

## **Programme Overview**

### **Bachelor of Science ( Mathematics, Statistics, Computer Science )**

#### **Programme Overview :**

B.Sc (Mathematics, Computer Science, & Statistics) or Bachelor of Science in Mathematics, Computer Science, and Statistics is a three-year undergraduate Mathematics course. The aim of this course is to provide a wide grounding over a range of mathematics and computing science and statistics the regulations are designed to ensure that this is achieved without too much specialization while giving students a good choice of options. Subject areas give you expertise in Mathematical Sciences. Numerical methods for problem-solving, statistical modelling and scientific computing are central. The **Computer Science** curriculum includes relevant studies related to the study of programming concepts and software and their applications. Candidates will be able to gain insights into the structure, function, mechanism, and algorithm that are responsible for the representation, processing, storage, and communication, and access to digital information. The **Mathematics** curriculum focuses on the understanding and solving of numerical problems. Candidates are taught about the science of numbers, quantity, and space through algebra, calculus, geometry, differential equations, and real analysis. The **Statistics** curriculum deals with the collection, organization, calculation, and interpretation of data. Candidates are taught about the principles and applications of Statistics, Probability, Permutations, and Combination. A degree in Mathematics is considered one of the most advanced degrees of study. With mathematical applications traversing multiple disciplines including even literature and languages, it is fair to say that a BSc in Mathematics enables an individual to work in an array of industries. Being a part of popular STEM courses, it also builds a strong foundation in allied fields of [Computer Science](#), [Statistics](#), [Finance](#), [Information Technology](#), Game Theory, and so forth. In addition to that, the course also trains students in computer software such as C+, [Java](#), etc. BSc Maths helps you major in any good field, such as statistics, operations management, accounting, actuarial sciences, and many others. After earning a bachelor's degree in mathematics, you can enter academia. As a Mathematics student, you can pursue a career in data analysis, which is in high demand right now. After passing the course applicants can go for further studies and for jobs as well.

#### **Program Outcomes (POs)**

Program Outcome (POs) : It is represent the knowledge skills and attitude the students should have end the of B.Sc. program.

<b>PO1</b>	<b>Domain Knowledge</b>	<b>Understand the basic concepts, fundamental principles, and the scientific theories related to various scientific phenomena and their relevancies in the day-to-day life</b>
<b>PO2</b>	<b>Problem analysis:</b>	<b>Analysed the given scientific data critically and systematically and the ability to draw the objective conclusions.</b>
<b>PO3</b>	<b>Design/ Development of solutions</b>	<b>Construct and design effective solution by applying existing computation and statistical theory and tool to identify to research</b>
<b>PO4</b>	<b>Communication skills</b>	<b>Developed various communication skills such as reading, listening, speaking, etc., which we will help in expressing ideas and views clearly and effectively.</b>
<b>PO5</b>	<b>Modern tools</b>	<b>Develop to ability to apply quantitative and qualitative tools of advanced statistics and computer to analyse disciplinary and cross disciplinary real world issues.</b>
<b>PO6</b>	<b>Environment and sustainability:</b>	<b>Developed flair by participating in various social and cultural activities voluntarily, in order to spread knowledge, creating awareness about the social evils, blind faith, etc.</b>

<b>P07</b>	<b>Ethics:</b>	<b>Imbided ethical, moral and social values in personal and social life leading to highly cultured and civilized personality.</b>
<b>P08</b>	<b>Life-long learning</b>	<b>Developed scientific outlook not only with respect to science subjects but also in all aspects related to life.</b>

### **Program Specific Outcomes (PSOs)**

Program Specific Outcomes (PSOs): PSOs are statements that describe what the students of B.Sc (Mathematics, Computer Science, & Statistics) should be able to do.

**PSO1-** Ability to apply knowledge of logical computing relevant and appropriate to the domain.

**PSO2-** Ability to design, implement and evaluate computer-based system, process, component

**PSO3-** Focus on statistical science and its application

**PSO4-** Capability to design and conduct experiments, as well as analyze and interpret data

**PSO5-** Equip students with analytic and problem solving skills.

**PSO6-** Ability to develop aptitude skills and apply mathematical methods and ideas in any area of inquiry.