

JEE Syllabus

Some of the basic differences between JEE Main and Advanced are listed below:

- Anybody who satisfies the eligibility criteria can sit for JEE Main. But, the top 150000 rankers of JEE Main are eligible to sit for JEE Advanced.
- Certain top-notch institutes like IITs and ISM Dhanbad will only pick up candidates on the basis of All India Rank (AIR) in JEE Advanced subject to the condition that such candidates feature in the top 20 percentile of successful candidates of their Boards in respective categories.
- Both JEE Main and Advanced are held in two parts - Paper 1 and paper 2.
- The paper 1 of JEE Main asks multiple choice questions in Physics, Chemistry and Mathematics. Both the papers of JEE Advanced ask objective type questions from the same domains.
- Candidates have the option of attempting the paper 1 of JEE Main as a pen-paper test or an online test. But JEE Advanced does not offer any such option. Both the papers of JEE Advanced shall be paper based tests.
- The paper 2 of JEE Main is only for gaining admission into B.Arch, B.Plan program. While those interested in pursuing Architecture and Design courses in an IIT shall be required to sit for the Design Aptitude Test in a zonal IIT sometime later.
- A candidate can sit for the JEE Main a maximum of three times during his lifetime.
- A candidate can attempt JEE (Advanced) a maximum of two times in consecutive years.

Topics in the JEE Advanced Syllabus that are NOT a part of the JEE Main Syllabus:

Physics	Chemistry	Maths
Thermal Physics: <ul style="list-style-type: none"> • Kirchoff's Laws • Newton's Laws of Cooling • Black-Body Radiation • Absorptive & Emissive Power • Stefan's Law • Wein's Displacement Law 	Electrochemistry: <ul style="list-style-type: none"> • Equivalent Conductivity Nuclear Chemistry: <ul style="list-style-type: none"> • Radioactivity and Carbon Dating • Kinetics of Radioactive Decay • Properties of α-, β-, & γ-rays • Fission & Fusion Reactions • Proton to Neutron Ratio & Stability of Nuclei 	NIL

Topics in the JEE Main Syllabus that are NOT a part of the JEE Advanced Syllabus:

Physics	Chemistry	Maths
<p>Electronic Devices:</p> <ul style="list-style-type: none"> • Semiconductors & Semiconductor Diodes • Forward & Reverse Bias • I-V Characteristics of Photo-Diode • Solar Cells • LEDs • Zener Diode as a Voltage Regulator • Junction Transistors & their Characteristics • Transistor Action • Transistors as Amplifiers (Common Emitter Configuration) • Transistors as Switches • Oscillators <p>Electronic Waves:</p> <ul style="list-style-type: none"> • Definition & Characteristics of Electronic Waves • Transverse Nature of Electronic Waves • Applications of EM Waves 	<p>Biomolecules:</p> <ul style="list-style-type: none"> • Definition & Classification of Biomolecules • Functions of Biomolecules • Nucleic Acids & Their Chemical Composition • Functions of DNA & RNA <p>Chemistry in Everyday Life:</p> <ul style="list-style-type: none"> • Cleansing Action of Soaps & Detergents • Chemicals in Food (Artificial Sweeteners & Preservatives) • Analgesics, Tranquillizers, Antibiotics, Antiseptics, Antihistamines, Antifertility Drugs, Antimicrobials, & Disinfectants 	<p>Sets, Relations, & Functions:</p> <ul style="list-style-type: none"> • Representation of Sets • Unions, Intersections, & Compliments • Types of Relations & Equivalent Relations • Power Sets • Algebraic Properties of Sets <p>Trigonometry:</p> <ul style="list-style-type: none"> • Heights and Distances <p>Statistics & Probability:</p> <ul style="list-style-type: none"> • Calculating Mean & Median • Measures of Dispersion • Calculating Mode of Grouped/Ungrouped Data • Calculating Variance, Mean, & Standard Deviation of Grouped/Ungrouped Data <p>Mathematical Reasoning:</p> <ul style="list-style-type: none"> • Statements & Logical Operations

<ul style="list-style-type: none"> • Electromagnetic Spectrum <p>Communication Systems:</p> <ul style="list-style-type: none"> • Propagation of EM Waves • Amplitude Modulation & Frequency Modulation • Signal Bandwidth & Transmission Medium • Basic Elements of Communication Systems (Block Diagrams) 		<ul style="list-style-type: none"> • Tautology • Contradiction • Converse • Contrapositive
--	--	--

Important Topics that are a Part of Both JEE Main & Advanced Syllabus:

Physics	Chemistry	Maths
<ul style="list-style-type: none"> • Kinematics • Gravitation • Laws of motion • Optics • Waves • Electromagnetic Induction 	<ul style="list-style-type: none"> • Surface Chemistry • Electrochemistry • Atomic Structure • Solutions • Chemical bonding • Chemical Kinetics • States of Matter 	<ul style="list-style-type: none"> • Quadratic Equations • Logarithms • Probability • Binomial Theorem • Trigonometry • Vectors • Differential Calculus • Limits • Derivatives • Integral calculus • Complex Numbers • Sequences and Series • Matrices and

		<p>Determinants</p> <ul style="list-style-type: none">• Permutations and Combinations• Trigonometric and Inverse Trigonometric Functions• Differential Equations
--	--	--