

Detailed Advisory for Applicants

1. Advisory on Programming Proficiency

Applicants are expected to have a **basic level of programming proficiency** before joining the M.Sc. DS & AI programme.

At the time of admission, applicants should ideally be comfortable with:

- **Fundamental Programming Concepts:** variables, data types, conditionals, loops, and functions
- **Problem Solving using Algorithms**
- **Data Structures:** lists, arrays, and dictionaries
- **Python Basics:** writing and executing scripts, handling input/output, simple data manipulation
- **Introduction to Libraries:** using libraries such as NumPy and pandas for data handling

Applicants are advised to self-assess their comfort with these areas. Those with little or no prior experience in programming are encouraged to opt for the Programming Preparedness Programme alongside Trimester 1 of the M.Sc. DS & AI programme.

2. The Programming Bridge Programme

Duration: 4 months (one trimester)

Objective: To equip learners with the foundational programming and computational skills necessary for success in the M.Sc. DS & AI.

Mode: 100% online

Design: Tailored by BITS Pilani Digital faculty to build programming readiness for data science applications.

The Programming Preparedness Programme may be **taken concurrently with Trimester 1 of the M.Sc. DS & AI programme**. It is intended for learners who wish to strengthen their foundational programming and computational skills 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 Programming Preparedness Programme concurrently with Trimester 1 of the M.Sc. DS & AI programme, if they wish to strengthen their foundational programming and computational skills.

The Programming Preparedness Programme is **optional** and is recommended for applicants who wish to build their programming readiness while progressing through the M.Sc. DS & AI programme.