

Integrated Curriculum for CBSE/STATE Class 11&12

Start your best preparation for

IIT-JEE MAIN & JEE ADVANCED

Academic Session 2024-26







Course for JEE MAIN & ADVANCED



Syllabus

Course Duration

Total Teaching

Practice & Doubt Sessions

Testing Hrs

Grade 11 & 12 + JEE

April 2024 - May 2026

2,600 Hrs

1200 Hrs

650 (64 Mains Tests + 24 Adv Tests)

100+ Part & Full Syllabus Test in Revision Time

Resonance Visakhapatnam

VISION

Excellence in Career Education

MISSION

Practice, Persistence and Performance

VALUES

- > Leadership with human touch at various levels
- > Integrity, transparency and openness in all our actions
- Address the needs of students through career oriented initiatives



ANDHRA PRADESH ICON AWARDS 2023-24

"AP BEST JUNIOR COLLEGE"

with IIT-JEE / NEET & CA COACHING



We strive to provide best education platform with holistic development of students under the Guidance of our Managing Director, **P. Bharath**, Masters in Computer Science. With his 20+ years of experience working in MNC's abroad, he tries to build scientific temparent and creative thinking in our students.

Mrs. Anupama Guduru, B.Tech Graduate from NIT Warangal, is the functioning Academic Director of Resonance, Vizag. With 7 years of experience as Software Project Lead in USA and 15 years of experience in Education sector in premium CBSE institutions, she has successfully shaped the careers of thousands of students and continues to inspire and empower the young generation as Responsible, Ethical, Social & Organized RESOnite.

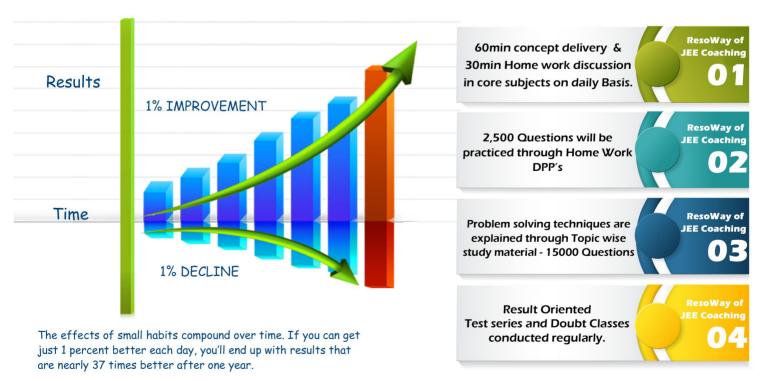




The Joint Entrance Examination, JEE is conducted nation wide for the admission into undergraduate Engineering and Architecture courses in 31 NIT's, 23 IIT's. JEE Main is a screening exam to selected the candidates for JEE Advance. It comprises of two papers. Paper 1 is for Engineering and Paper 2 is conducted for B.Arch and B.Planning Courses.

Engineering is the most popular field of study in the country and so getting admission into top engineering institutions is highly challenging. There are appoximately 17,385 IIT seats and 23,954 NIT seats for which about 15 lakhs students enroll every year.

Resonance has a consistent track record of sending thousands of students to premier institutions in India every year due to innovative academic inputs, comprehensive study material and Resoway of teaching methodology.



Ref: Atomic Habits by James Clear

Result Oriented test System:

Comprehensive Revision Test

These tests are focused on the topics which are being currently taught at that time

JEEMain Test (MCT)

One test of 3 hrs on JEE Main pattern on weekly basis. Syllabus will be cumulative.

JEEAdvanced Test (ACT)

Two tests of 3 hrs each on sunday are conducted in a time interval of 4 to 6 weeks which covers all the topics taught till date for better revision.

Board Pattern Test (BPT)

Designed according to the Board syllabus to ensure best performance of students in their Board exams conducted every thursday.

BITSAT, VITEE, SRMJEE, AEEE, EAPCET: Practice tests are conducted in second year.

Discipline In Resonance

General Instructions

Resonance bears the responsibility of its students' academic performance and discipline within its premises only. Parents are advised to remain in touch with their wards and keep a strict vigilance on his/her activities and behaviour throughout the academic session.

