



M.KUMARASAMY
COLLEGE OF ENGINEERING

NAAC Accredited Autonomous Institution

Approved by AICTE & Affiliated to Anna University

ISO 9001:2015 Certified Institution

Thalavapalayam, Karur, Tamilnadu.



Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)



Criterion 1: Curricular Aspects

1.1 Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

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Thalavapalayam, Karur, Tamilnadu.



B.Tech – Artificial Intelligence and Data Science



Criterion 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: Artificial Intelligence and Data Science

Programme Educational Objectives (PEOs)

PEO1: To apply mathematical, scientific and engineering concepts essential for a data architect/data scientist to address the various challenges using emerging AI technologies.

PEO2: To impart knowledge to create, analyze, design, implementation and test a novel solutions required for broader social context.

PEO3: To hone personality skills, leadership qualities, social commitment, social responsibilities, possess professional and ethical attitude through life-long learning and multidisciplinary approach.

Programme Outcomes (POs)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

PO3: 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.

PO4: 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.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.



PO6: 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.

PO7: 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.

PO8: 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.

PO10: 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.

PO11: 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.

PO12: 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.

Programme Specific Outcomes (PSOs)

PSO1: Ability to understand, design and develop essential proficiency in the areas related to data science & AI and to identify, use appropriate analytical, statistical and computational principles for designing novel intelligent solutions to meet society needs.

PSO2: Ability to implement Artificial Intelligence and data science techniques such as research establishment career advancement & entrepreneurship and to practice social responsibilities, ethical and human values for the growth of society.


Department of Artificial Intelligence & Data Science
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B.Tech – Artificial Intelligence and Machine Learning



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1.1: Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: Artificial Intelligence and Machine Learning

Programme Educational Objectives (PEOs)

PEO 1: Develop intelligent software solutions demonstrating reasoning, learning and decision support while handling uncertainty using domain knowledge.

PEO 2: Create significant research towards social benefits and engineering improvement with a wide breadth knowledge of AI & ML technologies and their applications

PEO 3: Participate in life-long learning for effective professional growth and demonstrate leadership qualities in disruptive technologies along with a capacity to critically analyse and evaluate design proposals.

Programme Outcomes (POs)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

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PO12: 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.

Programme Specific Outcomes (PSOs)

PSO1: Utilize multidisciplinary knowledge along with Artificial intelligence and Machine Learning Principles to create innovative solutions for the development of society.

PSO2: Graduates will use Information and Communication Technology (ICT) tools and techniques to attain advance knowledge to exhibit state of the art technologies to overcome the demand of sustainable development to meet future business and society needs.


Head of The Department
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B.E. – Civil Engineering



Criterion 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: B.E. – CIVIL ENGINEERING

Programme Educational Objectives (PEOs)

PEO1: Graduates of the programme will contribute competent, inspired, and highly dedicated professionals in their working environment.

PEO2: Graduates of the programme will contribute versatile and innovative in the workplace, possess the capacity to face the tough challenges and converting them into opportunities, and embrace leadership and teamwork opportunities and affording sustainable engineering careers.

PEO3: Graduates of the programme will contribute Continue their professional development by obtaining advanced degrees in Core area of specialization such as Environmental Engineering, Structural engineering or professional fields like transportation and geotechnical engineering, as well as other fields of Project management, Environmental law.

PEO4: Graduates of the programme will espousal ethical attitude and evince effective skills in team management, coordination of sub workers and good leadership qualities expected of practicing engineering professionals.

Programme Outcomes (POs)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

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PO12: 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.



Programme Specific Outcomes (PSOs)

PSO1: Employability Skills: Able to give sustainable solution to the real time problems of society by using technical and software skills.

PSO2: Career Growth: Able to exhibit ethically their managerial and professional skills as an individual or as a team in multidisciplinary environment.

