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Engineering Exam- 2023

Information Booklet

Engineering Streams

Aerospace Engineering: This branch of engineering course includes developing, designing, constructing, testing and operating the aeroplanes and spacecraft. Aerospace engineering is of two types
Aeronautical engineering and Astronautical engineering. Both deals with craft but the former stay within earth's atmosphere but the later operates outside of earth's atmosphere

Automobile Engineering: This branch of engineering course deals with designing, manufacturing and operating machines,
Civil Engineering: This branch of engineering course mainly deals with designing, developing, executing of dams, bridges, harbours, lighthouses roads, canals, tunnels etc.

Computer Engineering: This branch of engineering course deals with, designing, developing, manufacturing and maintenance of computer and computers peripherals/components.

Chemical engineering: This branch of engineering course deals developing, designing and operating plants to change materials physical or chemical states. Electrical & Electronic engineering: The electrical engineering course deals with electric lights, power systems and equipment's whereas electronic engineering deals with wire and radio communication, program stored in computer, radar and automatic control system.

Information technology: This branch of engineering manages and uses information with the help of computer-based tools. It includes both hardware and software.
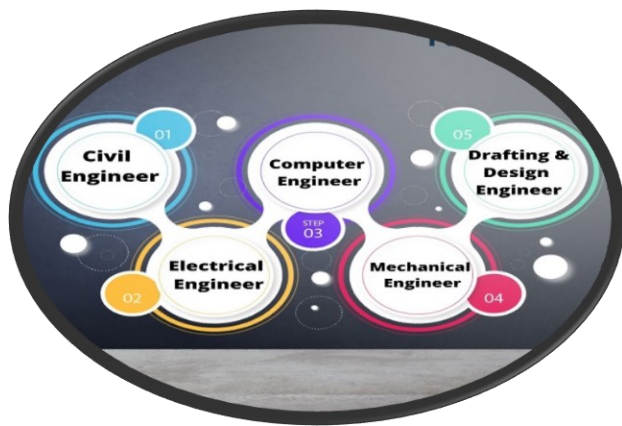
Genetic Engineering: This branch of engineering deals with modification, manipulation and re-combination of Deoxyribonucleic Acid (DNA) or other nucleic-acid molecules in order to modify an organism or population of an organism

Mechanical Engineering: This branch of engineering mainly concerns with designing, manufacturing, installations and operating the engines and machines.

Mining Engineering: This branch of engineering deals with mines and minerals, Mining engineers manufactures and develops the instruments which are required in mining

Marine Engineering: This branch of engineering deals with designing, constructing and managing the ships and other sailing vehicle.

Military Engineering: This branch of engineering is an art of designing and building military work such as military transport, military communication, construction or maintenance of airfield, roads, railroads, bridges, ports and hospitals.

Engineering Courses

BE (Bachelor of Engineering)
B. Tech (Bachelor of Technology)
B.Arch. (Bachelor of Architecture)
B. Planning. (Bachelor of Planning)

Eligibility for JEE (Main)

Minimum qualification for engineering entrance examination is 10+2

Age limit

For appearing in the JEE (Main) – 2022, there is no age limit for the candidates. However, the candidates may be required to fulfill the age criteria of the Institute(s) in which they are desirous of taking admission.

List of Qualifying Examinations (QE)

- ✓ **The final examination of the 10+2 system**, conducted by any recognized Central/State Board, such as Central Board of Secondary Education, New Delhi; Council for the Indian School Certificate Examinations, New Delhi; etc.
- ✓ **Intermediate or two-year Pre-University** examination conducted by a recognized Board/ University.
- ✓ **Final examination of the two-year** course of the Joint Services Wing of the National Defense Academy
- ✓ **Senior Secondary School Examination** conducted by the National Institute of Open Schooling with a minimum of five subjects.
- ✓ **Any Public School/ Board/ University examination** in India or any foreign country recognized as equivalent to the 10+2 system by the Association of Indian Universities (AIU).
- ✓ **Higher Secondary Certificate Vocational Examination.**
- ✓ **A Diploma recognized by AICTE or a State board** of technical education of at least 3 years duration.
- ✓ **General Certificate Education (GCE) examination** (London/Cambridge/Sri Lanka) at the Advanced (A) level.
- ✓ **High School Certificate Examination of the Cambridge University or International Baccalaureate Diploma of the International Baccalaureate Office, Geneva.**
- ✓ Candidates who have completed the Class 12 (or equivalent) examination outside India or from a Board not specified above should produce a certificate from the **Association of Indian Universities (AIU)** to the effect that the examination they have passed is equivalent to the Class 12 Examination.
- ✓ In case the Class 12 Examination is not a public examination, the candidate must have passed at least one public (Board or Pre-University) examination earlier.

