

PROGRAMME OUTCOMES (POs) - PG

MSc MATHEMATICS

Upon completing the MSc degree in the field of Mathematics, students have/capable of:

- PO1: A solid understanding of graduate level algebra, analysis and topology.
- PO2: Using their mathematical knowledge to analyze certain problems in day today life.
- PO3: Identifying unsolved yet relevant problems in a specific field.
- PO4: Undertaking original research on a particular topic.
- PO5: Communicate mathematics accurately and effectively in both written and oral form.
- PO6: Conducting scholarly or professional activities in an ethical manner.

MSc ZOOLOGY

- PO1: Students will be able to develop knowledge and understanding of living organisms at several levels of biological organisation from the cellular through molecular to whole organisms level and at ecosystem level in an evolutionary perspective.
- PO2: Students will be able to acquire knowledge related to concepts like ecology, evolution, taxonomy, biochemistry, molecular biology etc. and apply the knowledge in new situations.
- PO3: The student will develop skills in experimental techniques in the subjects of study.
- PO4: The student will be able to develop a scientific way of thinking and scientific attitude pertaining to the concepts in ecology, evolution, taxonomy, biochemistry, molecular biology etc.

MSc PHYSICS

On successful completion of the MSc Physics programme, students will

- PO1: acquire a comprehensive knowledge in physics.
- PO2: will develop a broad understanding of the physical principles of the universe.
- PO3: acquires laboratory skills to design advanced experiments and high precision measurements.
- PO4: be proficient in computing and interfacing techniques.

- PO5: be empowered for critical thinking and innovation in dealing with scientific problems and experiments.
- PO6: develops advanced laboratory techniques and instrumentation skills for a career in research.
- PO7: develops independent research skills through projects.
- PO8: be provided with opportunities to further their knowledge in frontier areas through elective courses.
- PO9: be empowered for planning career in physical sciences and also in taking up jobs in other fields in the contemporary society.
- PO10: be able to communicate effectively and participate actively in team work.

MSc COMPUTER SCIENCE

After the successful completion of the Post Graduate Programme, MSc Computer Science at University of Calicut, a student would have:

- PO1: Attained in depth knowledge of foundations of computing.
- PO2: Development of soft skills and practicing professional ethics.
- PO3: An ability to understand, analyze and design efficient algorithms.
- PO4: Apply computer science theory and software development concepts to construct computing-based solutions.
- PO5: To make them employable according to the current demand of the IT Industry and responsible citizens.
- PO6: An ability to understand and solve emerging research problems.
- PO7: Develop programming skills to implement research projects.

Programme Specific Outcome (PSO)

- PSO1: Evaluate complex real-world problems by applying principles of theoretical computing, engineering and Mathematical models.
- PSO2: Modern Tool usage: Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.
- PSO3: Understand all dimensions of the concepts of software application development and projects.

- PSO4: Aware the students to publish their work in reputed journals.
- PSO5: Conceive Project Management capabilities to solve real world problems in accordance to the needs of the industry, in a specific time frame.
- PSO6: Design and develop computer programs/computer-based systems in the field of Computer Sciences viz. Computational Intelligence, Machine learning, Web technology, Information Retrieval Systems, Data Analytics, Communication and networking.
- PSO7: To prepare the students to address the challenging requirements coming from the enterprise applications.

MA ECONOMICS

At the end of the PostGraduate Programme, a student would have:

- PO1: Attained profound expertise in discipline
- PO2: Acquired Ability to function in multidisciplinary Domains
- PO3: Attained ability to exercise Research Intelligence in investigations and Innovations
- PO4: Learn Ethical Principles and be committed to Professional Ethics
- PO5: Incorporated Self-directed and Life-long Learning
- PO6: Obtained Ability to manoeuvre in diverse contexts with Global Perspective
- PO7: Attained Maturity to respond to one's calling
- PO8: Continue life-long learning as an autonomous learner
- PO9: Continuously strive for excellence in education
- PO10: Apply and nurture critical and creative thinking
- PO11; Promote sustainable development practices
- PO12: Promote cooperation over competition
- PO13: Balance rights with responsibilities
- PO14: Understand and respect diversity & difference
- PO15: Not be prejudiced by gender, age, caste, religion, or nationality.
- PO16: Use education as a tool for emancipation and empowerment of humanity

Programme Specific Outcomes (PSO):

- PSO1: To equip students with advanced knowledge of Applied Economics and Development Issues of Indian Economy in general and Kerala Economy in particular

- PSO2: To familiarise the students with suitable alternative methods of knowledge on the basis of the heterogeneity of societies
- PSO3: To develop right skills in students catering to the needs of the industry and policy makers
- PSO4: To make the students capable of addressing and solving the issues in the society and the economy by contextualising the knowledge they have acquired and finally
- PSO5: To create academic excellence through holistic education.

MA ENGLISH

- The students are expected to develop both an understanding of the cultures represented by the literatures discussed and abilities of critical thinking. The courses on marginalized discourses promote values-based thinking. The Project/Dissertation in the Fourth Semester is expected to be a window to research/project writing for prospective research scholars and professionals. The elective course on Teaching of English is directly career-oriented.

