- PO5. Modern Tool Usage:** Select the appropriate techniques,

modern resources, IT tools including modeling and prediction for electronics and telecommunication engineering practice.

- PO6. The Engineer and Society:** Apply reasoning and logical thinking relevant to electronics and telecommunication engineering with understanding of consequent responsibilities towards societal, health, safety, legal and cultural issues.
- PO7. Environment and Sustainability:** Understand the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of, and need for sustainable development.
- PO8. Ethics:** Apply ethical principles, commit to professional ethics and the responsibilities and the norms of electronics and telecommunication engineering practice.
- PO9. Individual and Teamwork:** Function effectively as an individual or as a member or leader in diverse teams and in multidisciplinary settings.
- PO10. Communication:** Communicate effectively with engineering community in electronics and telecommunication engineering

activities, be able to comprehend and write effective reports, design documentations and make effective presentation with exchange of clear instructions.

- PO11. Project Management and Finance:** Manage projects in multidisciplinary environment with the skill of handling monetary resources in one's own work, as a member or leader in teamwork.
- PO12. Life-long Learning:** Recognize the need for life-long learning and possess the ability to engage in the broadest context of technological change.

## Program Specific Outcomes PSO

- PSO1.** Engineering Graduates will be able to apply the knowledge of engineering specialization in designing, analyzing, implementing and testing electronic system.
- PSO2.** Engineering Graduates will be able to use all types of software and hardware tools to provide sustainable solutions to electronic and telecommunication problems.



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# THEEM COLLEGE OF ENGINEERING **ELECTRONICS & TELECOMMUNICATION ENGINEERING**

## *Vision*

“Generating curiosity among students to become researcher, responsible technocrats and innovative professionals in the field of electronics and telecommunication engineering.”

## *Mission*

- » To impart students valuable technical knowledge and creativity through excellent teaching-learning process
- » To enable students facing engineering challenges by providing a unique learning environment and more industrial practical exploration
- » To provide ethical and value-based education to develop engineering technocrats and professionals for the service of the society and nation

## *Program Educational Objectives*

- PEO1.** Imparting the knowledge of a solid foundation in mathematics, science and engineering fundamentals to pursue both intellectual and professional growth.
- PEO2.** Producing technically sound and competent graduates with the ability of designing, analyzing, developing and implementing electronic system.
- PEO3.** Preparing the engineering graduates productive and successful in their career.
- PEO4.** Catering students in learning experience of positive attitude, ethical values, effective communication and interpersonal skills.



THEEM COLLEGE OF ENGINEERING

# DEPARTMENT OF INFORMATION TECHNOLOGY

## Program Outcomes PO

**Engineering Graduates will be able to:**

- PO1. Engineering Knowledge:** Apply the knowledge of science, mathematics, engineering fundamentals and engineering specialization for research, innovation and solving information technology engineering problems.
- PO2. Problem Analysis:** Use the basic principles of natural science, mathematics and engineering for identifying and analyzing the information technology engineering problems to reach the suitable conclusions.
- PO3. Design/Development of Solutions:** Design solutions for information technology engineering problems and to meet the specified needs with appropriate consideration to the environment, public health and safety.
- PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge including design of experiments, data interpretation and synthesis of information to provide valid conclusions.
- PO5. Modern Tool Usage:** Select the appropriate techniques,

modern resources to create IT tools including modeling and prediction for information technology engineering activities with an understanding of the limitations.

- PO6. The Engineer and Society:** Apply reasoning and logical thinking relevant to information technology engineering with understanding of consequent responsibilities towards societal, health, safety, legal and cultural issues.
- PO7. Environment and Sustainability:** Understand the impact of professional engineering solutions in societal and environmental contexts to converse suitable environment for sustainable development.
- PO8. Ethics:** Apply ethical principles, commit to professional ethics and the responsibilities and the norms of information technology engineering.
- PO9. Individual and Teamwork:** Function effectively as an individual or as a member or leader in diverse teams and in multidisciplinary settings.
- PO10. Communication:** Communicate effectively with engineering community in information technology

engineering activities, be able to comprehend, write effective reports, design documentations and make effective presentation with exchange of clear instructions.

- PO11. Project Management and Finance:** Manage projects in multidisciplinary environment with the skill of handling monetary resources in one's own work.
- PO12. Life-long Learning:** Recognize the need for long-life learning and possess the ability to engage in the broadest context of technological change.

## Program Specific Outcomes PSO

- PSO1.** Engineering Graduates will be able to demonstrate database, networking and programming technologies with realistic constraints.
- PSO2.** Engineering Graduates will be able to design logical algorithms to meet the global needs and problems.