Timings Students must be in the class room by 8:30 am. No one will be allowed after the college time. Late permissions need to be taken prior day itself if there is any plan and only on emergency basis. Students

Identity Card On successful registration of students at Resonance, they get the identity of a "RESOnite" in the form of an I-Card. Students are not allowed to enter Resonance premises if they are not wearing their I- Card.

Student Uniform It is mandatory for the students to wear their uniforms while attending the classes or tests.

Attendance System At Resonance, students' attendance in classroom sessions and tests is vital to their success in the competitive exams and we have a regular attendance marking and monitoring system. The students/parents are informed of students' attendance regularly. Student must maintain 90 % attendance and must be regular to college. A day absent makes the child loose once chapter completely.

Discipline Student must maintain complete discipline in the campus once entered. No interaction during the class hours or in corridor or stair case. Coming out of classes after the teacher leaves the class and before the arrival of the next teacher is strictly prohibited. Rude and argumentative behaviour with staff will be strictly dealt.

Academic Discipline

Student must be in the class 5 min before class starting time and be ready for class with the required books.

Student must focus during the class and not to discuss with other student while faculty is teaching.

Student must complete daily homework and be updo date with learning and practice regularly.

Coming out of classes after the teacher enters into the class is strictly prohibited.

Mobile Phone

Students are not permitted to have or use mobile phones inside the college. If any student is found carrying a Mobile phone, it will be confiscated and not returned.

	CBSE BOARD - 11th JEE (Main + Advanced) - ASPIRE BATCH							
CHEMISTRY [C] PHYSICS [P] MATHEMATICS [M]								
S.No.	Topic Name/Sequence	Month	S.No.	Topic Name/Sequence	Month	S.No.	Topic Name/Sequence	Month
	Some Basic Concepts of Chemistry	APR		Unit & Dimension, Mathematical Tools-1	APR		Basic Mathematics	APR
1	Atomic Structure	APR	1	Mathematical Tools-2 & Measurement Error	APR	1	Trigonometric Ratios & Identities	APR
2	Periodic Table	MAY	2	Rectilinear Motion	MAY	2	Trigonometric Equations	MAY
3	Mole Concept & (Equivalent Concept & Titration)	MAY- JUNE	3	Projectile Motion	JUNE	3	SET & Logarithms	JUNE
4	State of MatterIdeal Gases, Real Gases	JUNE	4	Relative Motion	JUNE	4	Quadratic Equations	JUNE
5	Thermodynamics & Thermochemistry	JULY	5	Newton's Laws of Motion	JUNE- JULY	5	Modulus Function	JULY
6	Chemical Equilibrium	JULY	6	Friction	JULY	6	Sequences & Series	JULY
7	Ionic Equilibrium	AUG	7	Work, Power & Energy	JULY- AUG	7	Binomial Theorem	JULY- AUG
8	Chemical Bonding	AUG- SEP	8	Circular Motion	AUG	8	Permutation & Combination	AUG- SEP
9	IUPAC Nomenclature, Structural Isomerism	SEP	9	Centre of Mass	AUG- SEP	9	Straight Line, Pair of Straight Line	SEP- OCT
10	GOC	OCT- NOV	10	Rigid Body Dynamics	SEP	10	Circle	OCT- NOV
11	Structural identification, POC,Purification and separation of Organic Compounds	NOV	11	Simple Harmonic Motion	SEP- OCT	11	Parabola N	
12	S-Block	NOV	12	Fluids	ОСТ	12	Ellipse	
13	P-Block (13-14 groups)	DEC	13	Surface Tension	ОСТ	13	Hyperbola	DEC
14	Hydrogen and its compounds	DEC	14	Elasticity and viscosity	NOV	14	Statistics	DEC
15	Environmental Chemistry	DEC	15	KTG & Thermodynamics	NOV	15	Relation	DEC
16	Hydrocarbons	DEC	16	Calorimetry & Thermal Expansion	DEC	16	Solution of Triangles	DEC
17	EAS	DEC	17	Waves- String & Sound	DEC	17	Mathematical Reasoning	DEC

11th IIT-JEE (AP-BOARD)

