

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

Department of Mathematics

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

Program: B. Sc. Mathematics

After successful completion of B.Sc. Mathematics, the student will be able to:

PSO No.	Program Specific Outcomes:
PSO1	Academic Expertise: <ul style="list-style-type: none">i. On completion of the course, the student will be able to impart his knowledge in the field of education till higher secondary level.ii. The students have an opportunity to become an entrepreneur in the teaching field.iii. The students also have an opportunity to work in Civil services, Defence services and Banking sectors.
PSO2	Inquisitive Learner : <ul style="list-style-type: none">i. The various techniques learned in the course by assuming hypothetical situations and eventually reaching valid conclusions helps the students in handling real life situations in future.ii. Decision making is one of the most important qualities required in an organisation. Various courses are designed to increase analytical thinking and logical reasoning of the students, which play a very important role in Decision making.
PSO3	Social Competence: <ul style="list-style-type: none">i. Study of mathematics boosts self confidence of the students. The capability to tackle problems by using various mathematical techniques and handle real life situations using mathematics also helps in building social awareness.ii. Improvised intellectual skills using various mathematical tools helps the students to succeed in society.
PSO4	Effective Communication : <ul style="list-style-type: none">i. Mathematics is a language in itself. Use of quantifiers makes mathematics precise and concise. This helps the students of mathematics to express their thoughts in a precise and logical manner.ii. Mathematics students as compared to other students are less elaborative in explaining a certain concept. It helps the students to communicate with others in a very effective way and in a very less amount of time.
PSO5	Environmental Awareness : <ul style="list-style-type: none">i. Some major problems related to the environment are handled by various tools in mathematics. Modelling of such problems is a part of this course.ii. Obtaining solutions or an attempt to find solutions to environment related problems is also done in this course.
PSO6	Digital Competence:

	<ul style="list-style-type: none"> i. Use of ICT plays an important role in the study of mathematics. Use of Powerpoint presentations using LaTeX helps the students to grasp the concepts easily. ii. 2D and 3D animation related subjects in this course helps them to create their own digital content. iii. Use of various mathematical softwares helps them to visualize some mathematical concepts. It helps them to develop digital content.
PSO7	<p>Experiential Learning:</p> <ul style="list-style-type: none"> i. The students are given assignments based on their subjects. These are designed in such a way that the student gets more exposure to the subject. ii. To increase the interest in the subject, students are required to submit a book-review related to the subject. This enhances the reading habits and increases their knowledge. iii. Journals of practicals are also maintained by the students
PSO8	<p>Ethical and Moral Values:</p> <ul style="list-style-type: none"> i. Mathematics enables the students to think in a multidirectional pattern. ii. Submitting the practical in a stipulated time, writing the practical without imitation from others are some of the ethical values the students learn in the course. iii. The course upgrades the ethical values since it has connections to facts, truths and the argument building process.
PSO9	<p>Stress Management:</p> <ul style="list-style-type: none"> i. Students face many challenges in solving problems in mathematics. Solving many problems and regular practice of solving similar such problems in mathematics reduces their stress. This is in fact the key to managing stress in this subject. ii. The course helps students to test and improve their patience.
PSO10	<p>Extramural Skills :</p> <ul style="list-style-type: none"> i. Students are able to plunge themselves into research after this course. Many practical problems can be solved using mathematics. ii. Abstract extensions of realistic situations give rise to various research problems. The subject thereby has no boundaries of extension.