N. 10
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B.Tech – Computer Science and Business Systems



Criterion 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: B.Tech – Computer Science and Business Systems

Programme Educational Objectives (PEOs)

PEO-I:	To acquire technical knowledge and proficiency required for the employment and higher education in the contemporary areas of computer science or management studies. { Technical Competence }
PEO – II :	To apply their competency in design and development of innovative solutions for real-world problems. { Professionalism }
PEO – III :	To demonstrate leadership qualities with high ethical standards and collaborated with other industries for the socio-economical growth of the country. { Life-Long Learning }

Programme 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, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences
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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.

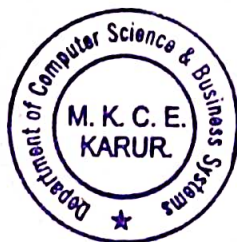




PO 7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO 8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities 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.
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Programme Specific Outcomes (PSOs)

PSO – I	Ability to apply the analytical and business skills to provide sustainable solutions as an engineer/researcher for the real-time applications using Machine Learning, Internet of Things and Data analytics.
PSO – II	Ability to practice ethical and human values with soft-skills qualities in computer science and business disciplines to emerge as an entrepreneur for the growth and development of the society.




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B.E – Computer Science and Engineering



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Programme Educational Objectives (PEOs):

PEO1: Graduates will have successful career in software industries and R&D divisions through continuous learning.

PEO2: Graduates will provide effective solutions for real world problems in the key domain of computer science and engineering and engage in lifelong learning.

PEO3: Graduates will excel in their profession by being ethically and socially responsible.

Programme Outcomes (POs)

PO1: 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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Programme Specific Outcomes (PSOs)

PSO1: Professional Skills: Ability to apply the knowledge of computing techniques to design and develop computerized solutions for the problems.

PSO2: Successful career: Ability to utilize the computing skills and ethical values in creating a successful career.

HOD - CSE

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B.E – Electronics and Communication Engineering



Criterion 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: ELECTRONICS AND COMMUNICATION ENGINEERING

Programme Educational Objectives (PEOs):

PEO1: Core Competence: Graduates will have a successful career in academia or industry associated with Electronics and Communication Engineering.

PEO2: Professionalism: Graduates will provide feasible solutions for the challenging problems through comprehensive research and innovation in the allied areas of Electronics and Communication Engineering.

PEO3: Lifelong Learning: Graduates will contribute to the social needs through lifelong learning, practicing professional ethics and leadership quality

Programme 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, review 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 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.

Programme Specific Outcomes (PSOs):

PSO1: Applying knowledge in various areas, like Electronics, Communications, Signal processing, VLSI, Embedded systems etc., in the design and implementation of Engineering application.

PSO2: Able to solve complex problems in Electronics and Communication Engineering with analytical and managerial skills either independently or in team using latest hardware and software tools to fulfill the industrial expectations.

HoD

Dr.S.JEGADEESAN, M.E., Ph.D.,
Associate Professor & Head,

Department of Electronics and Communication Engineering
M.Kumarasamy College of Engineering,
Thalavapalayam Karur -639 113





Name of the Programme:M.E. (COMMUNICATION SYSTEMS)

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S):

- PEO1: Graduates will be capable to develop their skills and provide optimal solutions to subsystems in the areas of Communication Systems
- PEO2: Graduates will be capable of carrying out scientific research in the areas of Communication Systems
- PEO3: Graduates will be able to analyze societal problem and can provide technological solutions.

PROGRAM OUTCOMES (PO's):

On successful completion of the Program, the graduates of M.E. (Communication Systems) Program will be able to

PO1: An ability to independently carryout research/investigation and development work to solve practical problems

PO2: An ability to write and present a substantial report/document

PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

PO4: An ability to independently carry out research to deliver solutions for complex problems in Communication systems.

PO5:Able to communicate effectively in written and oral formats.

PO6:Ability to continuously engage in life-long learning with enhanced knowledge and competence.

