

## Programme Outcomes (Generic Learning Outcomes)

As per OA-38 Ordinance Governing Undergraduate Programmes of Goa University, the following Generic Learning Outcomes serve as the Programme Outcomes (POs). These outcomes are common across disciplines and reflect the graduate attributes expected from all undergraduate students. The Programme Specific Outcomes (PSOs) listed thereafter are tailored for the B.Sc. Mathematics Programme in alignment with the University's framework.

### Programme Outcomes (Generic Learning Outcomes)

1. PO1: Complex Problem Solving – The capability to solve different kinds of problems and apply learning to real-life situations.
2. PO2: Critical Thinking – The capability to apply analytic thought to a body of knowledge.
3. PO3: Creativity – The ability to create knowledge and seek solutions to complex problems and situations using innovative, imaginative, and lateral thinking.
4. PO4: Communication Skills – Listening, reading, analytical and interpretation skills using correct technical language related to the field of learning, and conveying ideas and arguments respectfully.
5. PO5: Analytical Reasoning/Thinking – The capability to evaluate reliability and relevance of evidence, identify logical flaws, analyze and synthesize data, and draw valid conclusions.
6. PO6: Research-related Skills – A keen sense of observation, inquiry, and capability to problematize, synthesize, and design proposals and undertake research.
7. PO7: Coordinating/Collaborating Skills – The ability to work effectively and respectfully with diverse teams to achieve a common goal.
8. PO8: Leadership Readiness/Qualities – The capability to organize, direct, and inspire a team to work toward a shared vision.
9. PO9: Learning How to Learn Skills – The ability to acquire new knowledge and skills independently for lifelong learning and personal growth.
10. PO10: Digital and Technological Skills – The capability to use ICT effectively for learning, analysis, and problem-solving.
11. PO11: Multicultural Competence and Inclusive Spirit – Demonstrate respect for diversity, gender sensitivity, and empathy for differently-abled individuals.
12. PO12: Value Inculcation – Demonstrate ethical, constitutional, and humanistic values in personal and professional life.
13. PO13: Autonomy, Responsibility, and Accountability – The ability to work independently with integrity and accountability.
14. PO14: Environmental Awareness and Action – Knowledge and skills for sustainable development and global environmental responsibility.
15. PO15: Community Engagement and Service – The capability to engage in social service activities for the well-being of society.
16. PO16: Empathy – The ability to understand and share the feelings and perspectives of others.