

AJEE 2025 Mathematics Syllabus

Topic

Sets, Relations, and Functions
Complex Numbers and Quadratic Equations
Matrices and Determinants
Permutations and Combinations
Mathematical Induction
Binomial Theorem and its Simple Applications
Sequences and Series
Limit Continuity and Differentiability
Integral Calculus
Differential Equations
Coordinate Geometry
Three-Dimensional Geometry
Vector Algebra
Statistics and Probability
Trigonometry
Mathematical Reasoning

Recommended Books for Mathematics

Book Title	Author/Publisher
Complete Study Pack for Engineering Entrances Objective Mathematics	Amit M Agarwal
B.Tech Entrance Exam Mathematics (22 years solved papers and Grand Test Papers)	Various Authors

AJEE 2025 Physics Syllabus

Topic

Properties of Solids and Liquids
Physics and Measurement
Work, Energy, and Power
Kinetic Theory of Gases
Oscillations and Waves
Rotational Energy
Thermodynamics
Laws of Motion
Gravitation
Kinematics
Electrostatics

Topic

Current Electricity
Magnetic Effects of Current and Magnetism
Electromagnetic Induction and Alternating Currents
Optics
Electromagnetic Waves
Experimental Skills
Communication Systems
Dual Nature of Matter and Radiation
Atoms and Nuclei
Electronic Devices

Recommended Books for Physics

Book Title	Author/Publisher
Objective Physics	S Chand
CUET Guide -Physics Entrance Exam Book	Target Publications
Together with CUET UG (Physics) Solved Question Bank with Sample Papers	Various Authors
Physics Volume I and II	Target Publications

AJEE 2025 Chemistry Syllabus

Physical Chemistry

Topic

States of Matter
Atomic Structure
Chemical Bonding and Molecular Structure
Chemical Thermodynamics
Solutions
Equilibrium
Redox Reactions and Electrochemistry
Chemical Kinetics
Surface Chemistry

Inorganic Chemistry

Topic

Classification of Elements and Periodicity of Properties

Topic

General Principles and Processes of Isolation of Metals

Hydrogen

S-Block Elements

P-Block Elements

D and F-Block Elements

Coordination Compounds

Environmental Chemistry

Organic Chemistry

Topic

Purification and Characterization of Organic Compounds

Basic Principles of Organic Chemistry

Hydrocarbons

Organic Compounds Containing Hydrogen

Organic Compounds Containing Oxygen

Organic Compounds Containing Nitrogen

Polymers

Biomolecules

Chemistry in Everyday Life

Principles Related to Practical Chemistry

Recommended Books for Chemistry

Book Title	Author/Publisher
Handbook Chemistry	Oswal Books
Entry Chemistry	Bhakta and Ghosh
Pearson Conceptual Problems in Organic Chemistry for Engineering and Medical Entrance Exams	Pearson
J.D Lee Inorganic Chemistry	J.D Lee
Complete Study Pack for Engineering Entrances Objective Chemistry (Volume 1)	Arihant Publications