

## B.Sc., MATHEMATICS

The Bachelor of Science degree in Mathematics is a three year UG course. It is a culmination of in-depth knowledge in advanced mathematical theories such as Analytical Geometry, Vector Calculus, Dynamics and Discreet Mathematics etc.

Though the subject seems abstract to the naked eye, there exists a sublime beauty in learning it and understanding the intricate relationship between the numbers and equations.

Here at NMC we strive to aid our students into understanding said relations, by expanding their theoretical and practical abilities. Apart from book knowledge, we also encourage students to explore maths on their own through platforms like MATLAB, R Programming etc. this gives the student a better understanding of the subject. Furthermore, this course also deals with other related fields such as Computer Science and Statistics.

### PROGRAMME HIGHLIGHTS

- The students develop the ability to apply concepts of Calculus, Linear Algebra, Operations Research, Differential Equations and Laplace Transforms etc.
- They develop an understanding of the underlying unifying structures of graph theory, analytical geometry, trigonometry, etc.
- Students are able to comprehend the 'Value of Proof', which is the single distinguishing factor for the courses like Classical Algebra, Modern Algebra and Complex Analysis
- They are exposed to MAATLAB, R Programming, and Latex etc. in order to hone their problem solving skills.
- Students develop proficiency in writing proofs.

### DURATION AND ELIGIBILITY

UG PROGRAMME	B.Sc., Mathematics
DURATION	3 years – 6 semesters
REQUIREMENTS	12 <sup>th</sup> passed with Physics, Chemistry, Mathematics, Computer Science/ Biology

### UNIQUE SKILL SET GAINED

- Testing hypothesis and its significance - STATISTICS
- Analysing and interpreting data using Excel
- Distilling complex, real-world problems into mathematical equations. - DYNAMICS AND DISCREET MATHEMATICS.
- Solve statistical problems using various tools. -R PROGRAMMING and MAT LAB
- Documentation and reporting – LATEX

## CAREER SCOPE

### PRIVATE SECTOR

- ◆ Business Analyst
- ◆ Mathematician
- ◆ Finance Analyst
- ◆ Numerical Analyst
- ◆ Graph Analyst
- ◆ Optimization Specialist

### PUBLIC SECTOR

- ◆ INDIAN SPACE RESEARCH ORGANIZATION
- ◆ DEFENSE RESEARCH AND DEVELOPMENT ORGANIZATION
- ◆ NATIONAL AERONAUTICS LIMITED

\*Coaching for Civil Exams are provided on request.

## EDUCATIONAL SCOPE

- M.Sc., Mathematics
- M.Sc., Statistics
- M.Sc., Data Science
- MBA
- M.Phil.
- Ph.D.

