B. Sc.(H) Mathematics

Program outcomes

Graduate Attributes in B.Sc. (H) Mathematics

On successful completion of B. Sc.(H) Mathematics course, the students develop a substantial leap in the following aspects of their personality

Problem Solving and Analytical Skills: Formulation of a problem into a version that can be analysed, divided into smaller problems and bringing out the solution by putting the solutions of the pieces put together.

Critical Thinking: Ability to take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

Improved Rational and Scientific Temperament : Drawing conclusions from experiments, and daily life experiences without letting it being affected by biases and prejudices is an important aspect of scientific thought process. A rational thinking is one that is driven by logical inference and not by just belief. Drawing conclusions using an array of logical arguments is something a student of Mathematics is trained in.

Effective Communication: Ability to speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

Programme Specific Outcomes - B.Sc (Hons) Mathematics

Good Knowledge of the subject: Bachelor Degree in Mathematics is the culmination of in-depth knowledge of many core branches of Mathematics, viz. Algebra, Calculus, Differential Equations, Mechanics, Real and Complex Analysis, Probability and Statistics including some related areas LaTeX and MATHEMATICA®. Thus, this programme helps students in building a solid foundation in Mathematics for further higher studies and research in Mathematics.

Proficiency in Skills: The skills and knowledge gained has intrinsic beauty, which leads to proficiency in analytical reasoning, critical understanding, analysis and synthesis in order to solve theoretical and practical problems. It will help them to formulate and develop mathematical arguments in a logical manner. This can orient students towards applications of mathematics in other disciplines and moreover, can also be utilised in modelling and solving real life problems.

Problem Solving Skills: Students undergoing this programme learn to logically question assertions, to recognize patterns and to distinguish between essential and irrelevant aspects of problems. This helps them to solve few real life problems using mathematical concepts and think in critical manner.

Interdisciplinary and Research Skills: Students completing this programme will be able to present mathematics clearly and precisely. They will be able to understand, formulate and use quantitative models arising in social science, business and other contexts via mathematics. They will be able to describe mathematical ideas from multiple perspectives and explain fundamental concepts of mathematics to nonmathematicians. Various computer languages and skills can help the students to go for other interdisciplinary projects in future and help for doing future research.

Employment Sector : This programme will help students to enhance their employability for Government jobs, jobs in banking, insurance and investment sectors, data analysis jobs, research analysis job and jobs in various other public and private enterprises by learning various programming languages like Mathematica, matlab.