

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)

SREE SAINATH NAGAR, TIRUPATI-517 102

DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS

ABOUT THE PROGRAM

The Department of MCA has grown in its size and stature over the years to create motivated, innovative, creative and thinking graduates to fill the roles of software Engineers who can conceptualize, analyze, design and implement computer software to meet the modern-day industry requirements. The program is designed to meet the growing demand for qualified professionals in the field of Computer Applications. The MCA program is inclined more toward application development and thus has more emphasis on the latest programming languages and tools to develop better and faster applications.

The department is well equipped with qualified and experienced faculty, computer laboratories and Internet facilities. A team of experienced members of faculty are dedicated to teaching and developing academic activities in the department. The department received academic autonomy in the year 2010. It believes in academic excellence through value based education, which is conducive to boost the inherent capabilities and confidence of the students to take up the challenges in the cutting edge global scenario.

ADMISSION PROCEDURE

Admissions are made into the two year Post Graduate Degree Program MCA as per the stipulations of A.P State Council of Higher Education (APSCHE), Government of Andhra Pradesh.

- (a) 70% of the seats are allotted by the Convener, APICET, (for Category-A Seats).
- (b) 30% of the seats are earmarked for NRI/Management candidates the Management (for Category-B Seats).

The duration of MCA programme is 2 years (4 Semesters). The minimum qualification for admission to first year of the MCA course is passed BCA/Bachelor Degree in Computer Science Engineering or equivalent Degree (or) passed B.Sc./B.Com./B.A.with Mathematics at 10+2 level at Graduation Level (with additional bridge Courses as per the norms of the concerned University). Obtained atleast 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying Examination.

Passed in Degree (B.Sc./B.Com./BCA) conducted by any University or any other examination recognized as equivalent. Admissions to the College are made along with the other Engineering Colleges in the state through a common entrance test (ICET).

Program Educational Objectives (PEOs)

Master of Computer Applications (MCA) is a four-semester full-time post-graduate Program spread over two years.

After few years of completion of the Program, the graduates of MCA would have

- **PEO1:** Enrolled or completed higher education/research studies in the core and allied areas of computer science.
- **PEO2:** Successful entrepreneurs and professionally excelled in diverse application skills in the core or allied area of computer science of societal importance.
- **PEO3:** Professionals in industry, academia and organizations with ability to adapt to evolving technologies in the core and allied areas of computer science.

Program Outcomes (POs)

On successful completion of the Program, the graduates of M.C.A will be able to:

- 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.
- 2. Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines.
- 3. 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.
- 4. 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.
- 5. Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

- 6. Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practices.
- 7. Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.
- 8. 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.
- 9. 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.
- 10. 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.
- 11. Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.
- 12. 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.

Program Specific Outcomes (PSOs)

On successful completion of the Program, the graduates of M.C.A will be able to:

- **PSO1:** Design, implement and test applications for complex computing problems for desired specifications through modern tool usage, appropriate technologies and programming skills.
- **PSO2:** Use managerial and domain Skills of Information Management to model an application's data requirements using domain specific modeling tools, Transaction & Query processing, Indexing & Searching techniques, and extract information for interpreting the datasets for Decision Making.
- **PSO3:** Apply suitable techniques and algorithms to Integrate Operating System, Services, Network devices, Security mechanisms and Infrastructure to meet the requirements for the deployment of an application and to communicate on computer networks.