*Vision*

“To set-up a technical excellence centre to produce responsible technocrats to serve the society and nation.”

*Mission*

- » To enhance students civil engineering skills through value-based quality education
- » To enable students to reach their goals by providing a congenial learning atmosphere
- » To inculcate students ethical principles and technically sound professionals to solve the problems of the society

*Program Educational Objectives*

- PEO1.** Ensuring to provide basic knowledge of science and mathematics.
- PEO2.** Imparting civil engineering skills to contribute in developing infrastructure and solving societal problems.
- PEO3.** Imparting the knowledge of design and analysis for using the codes of practice and software tools.
- PEO4.** Motivating students for higher studies to serve the community.



# THEEM COLLEGE OF ENGINEERING DEPARTMENT OF MECHANICAL ENGINEERING

## *Vision*

“To be an excellence centre in the field of imparting mechanical engineering education, training and empowering technical skills and to adapt research and transformation culture.”

## *Mission*

- » To educate students the mechanical engineering knowledge for life-long learning and empower their professional skills to meet the career challenges
- » To commit for professionalism, initiative, integrity, innovation and willingness to change and adopt research culture
- » To facilitate project-based learning for research, innovation and transfer of technology to serve the society

## *Program Educational Objectives*

01. To acquire basic principles and knowledge of science and mathematics and its application through engineering skills.
02. To achieve peer recognition as an individual and able to lead a team through engineering skill demonstration.
03. To develop abilities for successful professional career with ethical and moral values.
04. A competency to pursue life-long learning and to deal with challenges.





THEEM COLLEGE OF ENGINEERING

## DEPARTMENT OF ELECTRICAL ENGINEERING

### *Vision*

“To become a center of excellence in the field of electrical engineering to produce competent engineering graduates to serve the nation.”

### *Mission*

- » To provide an atmosphere to the staff and students for continuous learning, applying, investigating and transfer of knowledge
- » To promote student centered teaching-learning environment for developing professional technocrats with ethical values
- » To provide suitable forums for enhancing research and creativity

### *Program Educational Objectives*

- PEO1.** To acquire a strong background in basic science and mathematics and ability to use electrical engineering tools.
- PEO2.** To enable effective knowledge of electrical engineering in students to solve complex engineering problems.
- PEO3.** To produce graduates communicating effectively with colleagues, clients, employers and society with professional outlook.
- PEO4.** To attain professional excellence through life-long learning.



# THEEM COLLEGE OF ENGINEERING DEPARTMENT OF CIVIL ENGINEERING

## *Vision*

“To set-up a technical excellence centre to produce responsible technocrats to serve the society and nation.”

## *Mission*

- » To enhance students civil engineering skills through value-based quality education
- » To enable students to reach their goals by providing a congenial learning atmosphere
- » To inculcate students ethical principles and technically sound professionals to solve the problems of the society

## *Program Educational Objectives*

- PEO1.** Ensuring to provide basic knowledge of science and mathematics.
- PEO2.** Imparting civil engineering skills to contribute in developing infrastructure and solving societal problems.
- PEO3.** Imparting the knowledge of design and analysis for using the codes of practice and software tools.
- PEO4.** Motivating students for higher studies to serve the community.



THEEM COLLEGE OF ENGINEERING

## DEPARTMENT OF AUTOMOBILE ENGINEERING

### *Vision*

“Providing high quality technical and professional education to empower the automobile engineers for contributing to global demand.”

### *Mission*

- » To inculcate the recent technological trends in learning and research activities
- » To offer opportunities for undertaking collaborative projects with automotive industry as a long-term learning
- » To impart the knowledge of state-of-art designing and simulation of vehicle with better safety and less pollution

### *Program Educational Objectives*

- PEO1.** To acquire fundamental technical knowledge and develop essential proficiency in varied areas of basic science, mathematics and engineering science.
- PEO2.** To inculcate core automobile areas such as vibration, thermal engineering, design of automotive system and autotronics to meet the automobile industry challenges.
- PEO3.** To enhance competency in interdisciplinary approach and research activities.
- PEO4.** To inculcate teamwork, leadership skills, problem solving and decision making skills and entrepreneurship.



