

DEPARTMENT OF MATHEMATICS

PROGRAMME OUTCOMES

(Upon completion of the M.Sc. Degree Programme, the postgraduate will be able to)

PO-1	Disciplinary Knowledge: Demonstrate in-depth knowledge and understanding of theories, policies, and practices in one or more disciplines that form a part of a Post Graduate program of study in Master of Science.
PO-2	Critical Thinking and Problem Solving: Apply analytic thought to a body of knowledge, analyze and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence, identify relevant assumptions or implications, formulate coherent arguments, critically evaluate practices, policies and theories by following scientific approach to knowledge development: solve problems and extrapolate the same to real life situation.
PO-3	Information/digital literacy and Communication Skills: Use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources, and use appropriate software for analysis of data: communicate thoughts and ideas analytically and effectively in writing and orally using appropriate media, and present complex information in a clear and concise manner to different groups.
PO-4	Research-related skills: Conduct independent inquiry in a chosen scientific discipline, demonstrate sense of inquiry and capability for asking relevant/appropriate questions, problematizing, synthesizing and articulating; recognize cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyze, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; plan, execute and report the results of an experiment or investigation.
PO-5	Scientific reasoning and Reflective Thinking: Analyze, interpret and draw conclusions from quantitative/qualitative data and critically evaluate ideas, evidence and experiences from an open-minded and reasoned perspective; critically and sensibly evaluate life experiences, with self-awareness and reflexivity of both self and society.
PO-6	Multidisciplinary Approach, Innovation and Entrepreneurship: propose novel ideas of interdisciplinary approach in providing better solutions and new ideas for the sustainable developments; identify opportunities, entrepreneurship vision and use of innovative ideas to create value and wealth for the betterment of the individual and society.

PO-7	Moral and ethical awareness/reasoning: Embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in all work, demonstrate the ability to identify ethical issues related to one's work, avoid unethical behavior such as fabrication, falsification or misrepresentation of data or committing plagiarism, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopt objective, unbiased and truthful actions in all aspects of work.
PO-8	Self-directed Learning: Work independently, identify appropriate resources required for a project, and manage a project till completion.
PO-9	Lifelong Learning: Engage in continuous learning for professional growth and development, acquire knowledge and skills, adapt to changing environment and adapt to changing trades and demands of work place through knowledge/skill development/reskilling.
PO-10	Multicultural Competence, Social Interaction and Effective Citizenship: Understand the values and beliefs of multiple cultures, global perspectives, engage and interact respectfully with diverse groups and elicit views of others, mediate disagreements and help reach conclusions in group settings, and demonstrate empathetic social concern and equity centered national development.