

Amity University Lateral Entry Syllabus for B.Tech 2nd-Year Admission

The Amity University Lateral Entry Admission allows Diploma and B.Sc. graduates to secure direct admission into the 2nd year of B.Tech programs at Amity University. The syllabus primarily covers Mathematics, Logical Reasoning, and Core Engineering Subjects based on the candidate's diploma specialization.

Section-Wise Syllabus for Amity Lateral Entry

The exam consists of the following sections:

- Mathematics (30 Marks)
 - Logical Reasoning (20 Marks)
 - Core Engineering Subjects (50 Marks)
-

Section 1: Mathematics (30 Marks)

This section tests fundamental mathematical concepts required for engineering studies.

Mathematics Topics

- Algebra – Matrices, Determinants, Quadratic Equations
 - Differential Calculus – Limits, Derivatives, Maxima & Minima
 - Integral Calculus – Definite & Indefinite Integrals, Applications
 - Probability & Statistics – Permutations, Combinations, Probability Theorems
 - Coordinate Geometry – Straight Lines, Circles, Parabola
 - Trigonometry – Identities, Heights & Distances
-

Section 2: Logical Reasoning (20 Marks)

This section evaluates logical thinking and problem-solving skills.

Topics Covered

- Number Series – Sequences, Missing Numbers
- Coding-Decoding – Letter & Number-Based Problems
- Blood Relations – Family Tree Questions
- Seating Arrangement – Linear & Circular Arrangements
- Syllogisms – Logical Deductions, Venn Diagrams
- Puzzles & Statements – Statement & Conclusion Problems

Section 3: Core Engineering Subjects (50 Marks)

This section consists of branch-specific diploma subjects.

Mechanical Engineering

- Thermodynamics – Laws of Thermodynamics, Heat Transfer
- Strength of Materials – Stress, Strain, Bending Moment
- Manufacturing Processes – Casting, Welding, Machining
- Fluid Mechanics – Bernoulli's Theorem, Pipe Flow

Electrical & Electronics Engineering

- Circuit Theory – AC/DC Circuits, Kirchhoff's Laws
- Electrical Machines – Transformers, Induction Motors
- Power Systems – Transmission & Distribution Basics
- Digital Electronics – Logic Gates, Boolean Algebra

Civil Engineering

- Structural Analysis – Bending & Shear Force Diagrams
- Strength of Materials – Stress, Strain, Elasticity
- Surveying – Leveling, Contouring, GPS Basics
- Fluid Mechanics – Properties of Fluids, Pipe Flow

Computer Science & IT

- Programming – Basics of C, C++, Java
- Data Structures – Arrays, Linked Lists, Trees
- Computer Networks – OSI Model, TCP/IP Model
- Operating Systems – Memory & Process Management

Amity Lateral Entry Exam Pattern

Subject	Marks
Mathematics	30 Marks
Logical Reasoning	20 Marks
Core Engineering Subjects	50 Marks

Subject	Marks
Total	100 Marks

 Exam Duration: 90 Minutes

 Marking Scheme: +1 for Correct Answer, No Negative Marking

 Preparation Tips for Amity Lateral Entry

 Focus on Diploma/B.Sc. Subjects: Engineering concepts carry the highest weightage.

 Revise Mathematics & Logical Reasoning: Helps improve accuracy and speed.

 Solve Previous Year Papers: Understand the exam pattern and difficulty level.

 Take Mock Tests: To enhance problem-solving skills and time management.