AP BOARD - 11th JEE (Main + Advanced) - ASPIRE BATCH CHEMISTRY [C] **MATHEMATICS [M]** PHYSICS [P] S.No S.No. Topic Name/Sequence Month S.No. Topic Name/Sequence Month Topic Name/Sequence Month Unit & Dimension, Some Basic Concepts of Chemistry APR APR **Basic Mathematics** APR Mathematical Tools-1 Mathematical Tools-2 & Atomic Structure APR APR Trigonometric Ratios & Identities IA APR Measurement Error 2 Periodic Table MAY 2 Rectilinear Motion MAY 2 Trigonometric Equations IA MAY Mole Concept & (Equivalent Concept & MAY-3 Projectile Motion JUNE JUNE Straight Lines, Pair of Straight Lines Titration) JUNE 4 JUNE State of MatterIdeal Gases, Real Gases JUNE 4 Relative Motion JUNE Locus, Transformation of Axes IB JUNE-Function-I- Quadratic Equation 5 5 5 Thermodynamics & Thermochemistry JULY Newton's Laws of Motion IA JULY JULY Logarithms, Modulus, GIF JULY-Chemical Equilibrium JULY Friction JULY 6 Function-II IA 6 6 AUG JULY-7 AUG 7 Work, Power & Energy 7 IA AUG Ionic Equilibrium Inverse Trigonometric Functions AUG AUG-Limits, Continuity & 8 Circular Motion AUG 8 IB SEP 8 Chemical Bonding SEP Differentiability IUPAC Nomenclature, Structural AUG-Centre of Mass SEP 9 9 Methods of Differentiation IB SEP SEP Isomerism OCT-10 Application of Derivatives 10 GOC 10 Rigid Body Dynamics SEP IA SEP-OCT NOV Structural identification, SEP-NOV 11 NOV 11 POC, Purification and separation of 11 Simple Harmonic Motion Determinants IA OCT Organic Compounds NOV 12 NOV Fluids OCT 12 IA S-Block 12 Matrices Vectors-Addition of Vectors, 13 OCT NOV P-Block (13-14 groups) DEC 13 Surface Tension 13 IA Product of Vectors. 3-D- Three Dimensional NOV 14 Hydrogen and its compounds DEC 14 Elasticity and viscosity 14 Coordinates - D.c, D.r, Straight IB DEC Lines, Plane Mathematical Induction & Sequence DEC NOV 15 DEC 15 **Environmental Chemistry** 15 KTG & Thermodynamics IA & Series Calorimetry & Thermal 16 Hydrocarbons* DEC 16 DEC 16 Property of Triangles IA DEC Expansion-Heat Transfer Waves- String & Sound & 17 DEC 17 EAS* DEC 17 Hyperbolic Functions IA DEC

Gravitation

12th IIT-JEE (CBSE)

	CBSE BOARD - 12th JEE (Main + Advanced) - ASPIRE BATCH								
PHYSICS [P]			CHEMISTRY [C]				MATHEMATICS [M]		
S.No.	S.No. Topic Name/Sequence		S.No.			S.No.	Topic Name/Sequence		
1	Geometrical Optics (Ray Optics,Optical Instruments)	JAN-FEB	1	Liquid solutions	JAN-FEB	1	Relation & Functions & ITF	JAN-FEB	
2	Electrostatics	MAR	2	Solid state	FEB	2	Limits, Continuity & Derivability	FEB-MAR	
3	Gravitation	APR	3	Chemical kinetics	FEB-MAR	3	Method of Differentiation	MAR	
4	Current Electricty	APR	4	Metallurgy	MAR	4	Application of Derivatives	MAR-APR	
5	Heat Transfer	APR	5	Co-ordination chemistry	MAR-APR	5	Indefinite Integration	APR	
6	Capacitance	MAY	6	Stereo isomerism	APR	6	Definite Integration	MAY-JNE	
7	EMF	JUNE	7	Hydrocarbons	APR-MAY	7	Area-Definite Integratin- Application	JUNE	
8	Electromagnetic Induction (EMI)	JUNE-JULY	8	Halogen derivatives	JUNE	8	Differential Equation	JUNE	
9	Alternating current	JULY	9	Alcohol and ether,Phenol	JUNE	9	Determinant	JULY	
10	EMWaves	JULY	10	Carbonyl compounds	JUNE	10	Matrices	JULY	
11	WAVE-optics	AUG	11	Oxidation and reduction	JULY	11	Vector & 3-D	JULY-AUG	
12	Modern Physics,	AUG	12	Electrochemistry	JULY	12	Complex Number	AUG-SEP	
13	Semiconductor, Principle of Communication	SEP	13	Surface chemistry	JULY	13	Probability	SEP	
14	Error in Measurments &	rror in Measurments & SEP	14	Salt analysis , d and f block elements , p- block (G-15,16,17,18) , Environmental chemistry	AUG	14	4 Linear Programming	SEP	
14	Instruments	SEP	15	Carboxylic acids and its derivatives , Amines , Aromatic compounds , Biomolecules and polymers , Chemistry in everyday life	SEP				

