JEE Advanced

What Is JEE Advanced?

JEE Advanced (formerly known as IIT- JEE) is the second phase of the JEE-MAIN and is usually conducted for Students who Qualifies in the JEE Main exam. It is an important test for engineering aspirants (especially those seeking admission to premier engineering institutes such as IITs). JEE Advanced is a computer-based exam and is usually conducted by IITs (IIT Kharagpur, IIT Bombay, IIT Roorkee, IIT Madras, IIT Kanpur, IIT Delhi and IIT Guwahati) on a rotational basis. The JEE Advanced is expected to be conducted by IIT Guwahati. On this page, you will get the latest updates about JEE Advanced , exam dates, syllabus, exam pattern, eligibility criteria, etc.

About JEE Advanced Exam Details

The details of the JEE Advanced entrance exam are presented below.

Exam Name: JEE Advanced

Exam Conducting Authority: IITs

Exam Purpose: B.Tech courses

Participating Institutes: 33 (IISc, 23 IITs, 5 IISER, IIPE, IIST and RGIPT)

Exam Mode: Computer-Based Online Test

Subjects Covered: Maths, Physics and Chemistry

Test Duration: 3 Hours (Paper 1 and 2 Each) – Both are mandatory to attempt

Total Marks: Varies every year

Total Eligible Candidates: Top 2,50,000 candidates from JEE Main

Counselling Authority: JoSAA

Available Seats in IITs: The number varies every year. The number of available IIT seats was 16,598 in 2022.

Number of attempts: Maximum 2 attempts in consecutive years

Official JEE Advanced Notification: After JEE Main Exam.

The entrance exam consists of two papers – Paper 1 and Paper 2. It is also carried out in two

stages (or shifts) that are held on the same day. All the students must appear for both papers to be eligible for the merit list. Candidates are granted admission to various undergraduate courses and master and dual degree programmes offered by IITs based on marks scored or ranks secured in the JEE Advanced examination.

Read on to know about the JEE Advanced dates, registration process and application forms, syllabus, exam pattern, results and more.

JEE Advanced Criteria:

The JEE Advanced eligibility criteria are important guidelines that aspirants should adhere to before filling out the application form. Students are suggested to carefully check the detailed information on the eligibility criteria listed by the exam conducting body. It will help them know many important details about the exam, like age criteria, nationality, number of attempts, and more.

The JEE Advanced eligibility criteria will help students know the minimum requirements they need to fulfil to appear for the exam. Further, the information provided will help students analyse whether they are eligible or not. Those who fail to meet the requirements will not be able to appear for the exam.

Nationality: Students who are citizens of India, PIOs (Persons of Indian Origin), OCIs (Overseas Citizens of India) and foreign nationals are eligible to appear for the JEE Advanced exam. Certain conditions have to be met by foreign nationals. We will look at them in detail below.

Age Criteria: Candidates who were born on or after the 1st of October 1998 are eligible. Applicants belonging to the reserved category are provided with a relaxation of 5 years. So, candidates should have been born on or after October 1, 1993.

Candidates may appear and write the exam twice in two years, regardless of whether they passed the qualifying exam.

Exam and Percentage of Marks: We will look at the exam requirements in detail below.

JEE Advanced Eligibility Based on Performance in JEE Main

To be eligible for JEE Advanced, aspirants should rank within the top 2,50,000 (including all categories) of successful candidates in JEE Main. The total number of candidates may also be greater than 2,50,000 in the presence of "tied" ranks or scores in any category.

The percentage-wise reservations of different categories are:

Category	Percentage
Open	40.5%
GEN-EWS	10%
Scheduled Caste (SC)	15%
Scheduled Tribe (ST)	7.5%
OBC-NCL	27%
PWD	5% Horizontal Reservation

The following table shows the order to be followed while choosing the top 2,50,000 candidates in various categories based on their performance in B.E./B.Tech. paper of JEE (Main) 2022.

Category	Number of Top Candidates	Total Candidates
Open	96,187 Candidates	101250
Open PWD	5,063 Candidates	
General-EWS	23,750 Candidates	25000
General-EWS-PWD	1,250 Candidates	
OBC Non-Creamy Layer	64,125 Candidates	67500
OBC Non-Creamy Layer PWD	3,375 Candidates	
Scheduled Caste	35,625 Candidates	37500
Scheduled Caste PWD	1875 Candidates	
Scheduled Tribe	17,812 Candidates	18750
Scheduled Tribe PWD	938 Candidates	

Eligibility Criteria for Foreign Nationals

Those candidates who are foreign nationals have a different set of eligibility criteria laid out for them by the authorities. As per the details provided in the official document, candidates are treated as foreign nationals if they are not citizens of India, or their parents are not of Indian origin and do not belong to either OCI/PIO category.