THEEM COLLEGE OF ENGINEERING

# DEPARTMENT OF COMPUTER ENGINEERING

## Program Outcomes PO

**Engineering Graduates will be able to:**

- PO1. Engineering Knowledge:** Apply the knowledge of science, mathematics, engineering fundamentals and engineering specialization for research, innovation and solving computer engineering problems.
- PO2. Problem Analysis:** Use the basic principles of natural science, mathematics and engineering specialization for identifying and analyzing the computer engineering problems to arrive valid conclusions.
- PO3. Design/Development of Solutions:** Design solutions for computer engineering problems to meet the specified needs with appropriate consideration to the environment, public health and safety.
- PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge including design of experiments, data interpretation and synthesis of the information to provide valid conclusions.
- PO5. Modern Tool Usage:** Select the appropriate techniques, resources, modern engineering including modeling and prediction to design computer applications for computer engineering activities with understanding of the limitations.
- PO6. The Engineer and Society:** Apply reasoning and logical thinking relevant to computer engineering with understanding of consequent responsibilities towards societal, health, safety, legal and cultural issues.
- PO7. Environment and Sustainability:** Understand the impact of computer engineering solutions in societal and environmental contexts and demonstrate the knowledge for sustainable development.
- PO8. Ethics:** Apply ethical principles, commit to professional ethics and responsibilities and norms of the computer engineering.
- PO9. Individual and Teamwork:** Function effectively as an individual or as a member or leader in diverse teams and in multidisciplinary settings.
- PO10. Communication:** Communicate effectively with engineering community in computer engineering

activities, be able to comprehend and write effective reports, design documentations and make effective presentation with clear instructions.

- PO11. Project Management and Finance:** Manage multidisciplinary environment with the skill of handling monetary resources in computer engineering projects.
- PO12. Life-long Learning:** Recognize the need for engaging in life-long learning in the context of technological change.

## Program Specific Outcomes PSO

- PSO1.** Engineering Graduates will be able to apply the knowledge of mathematics, basic science and basic computing in general and in identifying, formulating and solving the real life computer engineering problems.
- PSO2.** Engineering Graduates will be able to acc innovation for industrial and social needs



THEEM COLLEGE OF ENGINEERING

# DEPARTMENT OF ELECTRICAL ENGINEERING

## Program Outcomes PO

Engineering Graduates will be able to:

- PO1. Engineering Knowledge:** Apply the knowledge of science, mathematics, engineering fundamentals and engineering specialization for research, innovation and solving electrical engineering problems.
- PO2. Problem Analysis:** Use the basic principles of natural science, mathematics and engineering specialization for identifying and analyzing the electrical engineering problems to reach suitable conclusions.
- PO3. Design/Development of Solutions:** Design solutions for electrical engineering problems to meet the specified needs with appropriate consideration to the environment, public health and safety.
- PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge including design of experiments, data interpretation and synthesis of information to provide valid conclusions.
- Modern Tool Usage:** Select the appropriate techniques,

modern resources including modeling and prediction for simulation and commissioning the complete system of electrical engineering activities.

- PO6. The Engineer and Society:** Apply reasoning and logical thinking relevant to electrical engineering with understanding of consequent responsibilities towards societal, health, safety, legal and cultural issues.
- PO7. Environment and Sustainability:** Understand the effect of professional engineering solutions in societal and environmental contexts to convert suitable environment for sustainable development.
- PO8. Ethics:** Apply ethical principles, commit to professional ethics and the responsibilities and the norms of electrical engineering.
- PO9. Individual and Teamwork:** Function effectively as an individual or as a member or leader in diverse teams and in multidisciplinary activities.
- PO10. Communication:** Communicate effectively with engineering community in electrical engineering activities.

be able to comprehend and write effective reports, design documentations and make effective presentation with exchange of clear instructions.

- PO11. Project Management and Finance:** Manage projects in multidisciplinary environment with the skill of handling monetary resources of one's own work.
- PO12. Life-long Learning:** Recognize the need for life-long learning to engage local and global current trend changing environment.

## Program Specific Outcomes PSO

- PSO1.** Engineering Graduates will be able to design, formulate and investigate various problems of electric and electronic circuits, power electronics and power systems.
- PSO2.** Engineering Graduates will be able to apply modern software tools for design, simulation and analysis of communication system.



## THEEM COLLEGE OF ENGINEERING

# DEPARTMENT OF MECHANICAL ENGINEERING

### Program Outcomes PO

#### Engineering Graduates will be able to:

- PO1. Engineering Knowledge:** Apply the knowledge of science, mathematics, mechanical engineering fundamentals and specialization for research and innovation and engineering problem solving.
- PO2. Problem Analysis:** Use the basic principles of science, mathematics and engineering for identifying and analyzing the mechanical engineering problems and to meet the desired needs.
- PO3. Design/Development of Solutions:** Design the system and simulation to find suitable solutions to mechanical engineering problems and needs.
- PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge including design of experiments, data interpretation and synthesis of information to provide valid conclusions.
- PO5. Modern Tool Usage:** Use the appropriate techniques, modern engineering tools and skills including modelling

and simulation to bring the technology transfer with an understanding of the limitations.

