



THEEM COLLEGE OF ENGINEERING

DEPARTMENT OF APPLIED SCIENCE & HUMANITIES

Vision

“To become an excellent centre to inculcate solid foundation of engineering education and to promote practical aspects of applied science and humanities.”

Mission

- » To motivate students and teachers to show enthusiasm in learning fundamental aspects of science and humanities
- » To counsel students to strengthen them in academics, ethics and social awareness
- » To commit to teach students to think logically, question critically, communicate effectively and live ethically

Program Educational Objectives

- PEO1.** To build a solid foundation of mathematics and basic sciences.
- PEO2.** To encourage students to pursue career in science and engineering and communicate fluently to express their thoughts.
- PEO3.** To inculcate ethical principles in students for working in teams and serve the society.
- PEO4.** To provide basic engineering knowledge and concept of programming.

Pro

Engineer

PO1. Engin
of scie
for re
engin

PO2. Probl
natur
for id
proble

PO3. Desig
for co
specif
enviro

PO4. Condu
research
data in
valid co

PO5. Modern



THEEM COLLEGE OF ENGINEERING

DEPARTMENT OF APPLIED SCIENCE & HUMANITIES

Program Outcomes PO

Engineering Graduates will be able to:

- PO1. Engineering Knowledge:** Apply the basic knowledge of science, mathematics and engineering fundamentals for research, innovation and solving composite engineering problems.
- PO2. Problem Analysis:** Use the basic principles of natural sciences, mathematics and basic engineering for identifying and analyzing composite engineering problems.
- PO3. Design/Development of Solutions:** Design solutions for composite engineering problems and 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 engineering resources and IT tools for composite engineering activities with an understanding of the limitations.

- PO6. The Engineer and Society:** Apply reasoning and logical thinking relevant to composite 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 conserve suitable environment for sustainable development.
- PO8. Ethics:** Apply ethical principles, commit to professional ethics and bear the responsibilities and norms of composite 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 composite 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.
- 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 apply the basic knowledge of science and mathematics to solve and analysis composite engineering problems.
- PSO2.** Engineering Graduates will be able to handle the societal problems and communicate effectively with ethical principles and professional ethics.



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 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, data interpretation and synthesis of information to provide valid conclusions.
- PO5. Modern 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 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

- PEO1.** To acquire basic principles and knowledge of science and mathematics and its application through engineering skills.
- PEO2.** To achieve peer recognition as an individual and able to lead a team through engineering skill demonstration.
- PEO3.** To develop abilities for successful professional career with ethical and moral values.
- PEO4.** A competency to pursue life-long learning and to deal with challenges.



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.



"To be an excellent training and en

» To educate and empower th

» To commit change and

» To facilitate to serve the

PEO1. To acc applica

PEO2. To ach engine

PEO3. To dev values.

PEO4. A com



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.

Pro

Engineer

PO1. Engi
scien
engin
solvin

PO2. Prob
scien
ident
lems

PO3. Desig
elect
with
health

PO4. Com
rese
data
vali

PO5. Mo



THEEM



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.
- PO5. 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 INFORMATION TECHNOLOGY

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.

Pr

Engine

PO1. En
sci
eng
sol

PO2. Pr
sci
an
pr

PO3. D
in
m
to

PO4. C
re
d
va

PO5. M



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.



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.

A-119

COMPUTER ENGINEERING CENTRE



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 accelerate innovation for industrial and social needs.



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 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.