

Progressive Education Society's
Modern College of Arts, Science and Commerce (Autonomous),
Shivajinagar, Pune – 411005

Department of Computer Science

Program Specific Outcomes (PSOs) and Course Outcomes (COs)

Programme: M.C.A.

After successful completion of MCA Computer Science, the student will be able to:

PSO No	Program Outcomes (POs)
PSO 1	Knowledge or Academic Expertise: <ul style="list-style-type: none">i. Produce knowledgeable and skilled human resources who are employable in IT and can also work as Researchers, Entrepreneurs or Software Professionalsii. Have knowledge required for planning, designing and building Complex Application Software Systemsiii. Able to identify, formulate and solve real world computing system problems of various domains by understanding and applying the principles of mathematics, computing techniques and business conceptsiv. Provide support to automated systems or application.v. Produce entrepreneurs who develop customized solutions for small and medium Enterprisesvi. Students will be able to understand, analyse and develop computer programs in the areas related to algorithm, system software, web design and networking for efficient design of computer based system.vii. Apply standard software engineering practices and strategies in software project development using open source programming environment to deliver a quality of products for businessviii. Student will be able to know various issues, latest trends in technology development and thereby provide innovate new ideas and solutions to existing problems.

	<ul style="list-style-type: none"> ix. Will have the ability to apply knowledge of mathematics, probability and statistics to computer science and solve problems. x. Ability to define, assess and adhere to software quality practices and software processes and methodologies xi. Apply mathematical foundations, algorithmic principles and computer science theory in the modeling and design of computational systems xii. Students will be able to demonstrate and apply the knowledge of Programming languages and technologies to develop effective software solutions
PSO 2	<p>Inquisitive learner or involved in Lifelong learning</p> <ul style="list-style-type: none"> i. Ability of life-long self learning and to keep oneself up-to-date in the field of technology ii. Pursue professional certifications available as per latest trends in technology
PSO 3	<p>Social competence</p> <ul style="list-style-type: none"> i. Analyse and understand the evolutionary changes in computing by inculcating employability and entrepreneur skills among the lifelong learners with moral values and ethics ii. Developed skills required for social interaction iii. Gain awareness of Professional ethics in the software industry, and equip them with soft skills essential for working in Professional teams iv. Ability to work in Collaborative and Multidisciplinary work
PSO 4	<p>Effective communication</p> <ul style="list-style-type: none"> i. Students will be able to demonstrate adequate skills in oral and written communication for technical English language, actively participate in group discussions and interviews and exhibit the evidence of vocabulary building. ii. Inculcate essential skills as demanded by the industry which includes team-building skills, audio- visual presentations and personality development programs iii. Gain confidence for effective public/team interaction

PSO 5	<p>Environmental awareness</p> <ul style="list-style-type: none"> i. Understanding the global environmental issues and have the ability to reflect critically on their roles as citizens, consumers and environmental actors in an interconnected world ii. Will be aware of environmental and sustainability issues and work towards its conservation
PSO 6	<p>Digital competence</p> <ul style="list-style-type: none"> i. Acquired necessary and state-of-the-art skills to take up industry challenges ii. Students will be able to adapt the skills to implement effective solutions for need based problems by applying knowledge gained through different programming languages, tools and software covered in the syllabus of program.
PSO 7	<p>Experiential Learning</p> <ul style="list-style-type: none"> i. Graduates will be able to demonstrate the ability to design creative solutions to real life and most relevant problems faced by the Industry and Society at large to meet the requirements of Industrial standards
PSO 8	<p>Ethical values</p> <ul style="list-style-type: none"> i. Ability to do SWOT analysis for one-self ii. An understanding of professional, ethical, legal and social issues and responsibilities
PSO 9	<p>Individuality and Teamwork or Interdisciplinary Studies</p> <ul style="list-style-type: none"> i. Analyse, design, test, develop and maintain desktop, web, mobile and cross platform software applications using modern tools and technologies in an economical and affordable way. ii. Gain ability to work as a member or leader in diverse teams in multidisciplinary environment. iii. Ability to work as self motivated individual

PSO 10	<p>Research and problem solving competence</p> <ul style="list-style-type: none"> i. Identify the potentiality to design experiments for complex problems, collect data, interpret data, develop, implement computer programs and use knowledge in various domains to identify research gaps and hence to provide solutions to new ideas and innovations ii. Gain eligibility to take up higher studies/research iii. Incorporate different domains and technologies for research purpose iv. Able to apply the knowledge of programming languages, tools and techniques to conduct research v. Graduates will be able to effectively communicate technical topics in written and verbal forms.
PSO 11	<p>Stress management</p> <ul style="list-style-type: none"> i. Effective stress management through Value based education programmes ii. Meditation practices
PSO 12	<p>Extramural skills</p> <ul style="list-style-type: none"> i. Ability to participate in Co-curricular activities which are important for overall development ii. Participation in International/N ational/ State level competitions