- PO6. The Engineer and Society:** Apply scientific reasoning methodologies appropriate to mechanical engineering with understanding of consequent responsibilities towards societal, health, safety, legal and cultural issues.
- PO7. Environment and Sustainability:** Understand the impact of professional engineering solutions in societal and environmental contexts to conserve suitable environment for sustainable development.
- PO8. Ethics:** Apply ethical principles, commit to professional ethics and the responsibilities alongwith the norms of mechanical engineering practice.
- PO9. Individual and Teamwork:** Function effectively as an individual or as a member or leader in diverse teams and in multidisciplinary settings.
- PO10. Communication:** Communicate effectively with engineering community, be able to comprehend,

write effective reports and design documentations and make effective presentation with clear instructions.

- PO11. Project Management and Finance:** Manage projects in multidisciplinary environment by using modern engineering tools with the skill of handling monetary resources.
- PO12. Life-long Learning:** Recognize the need for life-long learning to keep pace with technological and professional advancement.

### Program Specific Outcomes PSO

- PSO1.** Engineering Graduates will be able to apply the acquired mechanical engineering knowledge for the benefit and improvement of self and the society.
- PSO2.** Engineering Graduates will be able to implement the learnt principles and skills to analyze, evaluate and create more advanced mechanical systems or processes.



THEEM COLLEGE OF ENGINEERING  
**DEPARTMENT OF COMPUTER ENGINEERING**

***Vision***

“To be an academic excellence centre in producing global standard engineering graduates through effective teaching-learning environment.”

***Mission***

- » To provide advanced technical resources and platforms to students to take-up the challenges of digital world
- » To transform student community into potential technocrats with ethical and moral values to build the nation
- » To explore the student through collaborative learning process for long-term interaction with academics and industries

***Program Educational Objectives***

- PEO1.** Developing well-groomed and dynamic computer graduates with fundamental knowledge of mathematics, basic science and basic computing.
- PEO2.** Imparting the knowledge of designing and developing computer applications by using modern tools and techniques.
- PEO3.** Nurturing life-long learning skills to evolve technical challenges and opportunities.
- PEO4.** Preparing successful professionals with awareness and commit to ethical and social responsibilities.



## THEEM COLLEGE OF ENGINEERING

# DEPARTMENT OF CIVIL ENGINEERING

### Program Outcomes PO

#### Engineering Graduates will be able to:

- PO1. Engineering Knowledge:** Apply the knowledge of science, mathematics, engineering fundamentals and engineering specialization for research, innovation and solving civil engineering problems.
- PO2. Problem Analysis:** Use the basic principles of natural science, mathematics and engineering for identifying and analyzing the civil engineering problems to reach suitable conclusions.
- PO3. Design/Development of Solutions:** Design solutions for civil engineering problems to meet the specified needs with appropriate consideration to the environment, public health and safety.
- PO4. Conduct Investigations of Complex Problems:** Use research-based knowledge including design of experiments, data interpretation and synthesis of the information to provide valid conclusions.
- PO5. Modern Tool Usage:** Select the appropriate techniques, resources, modern engineering technology including modeling and prediction for civil engineering activities with an understanding of the limitations.
- PO6. The Engineer and Society:** Apply reasoning and logical thinking relevant to civil engineering with understanding of consequent responsibilities towards societal, health, safety, legal and cultural issues.
- PO7. Environment and Sustainability:** Understand the impact of professional engineering solutions in societal and environmental contexts to conserve suitable environment for sustainable development.
- PO8. Ethics:** Apply ethical principles, commit to professional ethics and responsibilities and norms of the civil engineering.
- PO9. Individual and Teamwork:** Function effectively as an individual or as a member or leader in diverse teams and in multidisciplinary settings.
- PO10. Communication:** Communicate effectively with engineering community in civil engineering activities,

be able to comprehend and write effective reports, design documentations to make effective presentation with clear instructions.

- PO11. Project Management and Finance:** Manage projects in multidisciplinary environment with the skill of handling monetary resources in one's own work.
- PO12. Life-long Learning:** Recognize the need for life-long learning in the broadest context of globally changing and challenging environment.

### Program Specific Outcomes PSO

- PSO1.** Engineering Graduates will be able to utilize the principles, methods and code of practice to excel in the area of drawing, designing and analysis related to civil engineering system.
- PSO2.** Engineering Graduates will be able to provide sustainable solution to civil engineering problems.