Note: 4 Phase JEE MAIN + ADVANCED Revision from September 2024 - April 2025

"THE BEST INVESTMENT YOU CAN MAKE IS AN INVESTMENT IN YOURSELF.
THE MORE YOU LEARN, THE MORE YOU EARN "

12th IIT-JEE (AP-BOARD)

	AP BOARD - 12th JEE (Main + Advanced) - ASPIRE BATCH								
PHYSICS [P]		CHEMISTRY [C]		MATHEMATICS [M]					
S.No.	Topic Name/Sequence	Starting Date	S.No.	Topic Name/Sequence	Starting Date	S.No.	Topic Name/Sequence		Starting Date
1	Geometrical Optics (Ray Optics,Optical Instruments)	MAR-APR	1	Liquid solutions	MAR	1	Binomial Theorem	IIA	MAR
2	Electrostatics	APR-MAY	2	Chemical kinetics	MAR-APR	2	Permutation & Combination	IIA	APR
3	Gravitation	MAY	3	Co-ordination chemistry	APR	3	Probability-Random variable	IIA	APR-MAY
4	UD & Error in Measurments & Instruments	MAY	4	Stereo isomerism	APR-MAY	4	Statistics	IIA	MAY
5	Current Electricty	JUNE	5	Hydrocarbons	MAY	5	Circle	IIB	JUNE
6	Heat Transfer	JUNE	6	Metallurgy	MAY	6	Conic section-Parabola	IIB	JUNE-JULY
7	Capacitance	JUNE-JULY	7	Solid state	JUNE	7	Conic section-Ellipse & Hyperbola	IIB	JULY
8	EMF-	JULY	8	Halogen derivatives	JUNE	8	Partial Fraction	IIA	JULY
9	Electromagnetic Induction (EMI)	JULY	9	Alcohol and ether, Phenol	JUNE	9	Indefinite Integration	IIB	JULY-AUG
10	Alternating current	AUG	10	Carbonyl compounds	JULY	10	Definite Integration	IIB	AUG
11	EMWaves	AUG	11	Oxidation and reduction	JULY	11	Area-Definite Integratin- Application	IIB	AUG
12	Wave-String-Sound	AUG	12	Electrochemistry	JULY	12	Differential Equation	IIB	SEP
13	WAVE-optics	SEP	13	Surface chemistry	AUG	13	Complex Number	IIA	SEP
14	Modern Physics-1-2	SEP	14	Salt analysis	AUG	14	Theory of Equation	IIA	ОСТ
	Semiconductor, Principle of Communication	oct oct	15	d and f block elements, p- block (G-15,16,17,18)	AUG	15	Relation		ост
15			16	Environmental chemistry , Carboxylic acids and its derivatives , Amines , Aromatic compounds	SEP	16	Mathmatical Reasoning		ост
			17	Biomolecules and polymers , Chemistry in everyday life	OCT				

