



**Savitribai Phule Pune University**

(Formerly University of Pune)



Styaniketan's

**Adv. M. N. Deshmukh Arts, Science and Commerce  
College Rajur**

**B.Sc. in Mathematics**

(Faculty of Science & Technology)

# **Program Outcomes & Program Specific Outcomes**

**F.Y. B. Sc. Mathematics**

(As Per National Education Policy-2020)

## **Program Outcomes**

After successful completion of this program, students will be able to

1. enhance their logical thinking and apply advanced mathematical concepts to solve complex problems.
2. formulate research questions, design experiments or investigations, collect and analyze data and present their findings in a clear and coherent manner.
3. apply advanced mathematical techniques or tools to analyze and solve challenging problems encountered in mathematics and related fields.
4. formulate mathematical models that represent real-world phenomena, analyze the models using mathematical methods and interpret the results to make informed decisions or predictions.
5. develop proficiency in utilizing computational tools, software and programming languages to aid in mathematical analysis, numerical simulations and data visualization.
6. present complex mathematical concepts, proofs and research findings to both technical and non-technical audiences.
7. develop a strong foundation for professional growth and lifelong learning in Mathematics.
8. acquire lifelong learning skills which will lead important to better opportunities and improve quality of life.
9. gain knowledge with the holistic and multidisciplinary approach across the fields.
10. analyzing the results critically and applying acquired knowledge to solve the problems.
11. be independent innovations and published it though research papers and projects.

## PROGRAM SPECIFIC OUTCOMES (PSO's)

The student will

1. have a strong foundation for being research in mathematics.
2. be able to apply mathematical skills for solving problems.
3. at least basic knowledge of programming and computational techniques as required for employment.
4. capable to analyze the results critically and apply acquired knowledge to solve the problems.
5. have at least four different skills and capable to think and communicate in three different languages.
6. be able prepare the models for real life problems.

## SCOPE OF THE PROGRAM:

After successful completion of the B.Sc. Program, the learner has ample opportunities to use their mathematical knowledge in different areas:

- Career opportunities in government organizations like Defense Research and Development Organization (DRDO), Indian Space Research Organization (ISRO), research laboratories like Council of Scientific and Industrial Research or government owned scientific organizations.
- Job positions like Mathematics specialist, Quantitative risk analyst, Treasury management specialist, Public sector banking, Financial institutions, Engineering or Insurance sectors, etc.
- Job opportunities in the teaching profession at science and engineering colleges and universities.
- Scope for Higher Studies and find lucrative opportunities in the field of research.