

## PROGRAMME OUTCOMES FOR B.Sc., DEGREE

PO No.	Programme Outcomes <i>(Upon completion of the B.Sc. Degree Programme, the Undergraduate will be able to)</i>
PO-1	<b>Disciplinary knowledge:</b> Demonstrate comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate program of study in Bachelor of Science.
PO-2	<b>Critical thinking, Problem Solving and Reflective thinking:</b> think critically about the issues and identify, critically analyze and solve problems from the disciplines of concern using appropriate tools and techniques and the knowledge, skills and attitudes acquired and extrapolate the same to real life situations; show critical sensibility to life experiences, with self awareness and reflexivity of both self and society.
PO-3	<b>Analytical &amp; Scientific Reasoning:</b> evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyze and synthesize data from a variety of sources; draw valid conclusions and support them with evidence and examples and addressing opposing viewpoints; critically evaluate ideas, evidence, and experiences from an open minded and reasoned perspective.
PO-4	<b>Research-related Skills:</b> develop a sense of capability for relevant/appropriate inquiry and asking questions, synthesize, articulate and report results and to recognize and predict cause and effect relationships, define problems, formulate and establish hypothesis, analyze and interpret and draw conclusions from data, execute and report the results of an experiment or investigation.
PO-5	<b>Digital literacy and Effective Communication:</b> use ICT in a variety of learning situations and speak, read, write and listen clearly in person and through electronic media in English and in one or more Indian languages, and make meaning of the world by connecting people, ideas ,books, media and technology; efficiently communicate thoughts and ideas in a clear and concise manner.
PO-6	<b>Individual and Team Work:</b> effectively accomplish tasks individually as well as work effectively and respectfully as member or leader with diverse teams, facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interest so for a common cause and work efficiently as a member of a team.
PO-7	<b>Multicultural Competence and Social Interaction:</b> 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.
PO-8	<b>Awareness of Ethical issues, Human values and Gender Issues:</b> 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 and understand the value of relationship between self and the community and aware of the various issues concerning women and society.
PO-9	<b>Awareness of Environment and Sustainability:</b> understand the impacts of technology and business practices in societal and environmental contexts, and sustainable development.
PO-10	<b>Self directed and Lifelong learning:</b> acquire knowledge and skills, including learning "how to learn", that are necessary for participating in learning activities throughout life and to engage in independent and life-long learning in the broadest context of socio-technological changes.

**PROGRAMME SPECIFIC OUTCOMES FOR B.Sc., COMPUTER SCIENCE**

<b>PSO No.</b>	<b>Program Specific Outcomes</b> <i>(Upon completion of the B.Sc., COMPUTER SCIENCE Degree Programme, the Undergraduate will be able to)</i>
<b>PSO-1</b>	Think in a critical and logical based manner
<b>PSO-2</b>	Familiarize the students with suitable software tools of computer science and industrial applications to handle issues and solve problems in mathematics or statistics and real time application related sciences.
<b>PSO-3</b>	Know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.
<b>PSO-4</b>	Understand, formulate, develop programming model with logical approaches to a Address issues arising in social science, business and other contexts.
<b>PSO-5</b>	Acquire good knowledge and understanding to solve specific theoretical and applied problems in advanced areas of Computer science and Industrial statistics. .

**PROGRAMME OUTCOMES FOR M.Sc.,DEGREE**  
**PROGRAMMES**

PO.No	Programme Outcomes <i>(Upon completion of the M.Sc.,Degree Programme, the Post graduate will be able to)</i>
PO-1	<b>Disciplinary Knowledge:</b> 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	<b>Critical Thinking and Problem Solving:</b> apply analytic thought to a body of knowledge, analyse 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	<b>Information/digital literacy and Communication Skills:</b> 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	<b>Research-related skills:</b> conduct independent inquiry in a chosen scientific discipline, demonstrate sense of inquiry and capability for asking relevant/appropriate questions, problematising, synthesizing and articulating; recognize cause-and-effect relationships, define problems, formulate hypotheses, test hypotheses, analyse, 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	<b>Scientific reasoning and Reflective Thinking:</b> analyse, 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	<b>Multidisciplinary Approach, Innovation and Entrepreneurship:</b> 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	<b>Moral and ethical awareness/reasoning:</b> 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, appreciate environmental and sustainability issues, and adopt objective, unbiased and truthful actions in all aspects of work.
PO-8	<b>Self directed Learning:</b> work independently, identify appropriate resources required for a project, and manage a project till completion.
PO-9	<b>Lifelong Learning:</b> engage in continuous learning for professional growth and development, acquire knowledge and skills, adapt to changing environment and to changing trades and demands of work place through knowledge/skill development/reskilling.

## PROGRAMME SPECIFIC OUTCOME (PSO)

PSO No.	PROGRAM SPECIFIC OUTCOMES (M.Sc., Computer Science)
<b>PSO1:</b>	Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems of varying complexity.
<b>PSO2:</b>	Explore the concepts and theories behind computer science to develop innovative software applications.
<b>PSO3:</b>	Apply the latest trends in technology to design, develop and test software applications for specific needs.
<b>PSO4:</b>	Plan and take part in continuous learning and deliver efficient solutions for emerging challenges in the computation domain.
<b>PSO5:</b>	Implement new development tools, software framework, middleware, programming language or methodology to aid in the development of software projects.
<b>PSO6:</b>	Apply and Implement the working of compilers which also tends towards system programming and using various components to implement a efficient scalable software solution in the form of web application.
<b>PSO7:</b>	Understand the interdisciplinary nature of data, information and communications and Adapt new languages quickly.

**PROGRAMME OUTCOMES FOR M.Sc.,DEGREE**  
**PROGRAMMES**

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PO-5	<b>Scientific reasoning and Reflective Thinking:</b> analyse, 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	<b>Multidisciplinary Approach, Innovation and Entrepreneurship:</b> 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.
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**M. Sc., INFORMATION TECHNOLOGY  
PROGRAMME SPECIFIC OUTCOME**

<b>PSO No.</b>	<b>Program Specific Outcomes (M.Sc., Information Technology)</b>
<b>PSO1:</b>	Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
<b>PSO2:</b>	Gain critical understanding of hardware and software tools catering to the contemporary needs of IT industry
<b>PSO3:</b>	Design, Develop and test software systems for worldwide network of computer to provide solutions to real world problems.
<b>PSO4:</b>	Apply standard software engineering principles to develop viable solutions for information technology enabled services.
<b>PSO5:</b>	Analyze and recommend the appropriate IT infrastructure required for the implementation of a project.
<b>PSO6:</b>	Implement the business ideas in IT industry through e-commerce and Management information system concepts.
<b>PSO7:</b>	An ability to understand research methods used to collect and analyze data for decision making.