Some of the other information that candidates should be aware of are:

- Foreign nationals do not have the privilege of reservation of seats under any categories as directed by the Government of India.
- Foreign national candidates who have studied or are studying ABROAD at 10+2 level or equivalent at the time of registering for JEE (Advanced) are not required to write JEE (Main) and may register for JEE (Advanced) directly subject to fulfilment of other eligibility criteria.
- Foreign national candidates who have studied or are studying in INDIA at 10+2 level or equivalent are required to write JEE (Main) and qualify for JEE (Advanced) under the OPEN category.
- Identity proof of both the parents and the candidate is required as a citizenship certificate/passport.
- Talking about the availability of seats, foreign nationals are allotted a maximum of 10% of the total number of seats in every course.

All foreign candidates planning to write the JEE Advanced exam must first register online through the JEE Advanced website (https://jeeadv.ac.in) or (https://jeeadv.ac.in/foreign.html). The registration fee for JEE (Advanced), applicable to foreign nationals, is given in the following table.

Registration Fee for JEE Advanced

- The registration fee does not include any processing fees or service charges, or any other charges that the banks can levy.
- The online registration portal normally provides detailed instructions related to the payment of the registration fee.

Documents Required for Registration

- 12th standard marks sheet/certificate for cut-off.
- Identity proof.
- Birth certificate for verifying the age.
- Citizenship certificate/passport of parents.
- Testimonial (if required).

*All the seats allotted to foreign national candidates will be supernumerary, with a cap of 10% of the total number of seats in every course.

Foreign Centres Where JEE Advanced Are Held

There are several centres where the exam is conducted. The centres include Colombo (Sri Lanka), Dhaka (Bangladesh), Addis Ababa (Ethiopia), San Francisco (USA), Dubai (UAE), Kathmandu (Nepal) and Singapore.

The eligibility criteria of JEE Advanced highlight some of the minimum requirements that engineering candidates need to fulfil in order to appear for the exam. Those candidates who do not meet the eligibility requirements will not be allowed to appear for JEE Advanced.

Note: *Registration for foreign nationals will begin first for JEE Advanced. And for Indian candidates, the registration will open at a later stage.*

Notably, it is crucial for aspirants to read and know the eligibility criteria before filling out the JEE Advanced application form. The student's applications will be rejected if the defined requirements are not met. As for the exam, IIT Bombay has been chosen to organise and conduct the upcoming exam.

Important Notice: Due to the prevailing pandemic situation resulting from COVID-19 in India and abroad, the exam authority has decided not to conduct the JEE (Advanced) in any of the foreign centres/countries. As per the information provided by the exam authority, foreign national candidates can appear for JEE Advanced at any of the Indian centres of their choice at their own expense (including travel etc.) after adhering to the required travel norms of the Government of India and their respective countries of residence.

Overview of JEE Advanced

JEE Advanced is the second phase of IIT JEE that is conducted after JEE Main. The exam is conducted yearly by different IITs on a rotation basis under the supervision of IIT–JAB (Joint Admission Board). Based on their performance in the exam, students are granted admission to various undergraduate courses (engineering, science, or architecture) offered at top IITs and ISM in the country. With some recent changes, the examination will be conducted in a computer-based online test comprising two papers (Paper 1 and Paper 2). The exam will also be carried out in two sessions on the same day. Students must appear for both Paper 1 and Paper 2 and clear them to have their names included in the merit list.

Connect with us to know more about JEE Advanced, the latest paper pattern, question papers, important topics and more.

JEE Advanced Application Form and Registration Process

Soon after the declaration of JEE Main results, the conducting authority for JEE Advanced exam will release the application form and other items. IIT Guwahati will be in charge of releasing the application forms, and they should be available after the completion of the JEE Main exams. The students must first register on the official website and then fill out the application form. They have to submit the form online along with the application fees. The top 2.50 lakh candidates from JEE Mains will be eligible for the IIT JEE Advanced exam.

We have outlined the steps students can follow to submit the JEE Advanced application form successfully.

JEE Advanced Registration Fees

Indian Nationals:

- **General Category Candidates:** INR 2,800/-
- **Female Candidates:** INR 1,400/-
- **Reserved Category Candidates:** INR 1,400/-

Foreign Nationals:

- **SAARC Country Candidates:** 75 USD
- **Non-SAARC Country Candidates:** 150 USD

Note: Students must choose five exam centres from an IIT zone while filling out the application. JEE Advanced exam centres are present in 161 cities. Once the centres are fixed, they cannot be changed. The details about the centres will be given on the candidate's admit card.

JEE Advanced Admit Card

IIT Guwahati will release the JEE Advanced admit card at jeeadv.ac.in. Admit cards will only be released for the candidates who successfully registered for the JEE Advanced exam before the last date. Candidates will not be allowed to enter the JEE Advanced exam centres without a valid admit card for JEE Advanced. Candidates can download their admit card by logging in to the candidate portal using their registration number, date of birth and mobile number.

JEE Advanced Exam Pattern

Below is the expected exam pattern for JEE Advanced. As we know, the number of questions in JEE Advanced paper may vary every year.

