

MTECH Computer Science and Engineering:

Programme Outcomes:

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

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

PO 3: 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 4: The engineer and society: Construct 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 5: Environment and sustainability: Translate the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of engineering for sustainable development.

PO 6: Ethics: Make use of ethical principles, commitment towards professional ethics and responsibilities for norms of the engineering practice.

PO 7: Individual and team work: Inspect effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 8: 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 9: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes:

PSO1: Model, design and develop robust computer applications by applying relevant data structures with suitable algorithms, techniques and strategies to deliver quality software solutions.

PSO2: The ability to get acquainted with the issues in various domains to identify industrial/research gaps and to provide innovative solution to the existing problem

Program Educational Objectives:

PEO1: Students will be able to exhibit their expertise in various fields of Computing technology to resolve industrial and technological issues.

PEO2: Enable the students to be competent leaders in engineering, education and research activities.

PEO3: Students will be able to interact effectively with their peers in industry, maintain good team spirit and follows professional, social and ethical responsibilities.

MASTER OF COMPUTER APPLICATIONS:

Programme Outcomes for MCA

1. Computational Knowledge - Apply knowledge of computing, mathematics, principles of accounting, management and fundamentals of software engineering appropriate to the discipline.
2. Problem Analysis – Identify and analyze problems and formulate the requirements appropriate to its solution.
3. Design Development of Solutions – Design, implement and evaluate a computer based system to meet the desired needs.
4. Conduct Investigations of Complex Computing Problems – Conduct investigations and experiments to analyze and interpret data of complex applications to find valid solutions.
5. Modern Tool Usage – Select and apply current trends, techniques and modern tools that suit the computing requirements.
6. Professional Ethics - Understand professional, ethical, security and social issues, work with appropriate societal and environmental considerations
7. Lifelong learning - Build up the passion for continuing professional development.
8. Project Management and Finance - Incorporate scientific, financial and management principles for the development of feasible projects.
9. Communication Efficacy - Communicate effectively across multidisciplinary teams to accomplish a common goal.
10. Societal and Environmental concern - Develop systems that meet the desired solutions considering societal and environmental factors.

11. Individual and Team work -Work individually and in teams for the fulfilment of the desired task.

12. Innovation and Entrepreneurship - Create a culture that focus on Innovation and Entrepreneurship.

Programme Specific Outcomes:

PSO1: Ability to apply analytics through research methodology for complex computing problems and provide valid conclusions

PSO2: Understand the technological developments in the usage of modern design and development tools to analyze and design variety of applications

Programme Educational Objectives:

PEO1: Preparing post graduate students to excel in their career and permeate a desire for continuous learning by providing conducive teaching and learning process in core and emerging areas.

PEO2: Preparing post graduate students to analyze and design solutions to real life problems that are technically sound, economically feasible and socially acceptable.

PEO3: Preparing post graduate students to exhibit professionalism, ethical attitude, and effective communication skills with social commitments and adapt themselves to lifelong learning.

BTECH COMPUTER SCIENCE AND ENGINEERING

Programme Outcomes:

1. **Engineering knowledge:** Apply knowledge of Computing, Science, Mathematics and Engineering fundamentals for developing hardware and software solutions for engineering problems.
2. **Problem analysis:** Identify, analyze various engineering problems and define the computing requirements appropriate to Computer Science & Engineering discipline.
3. **Design/development of solutions:** Expertise in design and development of efficient computer based solutions for complex engineering problems.
4. **Conduct investigations of complex problems:** Develop software solutions for multidisciplinary environment, test the performance and effectively maintain it.
5. **Modern tool usage:** Understand the pros and cons of latest techniques and tools and to use them in modeling and simulation of engineering activities.
6. **The engineer and the society:** Understand the requirements of various societal domains such as public health and safety, cultural, medical, cyber security, social network and ecommerce, and contribute the knowledge and experience as a computer scientist/engineer keeping environmental considerations and sustainability.
7. **Environment and sustainability:** Design and develop system software and new programming languages to provide more efficient computing environment which adds to the ease of human life.
8. **Ethics:** Apply professional, ethical, legal principles in developing solutions for issues related to social responsibilities and security.
9. **Individual and team work:** Perform effectively as an individual, as a member or a leader of a group for achieving a common goal.
10. **Communication:** Communicate effectively with members in a working group, clients, society at large and also able to present report on requirements and solutions.
11. **Project management and finance:** Study and understand the project requirements, estimation of cost and time of the implementation and the continuous monitoring of the progress.

12. **Life-long learning:** Recognize and adapt to latest changes in the relevant technologies in the world.

Programme Specific Outcomes.

PSO1: The ability to understand, analyze and apply the principles and working of hardware and software aspects of computer systems.

PSO2: The ability to design, implement, test and evaluate a computer system, component or algorithm to meet desired needs and to solve a computational problem.

PSO3: The ability to provide effective and efficient real time solutions using acquired knowledge in various domains.

Programme Educational Objectives:

PEO1: Work productively and successfully in diverse IT fields.

PEO2: Enhance their skills and embrace new computing technologies.

PEO3: Demonstrate professional attitude and ethics.

PEO4: Excel in higher education.

VISION STATEMENT

“To produce competent and dynamic professionals in the field of Computer Science and Engineering to thrive and cater the changing needs of the society through research and education.”

MISSION STATEMENTS

1. To impart high quality technical education and knowledge in Computer Science and Engineering.
2. To introduce moral, ethical and social values to Computer Science and Engineering students.
3. To establish industry institute interaction to enhance the skills of Computer Science and Engineering students.
4. To promote research aimed towards betterment of society.