HoD

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Name of the Programme: M.E. (VLSI Design)

PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

- PEO1: Registered or completed research studies in the core or allied areas of VLSI Design
- PEO2: Successful technical / entrepreneurial career in the core or allied areas of VLSI Design.
- PEO3: Adapt to the world of constantly evolving technologies in the core or allied areas of VLSI Design through continuous learning

PROGRAM OUTCOMES (PO's):

On successful completion of the Program, the graduates of M. E. (VLSI Design) will be able to:

PO1: An ability to independently carryout research/investigation and development work to solve practical problems

PO2: An ability to write and present a substantial report/document

PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

PO4: An ability to independently carry out research to deliver solutions for complex problems in VLSI Design.

PO5: Able to communicate effectively in written and oral formats.

PO6: Ability in continuously engage in life-long learning to enhance knowledge and competence.


HoD

Dr.S.JEGADEESAN, M.E.,Ph.D.,
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B.E – Electrical and Electronics Engineering



Criterion 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: ELECTRICAL AND ELECTRONICS ENGINEERING

Programme Educational Objectives (PEOs)

PEO1: Graduates will have flourishing career in the core areas of Electrical Engineering and allied disciplines.

PEO2: Graduates will pursue higher studies and succeed in academic/research careers.

PEO3: Graduates will be a successful entrepreneur in creating jobs related to Electrical and Electronics Engineering /allied disciplines.

PEO4: Graduates will practice ethics and have habit of continuous learning for their success in the chosen career.

Programme Outcomes (POs)

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

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- PO8:** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
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Programme Specific Outcomes (PSOs)

PSO1: Apply the basic concepts of mathematics and science to analyse and design circuits, controls, Electrical machines and drives to solve complex problems.

PSO2: Apply relevant models, resources and emerging tools and techniques to provide solutions to power and energy related issues & challenges.

PSO3: Design, Develop and implement methods and concepts to facilitate solutions for electrical and electronics engineering related real world problems.

HoD/EEE

HEAD OF THE DEPARTMENT
Dept. of Electrical & Electronics Engg.
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B.Tech – Information Technology



Criterion 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1. Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: INFORMATION TECHNOLOGY

Programme Educational Objectives (PEOs):

PEO1:Solve real world problems using learned concepts pertaining to Information Technology domain

PEO2:Encompass the ability to examine, plan and build innovative software products

PEO3:Carry out the profession with ethics, integrity, leadership and social responsibility

Programme Outcomes (POs):

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: 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.

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Programme Specific Outcomes (PSOs):

PSO1: Apply knowledge of theoretical computer science to assess the hardware and software aspects of computer systems

PSO2: Design software in a futuristic approach to support current technology and adapt cutting-edge technologies.

PSO3: Comprehend the technological advancements and practice professional ethics and the concerns for societal and environmental wellbeing.



HOD / IT

Head of the Department
Department of Information Technology
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Thalavapalayam - Karur.



M.KUMARASAMY
COLLEGE OF ENGINEERING

NAAC Accredited Autonomous Institution

Approved by AICTE & Affiliated to Anna University

ISO 9001:2015 Certified Institution

Thalavapalayam, Karur, Tamilnadu.



Master of Business Administration



Criteria 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: MBA

Programme Outcomes (POs)

1. Ability to create a suitable business solution considering the economic, cultural, technical, legal, societal and environmental issues
2. Ability to apply the theories and techniques of behavioural sciences to improve interpersonal effectiveness.
3. Ability to design effective solutions for unforeseen market problems in unfamiliar contexts
4. Ability to build and maintain a learning organization for effective people management.
5. Ability to take optimal financial decisions through analytical thinking and logical reasoning.
6. Ability to recommend actionable plans and strategies in process management.
7. Ability to apply the fundamental strategic management concepts to solve the complex business management problems.
8. Ability to demonstrate effective leadership with multicultural perspectives and ethical considerations.
9. Ability to communicate effectively on business management activities with the corporate community and with society at large
10. Ability to evaluate the use of ICT for critical decision making and apply for lifelong learning

Programme Specific Outcomes (PSOs)

