RN Shetty Trust

RNS Institute of Technology

Estd: 2001

An Institute with a Difference

Department of Master of Computer Applications

PEO, PO and PSO

Program Educational Objectives (PEOs)

- The PEOs of MCA program describe accomplishments that graduates are expected to attain within three-five years after graduation.

- Graduates would have applied their expertise to *contemporary problem solving, be engaged professionally, have continued to learn & adapt, and have contributed to their organizations through leadership & teamwork*.

- **MCA Graduates**, within three-five years of graduation should:

   PEO1: Exhibit their expertise in problem Solving skills through design, analysis, Implementation and evaluation of hardware and software systems.

   PEO2: Engage in the Computer Science and Applications related Profession locally and globally by contributing ethically to the competent and professional practices.

   PEO3: Effectively adapt as individuals and as team members in multidisciplinary projects involving technical, managerial, economical and social constraints.

   PEO4: Demonstrate Leadership and Entrepreneurship Skills by incorporating organizational goals and providing facilities for peer members with defined objective

   PEO5: Develop Communication Skills necessary to function productively to achieve successful professional career with integrity and societal commitments

Program Outcomes (POs) defined by NBA

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

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.

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.

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.

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.

Program Outcomes (POs) defined by NBA

6. **Professional Ethics:** Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.

7. **Life-long Learning:** Recognize the need, and have the ability, to engage in independent learning for continual development as a computing professional.

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.

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.

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 practice.

11. **Individual and Team Work:** Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.

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.

Program Specific Outcomes (PSOs)

The **MCA graduates** will have

PSO1: The graduates of the Program will have firm foundation in understanding and applying the principles of mathematics, computing techniques and its applications.

PSO2: The graduates of the Program will have skills to develop, deploy and maintain applications for desktop, web, mobile, cloud and cross platforms using modern tools and technologies.

PSO3: The graduates of the Program will be prepared to achieve their career goals in the software industry or pursue higher studies and enhance their professional knowledge.

PSO4: The graduates of the program will practice the profession with ethics, integrity, leadership and social responsibility.