

BHOGAWATI MAHAVIDYALAYA, KURUKALI



Department of Mathematics

Course Objectives and Programme Outcomes

Course Objectives

The Department of Mathematics aims to:

1. To provide a strong foundation in fundamental and advanced concepts of Mathematics.
2. To develop logical reasoning, analytical thinking, and problem-solving skills among students.
3. To enhance students' ability to apply mathematical techniques in science, technology, and real-life situations.
4. To develop computational and quantitative skills using modern mathematical tools and software.
5. To prepare students for higher education, research, competitive examinations, and employment opportunities.
6. To cultivate scientific temperament and independent learning abilities.
7. To encourage innovation, creativity, and research-oriented thinking in Mathematics.

Programme Outcomes (POs)

Upon successful completion of the B.Sc. Programme in Mathematics, students will be able to:

- PO1:** Demonstrate comprehensive knowledge of fundamental and advanced mathematical concepts.
- PO2:** Apply mathematical principles and techniques to solve theoretical and practical problems.
- PO3:** Analyze problems critically and develop logical solutions using mathematical reasoning.
- PO4:** Use appropriate computational tools and technologies for mathematical investigations.
- PO5:** Communicate mathematical ideas and results effectively in oral and written form.

- PO6:** Apply mathematical knowledge in interdisciplinary fields such as science, technology, economics, and data analysis.
- PO7:** Develop research aptitude and the ability to pursue independent learning.
- PO8:** Demonstrate ethical values, professional responsibility, and teamwork in academic and professional activities.
- PO9:** Acquire skills necessary for higher studies, competitive examinations, and career opportunities.
- PO10:** Contribute effectively to society through scientific and quantitative approaches to problem-solving.

Programme Specific Outcomes (PSOs)

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

- PSO1:** Apply concepts of Algebra, Calculus, Differential Equations, Real Analysis, Linear Algebra, and Discrete Mathematics to solve mathematical problems.
- PSO2:** Formulate mathematical models for real-world situations and interpret their solutions.
- PSO3:** Utilize statistical and computational techniques for data analysis and decision-making.
- PSO4:** Employ mathematical software and modern computational tools for research and applications.
- PSO5:** Pursue higher education, research, teaching, and professional careers in Mathematics and related disciplines.

Vision

To achieve excellence in Mathematics education by developing logical thinking, analytical skills, and research aptitude among students.

Mission

- To provide quality education in Mathematics.
- To develop analytical and problem-solving abilities.
- To encourage higher studies, research, and innovation.
- To promote the use of modern technology in teaching and learning.
- To prepare students for successful careers and lifelong learning.



Head

Department of Mathematics
Bhogawati Mahavidyalaya, Kurukali



Principal

Bhogawati Mahavidyalaya, Kurukali