1. Students will be able to understand, analyse and apply management concepts in the areas related to marketing, human resources and finance for efficient running of the business organization of varying complexity in competitive era.
2. Students will be able to define, identify and/or apply the principles of preparing a start-up business plan emphasizing financing, marketing, and organizing. Students will also be able to apply the principles of entrepreneurial management and growth through strategic plans, consulting projects and/or implementing their own businesses



Programme Educational Objectives (PEOs)

1. Graduates will be provided with a solid foundation in management with analytical and organisational skills to solve the complex nature of the business problems they are supposed to face in their day today life and also pursue higher studies.
2. Graduates will be trained students with good knowledge in the functional areas of business /management Breadth so as to comprehend, analyse, use statistical methodology, improve marketing skills and stimulate strategic thinking and innovative ideas /solutions for the real life problems.
3. Graduates will be provided with an academic environment/ real life situations /industry interaction to make them aware of excellence, leadership, written ethical codes and guidelines, and lifelong learning needed for a successful professional career.
4. Graduating students will have an integrated knowledge and demonstrated ability to perform as management professionals. Further, they will be prepared for continued learning throughout their career.
5. Graduates will be inculcated with professional and ethical attitude, effective communication skills, leadership qualities, team work skills, multidisciplinary approach, critical and innovative thinking and an ability to relate business /management issues to broader social context and relation to governance as well.


HOD - MBA
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Master of Computer Applications



Criteria 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: Master of Computer Applications

Programme Educational Objectives (PEOs)

PEO 1: Ability to face the changing trends and career opportunities in computer applications

PEO 2: Exhibit their expertise in problem Solving skills through design and development of computer applications

PEO 3: Develop Communication Skills necessary to function productively to achieve successful professional career with integrity and societal commitments

Programme Outcomes (POs)

PO 1: Understand and apply mathematical foundation, computing and domain knowledge for the conceptualization of computing models from defined problems.

PO 2: Design applications for any desired needs with appropriate considerations for any specific need on societal and environmental aspects

PO 3: Ability to select modern computing tools, skills and techniques necessary for innovative software solutions

PO 4: Ability to apply and commit professional ethics and cyber regulations in a global economic environment.

PO 5: Understand Management Principles and apply these to develop software as a team member and manage projects efficiently for multidisciplinary environments

PO 6: Communicate effectively and present technical information in oral and written reports

Programme Specific Outcomes (PSOs)

PSO 1: Design, develop applications to meet the needs of the industry by using latest computing tools and technologies

PSO 2: Able to pursue carrier in industry, academia, research and other technology enables services

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B.E – Mechanical Engineering



Criterion 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: Mechanical Engineering

Programme Educational Objectives (PEOs)

PEO1: Graduates of the program will accommodate insightful information of engineering principles necessary for the applications of engineering.

PEO2: Graduates of the program will acquire knowledge of recent trends in technology and solve problem in industry.

PEO3: Graduates of the program will have practical experience and interpersonal skills to work both in local and international environments.

PEO4: Graduates of the program will possess creative professionalism, understand their ethical responsibility and committed towards society.

Programme 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, review research literature, and analyse 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 modelling 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.

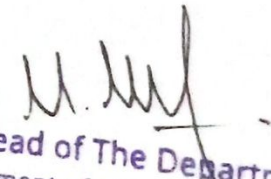
PO 12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Programme Specific Outcomes (PSOs)

Real world application: To comprehend, analyse, design and develop innovative products and provide solutions for the real-life problems.

Multi-disciplinary areas: To work collaboratively on multi-disciplinary areas and make quality projects.

Research oriented innovative ideas and methods: To adopt modern tools, mathematical, scientific and engineering fundamentals required to solve industrial and societal problems.


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M.E – Communication Systems



Name of the Programme:M.E. (COMMUNICATION SYSTEMS)

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S):

- PEO1: Graduates will be capable to develop their skills and provide optimal solutions to subsystems in the areas of Communication Systems
- PEO2: Graduates will be capable of carrying out scientific research in the areas of Communication Systems
- PEO3: Graduates will be able to analyze societal problem and can provide technological solutions.

