JEE Main & Advanced: Complete Guide to IIT, NIT, AKTU Admissions – Eligibility, Dates, Colleges & More

WHAT IS JEE?

Joint Entrance Examination (JEE) is one of India's most competitive national-level entrance exams conducted for admission into
undergraduate engineering programs. It opens doors to premier institutes such as the Indian Institutes of Technology (IITs),
National Institutes of Technology (NITs), Indian Institutes of Information Technology (IIITs), and state-affiliated universities
like AKTU in Uttar Pradesh.

JEE is known for its challenging syllabus, high level of competition, and is considered a gateway for students aiming for careers
in engineering, technology, and innovation.

EXAM PHASES

JEE MAIN

* Conducted by: National Testing Agency (NTA)
* Purpose: Entry to NITs, IIITs, CFTIs and eligibility test for JEE Advanced
* Exam Mode: Computer-Based Test (CBT)
* Frequency: Twice a year (January and April)
* Subjects: Physics, Chemistry, Mathematics

JEE Main serves as the first step toward admissions in centrally funded institutions and offers a great opportunity even if the
student doesn't qualify for IITs.

JEE ADVANCED

* Conducted by: IITs on a rotational basis
* Purpose: Admission into India's elite IITs
* Eligibility: Top 2.5 lakh candidates from JEE Main
* Mode: Online CBT

JEE Advanced is considered one of the toughest engineering entrance exams in the world and tests deep conceptual understanding and
application-based learning.

WHEN TO START PREPARING

* Class 11: Ideal time to start with 2 years of strategic preparation covering basic to advanced concepts.
* Class 12: One-year preparation with focus on revision, practice, and strengthening weak areas.
* Drop Year: Full-time preparation with access to mock tests, previous year questions, and refined strategies.

Subjects: Physics, Chemistry, Mathematics

Resources: Online platforms like Physics Wallah, Unacademy; offline institutes like FIITJEE, Aakash; standard books like HC Verma,
NCERT, D.C. Pandey, etc.

EXAM ATTEMPTS & ELIGIBILITY

Criteria JEE Main JEE Advanced Attempts 6 attempts (2 per year × 3 years) 2 attempts (in 2 consecutive years) Eligibility 12th
pass with Physics, Chemistry, and Mathematics Top 2.5 lakh rank holders in JEE Main Age Limit No age limit Within 2 years of
passing Class 12 Board Marks 75% or top 20 percentile in respective board Same criteria as JEE Main

APPLICATION & EXAM SCHEDULE

JEE MAIN

* Session 1: Forms open in Nov-Dec, Exam in January
* Session 2: Forms in Feb-Mar, Exam in April

JEE ADVANCED

* Forms: Released in May (after JEE Main result)
* Exam: Scheduled in May or June

Official Websites: jeemain.nta.nic.in [https://jeemain.nta.nic.in] | jeeadv.ac.in [https://jeeadv.ac.in]

ADMISSION PROCESS

NITS, IIITS, GFTIS

Admission is based on All India Rank from JEE Main through JoSAA Counseling. Reservation policies (SC/ST/OBC/EWS/PwD) apply as per
government rules.

IITS

Students must qualify JEE Advanced. Admission is offered based on rank, category, and preferences during JoSAA Counseling.
Candidates choose among the 23 IITs offering programs like Computer Science, Electrical, Mechanical, Civil, Aerospace, and more.

AKTU-AFFILIATED COLLEGES

In Uttar Pradesh, engineering colleges under AKTU (Dr. A.P.J. Abdul Kalam Technical University) accept JEE Main scores via UPTAC
Counseling. Includes both government and top private colleges.

Official portal: uptac.admissions.nic.in [https://uptac.admissions.nic.in]

TOP ENGINEERING COLLEGES

IITS (VIA JEE ADVANCED)

IITs are autonomous public technical universities known for world-class infrastructure, research, startup incubation, global

placements, and strong alumni networks. Some top IITs include:

* IIT Bombay: Leading in innovation, finance, AI, startups
* IIT Delhi: Strong in research, management programs, metro connectivity
* IIT Kanpur: Famous for core branches and coding culture
* IIT Madras: Beautiful green campus, deep tech, interdisciplinary research
* IIT Kharagpur: Largest IIT campus, strong mechanical and civil branches

NITS (VIA JEE MAIN)

NITs are premier engineering colleges funded by the central government. Known for excellent academics and placements. Top NITs include:

* NIT Trichy (Tamil Nadu): Best overall NIT, known for placements
* NIT Surathkal (Karnataka): Beachside campus, core engineering branches
* NIT Warangal (Telangana): Legacy NIT with great CSE/EEE departments
* NIT Rourkela (Odisha): Excellent labs and project exposure
* MNNIT Allahabad (Uttar Pradesh): Top tier college in North India

TOP AKTU COLLEGES (VIA UPTAC)

AKTU governs 700+ engineering colleges in UP. Top government & private institutions include:

* IET Lucknow: Best government engineering college under AKTU
* KNIT Sultanpur: Specializes in mechanical & civil engineering

* JSS Noida: Preferred private college with strong placement record

* AKGEC Ghaziabad: Focus on discipline and technical events

* Galgotias, KIET, ABES: Good infrastructure and training programs

PREPARATION TIPS

* Focus on conceptual clarity rather than rote learning

* Maintain a weekly study plan and stick to a realistic schedule

* Use mock tests and analyze your weak topics regularly

* NCERT books are crucial—especially for Chemistry

* Practice past 10 years' JEE papers

* Stay consistent and take short breaks to avoid burnout