Number of Papers: 2 (Paper-I and Paper-II) – Both are compulsory

Exam Mode: Computer-based (Online)

Duration: 3 Hours each for Paper-I and Paper-II (4 hours for PwD candidates)

Shifts: 9 AM – 12 PM, 2:30 PM – 5:30 PM

Number of Sections: 3 (Physics, Chemistry, Maths)

Number of Questions: Varies

Question Types: Multiple Choice Questions (with one or more correct options), Numerical-based Questions, Ma

Question Paper Languages: English and Hindi

JEE Advanced Marking Scheme

Marking scheme for questions with one or more correct options

- +4 if all the marked responses are correct
- +3, +2, +1 for partially correct answers, provided any incorrect option is not marked
- -2 for incorrect answer
- No negative marking for questions left unattempted

Marking scheme for questions with numerical value type answers

- +3 for correct answer
- No negative marking for incorrect answers or questions left unattempted

Marking scheme for matching list type and single correct option questions

- +3 for correct answer
- -1 for incorrect answer
- No negative marking for questions left unattempted

Similarly, the JEE Advanced AAT pattern is not fixed. Here is an outline of the exam pattern as seen in previous year's exams:

- **Mode of Examination:** It is conducted offline
- **Exam Duration:** 3 hours
- **Language:** English
- **Sections:** Geometrical Drawing, Freehand Drawing, Imagination and Aesthetic Sensitivity, Three-Dimensional Perception, Architectural Awareness.

Best Books for JEE Advanced

A list of books that can be referred to by students preparing for the JEE Advanced is provided below.

Maths:

- NCERT Class XI and XII books
- IIT Mathematics by M.L. Khanna
- Higher Algebra by Hall and Knight
- Differential Calculus by A. Das Gupta
- RD Sharma Classes 11 and 12
- Trigonometry by S.L. Loney

Chemistry:

- NCERT Class XI and XII books
- Inorganic Chemistry by J.D. Lee
- Numerical Chemistry by P. Bahadur
- Physical Chemistry by Wiley
- Organic Chemistry by Morrison and Boyd
- Inorganic Chemistry by O.P. Tandon

Physics:

- NCERT Class XI and XII Textbooks
- JEE Physics by D.C. Pandey
- HC Verma Part I and II
- Problems in Physics by S.S. Krotov
- Physics by Resnick and Halliday
- Physics by I.E. Irodov

Students need to choose the right and best books for IIT JEE preparations. They should stick with them throughout the preparations. Avoid referring to multiple books for similar topics, as it can lead to confusion between concepts. Analyse your strengths and weaknesses and make an appropriate study plan so that your preparation time can be evenly divided and the entire syllabus can be completed well in time.

JEE Advanced Mock Test

The examination authority will release the mock test paper for the exams. The students are advised to practise these test papers sincerely to get acquainted with the computer-based online exam pattern. The JEE Advanced mock test will be for 180 minutes, during which the candidates will use computers to navigate between the sections and submit their answers. It is one of the best ways to prepare for highly competitive exams like JEE Advanced.

Apart from the mock test, sample papers and previous years' question papers are extremely helpful in understanding the marking scheme, types of questions asked, the difficulty level of the exam, time distribution, etc.

JEE Advanced Results

IIT Guwahati will declare the results of the JEE Advanced. The examination authority who is in charge of the exam for that particular year will declare the results. The results will be published online on the official website comprising subject-wise marks and total marks secured, All India Rank (AIR) and Category Ranks.

JEE Advanced Cutoff Marks

The cutoff marks for the entrance exam will be released along with the declaration of results.

JEE Advanced cutoff marks are the minimum marks required by the candidates to be eligible in the counselling process conducted by Joint Seat Allocation Authority (JoSAA). The students are shortlisted for admission at IITs based on the cutoff marks and ranks secured in the examination.

What Factors Determine the Cutoff Marks for JEE Advanced?

- Total candidates eligible for JEE Advanced
- Seat availability in different IITs
- The difficulty level of the exam
- Total candidates appeared
- Last year's cutoff trends
- The overall performance of appearing candidates

JEE Advanced Marks vs Rank

Based on previous years' results analysis, we have provided an approximate range of JEE Advanced marks vs rank. Soon after the exam, the answer keys are released by the examination authority. After calculating their marks, the candidates can refer to JEE Advanced marks vs rank analysis to calculate their expected rank range based on the marks secured out of 360.

Marks Range out of 360	Expected ranks (Approx)
335 Marks to 308 Marks	10 to 50
285 Marks to 279 Marks	100 to 200
230 Marks to 224 Marks	700 to 800
212 Marks to 209 Marks	1100 to 1200
200 Marks to 197 Marks	1500 to 1600
191 Marks to 189 Marks	1900 to 2000
177 Marks to 175 Marks	2700 to 2800
172 Marks to 170 Marks	3100 to 3200
163 Marks to 162 Marks	3900 to 4000
155 Marks to 154 Marks	4700 to 4800