Note: 4 Phase JEE MAIN + ADVANCED Revision from September 2024 - April 2025

PROMINENT ENGINEERING ENTRANCE EXAMINATION

For Class XII Students | Science (PCM) Stream

S.NO	NAME OF EXAM	ADMISSION FOR COLLEGES	WEBSITE							
	1. Top Prominent Examination at Nationl Level For Govt. / Institutes of National Importance									
1	Joint Entrance Exam (Main)	NITs, IIITs, CFTIs, IISc., State & Other Private Eng. Colleges	www.jeemain.nat.nic in							
2	Joint Entrance Exam (Advanced)	IITS, IISC., IIST, IISER, RGIPT & IIPE	httos://jeeadv.ac.in/							
	2. Other National level Examinations For Govt. / Institutes of National Importance									
1	Indian Institutes of Science Education and research (IISER)	IISER Bhopal, Kolkata, Mohali, Bhrampur, Pune, Thiruvananthpuram, Tirupati (7 Colleges)	www.iiseradmission.in							
2	ISI-JRT (Junior research Fellowship)	Indian Statistical Institute, Kolkata	www.isical.ac.in							
3	ICAR-AIEEA (All India Entance Examination for Admission)	Indian Council of Agricultural Research (ICAR)	www.icar.nat.nic.in							
4	National Entrance Screening Test (NEST)	(NISER) Bhubanes war, (UM-DAE CEBS) Mumbai	www.nestexam.in							
5	Indian Maritime University Common Entrance (IMU-CET)	Indian Maritime University, Kochi	www.imu.edu.in							
6	Aligarh Muslim university Engineering Entrance Examination (AMUEEE)	Aligarh Muslime University	www.amucontrollerexams.com							
7	National Railway and Transportation Institure Admission Aptitude test (NRTI-AAT)	National Railway and Transportation Institute	www.nrti.edu.in							
8	National Defence Academy - Indian Naval Academy (NDA-NA)	Indian Military Academy, (Dehradun), Indian Air fore Academy, (Dundigal), Indian Vaval Academy, (Ezhimala)	www.upsc.gov.in							
9	Integrated Program in Management Aptitude Test & Joint Integrated Programme in Management Admission Test (IPMAT & JIPMAT)	IPMAT - IIM Indore, IIM Ranchi. IIM Rohtak JIPMAT - IIM Bodhgaya & IIM Jammu	IPMAT - www.iimidr.ac.in JIPMAT - www.jipmat.ac.in							
10	Common University Entrance Test (CUET-UG)	Central Universities	https://cuet.nta.nic.in/							
	3. National level Examinations For Architecture Planning & Degin									
1	Architecture Aptitude Test (AAT)	IITs	www.jeeadv.ac.in							
2	Joint Entrance Exam (Main)	NITs, CFTIs, State & Other Private Eng. College	www.jeemain.nat.nic in							
3	National Aptitude Test in Architecture (NATA)	Architecture Colleges	www.nata.in							
4	Undergraduate Common Entrance Exam for Design (UCEED)	Design Institutes	www.uceed.in							
5	Central Institute of Plastics Engineering & Technology Joint Entrance Examination (CIPET-JEE)	Central Institute of Plastic Eng. & Tech.	www.cipet.gov.in							
6	All Indian Entrance Examination for Design (AIEED)	ARCH College of Design & Business	www.aieed.com							
	4. Other Prominent National level Exam	ninations For Private Engineering Colleges / Universi	ties							
1	Birla Institute of Technology and Science Aptitude test (BITSAT)	BITS Pilani, Goa & Hyderabad	www.bitsadmission.com							
2	IIT-H Undergraduate Engineering Entrance Examination (UGEE)	IIT - Hyderabad	www.iiit.ac.in							
3	Vellore Institute of Technology Engineering Entrance Exam (VITEEE)	VIT University	www.vit.ac.in							
4	SRM University Joint Entrance Exam (SRMJEEE)	SRM University	www.srmuniv.ac.in							
5	Manipal University Online Entrance Test (MET)	Manipal University	www.mainpal.edu							
6	Thapar University Lateral Entry Entrance Test (THAPAR LEET)	Thapar University	www.thapar.edu							
7	Symbiosis Entance Test (SET)	Symbiosis Institute of Technology	www.set-test.org							
8	Sikkim Manipal Institute of Techology or Manipal University Online Entrance Test (SMIT OR MU OET)	Sikkim Manipal University	www.smu.edu.in							
9	Bharati Vidyapeeth Common Entrance Test (BVPCET)	Bharati Vidyapeeth University	www.bvuict.in							
10	Indraprasth Univesity Common Entrance Test (IPUCET)	IPU University	www.ipu.ac.in							
"1	T IS EASY TO STUDY, IF YOU SHOW INT	EREST IN IMPROVING YOURSELF CO	ONSISTENTLY "							

Hardwork does payoff...

Our Success Stories...



