

Advisory for Applicants on Maths proficiency

1. Advisory on Mathematical Proficiency

Before joining the programme, applicants are expected to be comfortable with **undergraduate-level mathematics** in the following areas:

- **Probability and Statistics:** descriptive measures, distributions, random variables, correlation, regression, hypothesis testing
- **Linear Algebra:** vectors, matrices, determinants, eigenvalues, transformations
- **Calculus:** differentiation, integration, and optimization concepts
- **Discrete Mathematics:** sets, relations, logic, and combinatorics

Applicants should **self-assess their proficiency in the Math topics mentioned above**. Those who feel the need to refresh or strengthen their fundamentals are **encouraged to opt for the Mathematics Preparedness Programme alongside Trimester 1 of the M.Sc. DS & AI programme**.

2. The Mathematics Bridge Programme

Duration: 4 months (one trimester)

Objective: Strengthen foundational mathematics skills essential for success in the M.Sc. DS & AI programme.

Mode: 100% online

Design: Tailored by BITS Pilani Digital to match the exact mathematical foundations required before pursuing the MSc in DS & AI.

The Mathematics Preparedness Programme may be **taken concurrently with Trimester 1 of the M.Sc. DS & AI programme**. It is intended for learners who wish to refresh or strengthen their mathematical foundations while beginning their M.Sc. journey.

3. Enrolment Options

Eligible applicants receiving an admission offer can choose between:

1. Directly enrol into the M.Sc. DS & AI programme; or
2. Opt for the Mathematics Preparedness Programme concurrently with Trimester 1 of the M.Sc. DS & AI programme, if they wish to strengthen their mathematical foundations.

The Mathematics Preparedness Programme is optional and is recommended for applicants who wish to refresh or strengthen their mathematical foundations while progressing through the M.Sc. DS & AI programme.