PROGRAM OUTCOMES (PO's):

On successful completion of the Program, the graduates of M.E. (Communication Systems) Program will be able to

PO1: An ability to independently carryout research/investigation and development work to solve practical problems

PO2: An ability to write and present a substantial report/document

PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

PO4: An ability to independently carry out research to deliver solutions for complex problems in Communication systems.

PO5:Able to communicate effectively in written and oral formats.

PO6:Ability to continuously engage in life-long learning with enhanced knowledge and competence.

HoD

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M.E – Computer Science and Engineering



Criteria 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Program Educational Objectives (PEOs) and Programme Outcomes (POs)

Name of the Programme: M.E Computer Science and Engineering

Programme Educational Objectives (PEOs)

PEO 1: To empower graduates to identify, create and solve computing problems by applying their knowledge of computing principles and mathematical theory to develop sustainable solutions to current and future computing problems.

PEO 2: To develop research attitude in graduates and to exploit it for higher education endeavors and constantly upgrade their skills with an attitude towards lifelong learning.

PEO 3: To facilitate graduates to acquire skills to communicate effectively with the society and contribute to the betterment of the society as a committed technical personnel.

Programme Outcomes (POs)

PO1: An ability to independently carry out research /investigation and development work to solve practical problems.


PO2: An ability to write and present a substantial technical report/document.

PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program..The mastery should be at a level higher than the requirements in the appropriate bachelor program.

PO4: Ability to discriminate, evaluate, analyze and synthesize existing and new knowledge, and integration of the same for enhancement of knowledge in Computer Science and Engineering.

PO5: Ability to think laterally and originally to identify, formulate and solve an engineering problem in Computer Science and Engineering and effectively utilize appropriate scientific and engineering techniques and methodologies in the problem solving process.

PO6: Ability to apply the tools from optimization, probability, statistics, simulation, and engineering economic analysis, including fundamental applications of the tools in IT industry involving uncertainty and scarce or expensive resources.


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M.E – Manufacturing Engineering



Criterion 1: Curricular Aspects

1.1: Curriculum Design and Development

1.1.1: Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

Name of the Programme: M.E - Manufacturing Engineering

Programme Educational Objectives (PEOs):

PEO1: Acquire basic knowledge and expertise necessary for professional practise in manufacturing engineering for higher studies and research

PEO2: Attain and practice technical skills to identify, analyse and solve complex problems and issues related to manufacturing engineering

PEO3: Possess a professional attitude as an individual or a team member with consideration for society, professional ethics, environmental factors and motivation for life-long learning

Programme Outcomes (POs)

PO1: An ability to independently carry out research /investigation and development work to solve practical problems

PO2: An ability to write and present a substantial technical report/document

PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

PO4: An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

PO5: An ability to design manufacturing processes that result in products that meet specific material and other requirements as per manufacturing planning, strategy, quality and control.

PO6: An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.


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M.E – Power Systems Engineering



Name of the Programme: M.E. POWER SYSTEMS ENGINEERING

Programme Educational Objectives (PEOs)

PEO1: Graduates of the programme will have excellent career in power sectors and its related disciplines.

PEO2: Graduates of the programme will have technical competency in solving challenging societal tasks in ethical and economical manner.

PEO3: Graduates of the programme will reveal lifelong learning and team work in their chosen profession.

Programme Outcomes (POs)

PO1: Students have an ability to independently carry out research /investigation and development work to solve practical problems

PO2: Students have an ability to write and present a substantial technical report/document

PO3: Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

PO4: Students have an ability to analyse problems related to Power Systems and be able to synthesise the domain knowledge and incorporate the principles in the state of art systems for further enrichment

PO5: Students should be able to critically investigate the prevailing complex Power System scenarios and arrive at possible solutions independently, by applying the acquired theoretical and practical knowledge

PO6: Students should be able to identify optimal solutions for improvising power transfer capability, enhancing power quality and reliability.


HoD/EEE

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