

Masters of Computer Applications (MCA)



Programme: MCA

Program Educational Objectives (PEOs)

The PEOs of MCA programme are:

- PEO 1:** To solidify foundations in mathematical, computer science and application concepts necessary to effectively formulate, analyze and solve computer application problems.
- PEO 2:** To impart advance knowledge about several sub & dependent domains associated to the field of computer science and applications.
- PEO 3:** To empower students with team building skills and leadership qualities that prepares them for employment, entrepreneurship and competent professionals to serve society and as per global needs.
- PEO 4:** To acquaint students about the principles of system analysis, design, development and project management.
- PEO 5:** To inculcate effectiveness to communicate effectively, work harmoniously in teams with ethical and professional attitude.

Program Specific Objectives (PSOs)

At the completion of MCA programme, our students shall have:

- PSO 1:** Ability to design and develop computing systems using fundamentals of Mathematics, Computer science and other related disciplines to meet customers' business objectives.
- PSO 2:** Ability to test and analyze the quality of various subsystems and to integrate them in order to evolve a larger computing system.
- PSO 3:** Ability to work professionally with positive attitude as an individual or in multidisciplinary teams and communicate effectively.

Graduate Attributes (GAs)

The graduate attributes for students of MCA are:

- Computational Knowledge
- Problem analysis
- Design/development of solutions
- Conduct investigations of complex problems
- Modern tool usage
- Professional Ethics
- Life-Long Learning
- Project Management and Finance
- Communication Efficacy
- Societal and Environmental Concern
- Individual and Team Work
- Innovation and Entrepreneurship

Program Outcomes (POs)

The outcomes of the program are statements that describe skills that we expect to enable our students to attain by the time of postgraduation:

<u>No.</u>	<u>Program Outcomes (POs)</u>
PO 1	Computational Knowledge: Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements
PO 2	Problem Analysis: Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.

- PO 3 Design /Development of Solutions:** Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- PO 4 Conduct investigations of complex Computing 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, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.
- PO 6 Professional Ethics:** Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practices.
- PO 7 Life-long Learning:** Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.
- PO 8 Project management and finance:** Demonstrate knowledge and understanding of the computing 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 Communication Efficacy:** Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.
- PO 10 Societal and Environmental Concern:** Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practices.
- PO 11 Individual and Team Work:** Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.
- PO 12 Innovation and Entrepreneurship:** Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.