Course structure of Resonance helped me in building concepts with strong base and sharp thinking. The faculty were really helpful and supportive. Every teacher will go out of the way to help us clear any doubt even if it is a simple one. Modules were really helpful and it had every concept that was required to crack the exam. Test schedule was designed in such a way that , they wont let you forget the concepts. Thats what had an edge overall in getting into IIT. Moreover weekly tests were very insightful and helped me develop my concepts and building exam temparement. Finally, I would recommend my juniors to choose Resonance and enhance their preparation

Viswas Jajpura (IIT KHARAGPUR).



I ,Ganta Nikhil enrolled in Resonance study centre of Visakhapatnam. I would like to thank my parents, each and every faculty of Resonance teaching and non teaching staff for providing constant support. Faculty in Resonance are more like friends here. Have a doubt ? Have a problem? Faculty is always ready to help you in their best way. The management is also very cooperative and flexible. Proud to be Resonite and proud to be

Ganta Nikhil (IIT DHANBAD)



Myself Santhosh Sagar, joined Resonance Vizag for JEE Advanced program. I sincerely thank all Resonance faculty for giving me complete support and guidance. Highly focused faculty and peaceful study environment in Resonance helped me achieve my goal of getting into IIT. Faculty is very friendly and highly supportive. Individual care and attetion for all my doubts and extra calsses made me an AIR Ranker.

Santhosh Sagar, (IIT MUMBAI)



I am Abhinav Sahil, a proud Alumini of Resonance Vizag successfully got admission in IIT Dharwad.Sincere thanks to entrie Resonance team for providing the right guidance and care. Resonance IIT material is rightly set for JEE adv and practicing through the toughest questions has improved my knowledge and problem solving skills.. Thanks to teaching and non teaching staff for the support..

Abhinav Sahil (IIT DHARWAD)



Resonance college provides a stress free learning environment and encourages all the students to excel in academics. Being a less confident student, with the kind of motivation received helped me to crack JEE Adv and Join IIT Patna. Student counselling and mentoring process is extremely helpful. I thank Resonance management and team for giving me a bright future

PREMA NANDH
(IIT PATNA)



I am Tamir, studied intermediate in Resonance college with coaching for JEE..I thank the principal, faculty and supporting staff for guiding me and providing the best coaching to get into IIT Kharagpur... Thank you

TAMIR (IITKHARAGPUR)

Holiday Calendar

ASPIRE - TARGET JEE MAIN/ADV 2026 ACADEMIC YEAR - 2024-25 Grade 11 ACADEMIC YEAR - 2025-26 Grade 12 Academic Academic TERM 1 TERM 1 APR 2024 - JUL 2024 JAN 2025 - MAY 2026 **Duration** Duration April 9 - Ugadhi, April 11 - Ramzan, Feb 26 - Shivrathri April 17 - Sri RamNavami March 31 - Ramzan Holidays **Holidays** April 14 - Ambedkar Jayanth May 18 Jun 2 Summer Break May 18 - 31 Summer break June 17 - Bakrid Academic Academic TERM 2 TERM 2 AUG 2024 - OCT 2024 JUN 2025 - SEP 2025 Duration Duration Aug 15 - Independence Day Term Exam Sep 30 - Oct 5 Holidays Aug 27- Ganesh Chathurthi Aug 15 - Independence Holidays **Term Exam** Sep 22 - Sep 27 Sep7 - Vinayaka Chavithi Oct 2- Gandhi Jayathi Dusehra Dusehra Oct 6 - 15 Sep 28 - Oct 4 Vacation Vacation Academic Academic OCT 2025 - FEB 2026 TERM 3 OCT 2024 -JAN 2026 **TERM 3** Duration Duration Oct 2 - Gandhi Jayanthi Oct 21 - Diwali Dec 25 - Christmas Term exam Jan 3rd -Jan 11th Holidays Jan 01 - New year Jan 26 - Republic Day October 31- Diwali **Academic** Holidays Pongal Vacation | Jan 11th - 18th Dec 25 - Christmas Year 2026 Jan 01 - New year Day Pongal JEE MAIN/ADV Jan 11 - 17 March - May REVISION Vacation



GG

I AM THE ONE WHO DREAMS BIG.

I AM THE ONE WHO STUDIES HARDER.

I AM THE ONE WHO AIMS TO WIN.

I AM THE ONE IN



Resonance