Top 10 Engineering Entrance Exams

S. No	Engineering Entrance Exam	Conducting Body
1	**JEE Main**	National Testing Agency (NTA)*
2	**VITEEE**	VIT University
3	**SRMJEEE**	SRM Institute of Science and Technology (Earlier known as SRM University)
4	**BITSAT**	BITS Pilani
5	**MET**	Manipal Academy of Higher Education
6	**COMEDK UGET**	Consortium of Medical Engineering and Dental Colleges of Karnataka (COMEDK).
7	**AP EAMCET**	JNTU Kakinada
8	**KIITEE**	Kalinga Institute of Industrial Technology
9	**MHTCET**	State Common Entrance Test Cell, Mumbai
10	**WBJEE**	West Bengal Joint Entrance Examinations Board

JEE Main

Admissions Offered into: 31 NITs, 25 IIITs and 28 GFTIs

National Testing Agency **(NTA)** will conduct the Joint Entrance Examination (JEE) Main 2023 in multiple phases. JEE Mains 2023 will be held in computer based mode (except the drawing section of Paper 2 (B.Arch) which is a pen and paper based exam).Information for the same will be available on official website

Duration of the exam - 3 hours
official website -www. jeemain.nta.nic.in

JEE Main Exam Pattern 2022: Paper 1 (B.E/B.Tech)

Particulars	Details
Exam Mode	Computer-based examination
Test Duration	Three hours
Language of Examination	English, Hindi, Assamese, Bengali, Gujarati, Kannada, Marathi, Malayalam, Odia, Punjabi, Tamil, Telugu, and Urdu.
Type of Questions	• Multiple choice questions (MCQs) • Questions with numerical values as answers
No. of Sections	Three are three sections: • Mathematics • Physics • Chemistry
No. of Questions	**Mathematics:** 25 (20+10) 10 Questions with answers as a numerical value. Out of 10 questions, 5 questions are compulsory. **Physics:** 25 (20+10) 10 Questions with answers as a numerical value. Out of 10 questions, 5 questions are compulsory. **Chemistry**: 25 (20+10) 10 Questions with answers as a numerical value. Out of 10 questions, 5 questions are compulsory. Total: 75 Questions (25 questions each)
Total Marks	300 Marks (100 marks for each section)
JEE Main Marking Scheme	MCQs: Four marks will be awarded for each correct answer and there will be a negative marking of one mark on each wrong answer. Questions with numerical value answers: Candidates will be given four marks for each correct answer and there will be a negative marking of 1 mark for each wrong answer.

JEE Main Exam Pattern 2022: Paper (B.Arch & B.Plan)

Particulars	Details
Mode of Exam	Computer-based examination except for Drawing section in B.Arch (Pen & Paper based mode)
Language	English, Hindi, Assamese, Bengali, Gujarati, Kannada, Marathi, Malayalam, Odia, Punjabi, Tamil, Telugu, and Urdu.
Exam Duration	Three hours

JEE Main 2022- Paper Pattern: B.Arch

Subjects	Number of Questions	Marks
Mathematics	25 (20+10*) 5 out of 10* questions with answers as a numerical value have to be answered.	100
Aptitude	50	200
DrawingTest	2	100
Total	82 Questions	400Marks

JEE Main 2023 -Paper Pattern: B.Plan

Subjects	Number of Questions	Marks
Mathematics	25 (20+10*) 5 out of 10* questions with answers as a numerical value have to be answered.	100
Aptitude	50	200
Planning Test	25	100
Total	105 Questions	400 Marks

OTHERS ENGINEERING COLLEGES

BITSAT

The Birla Institute of Technology and Science (BITS) will conduct the University level engineering entrance exam, BITSAT 2023 in online mode
Duration of examination - 3 hours
Pattern-objective based BITSAT question paper is divided into four sections – Physics, Chemistry, English Proficiency and Logical Reasoning and finally Mathematics
Admissions Offered Into: BITS Pilani, BITS Goa and BITS Hyderabad.
Official site- bitsadmission.com.

MET

Manipal Academy of Higher Education (earlier known as Manipal University) conducts the annual online entrance examination for admissions in 16 engineering courses through MU OET
Mode of exam- Online
Pattern of exam - objective multiple-choice question
Duration of exam- 150 minutes.

VITEEE

Mode of examination - online
Paper pattern - objective. 125 questions from Physics, Mathematics, Chemistry, Aptitude and English sections.
Duration of exam-2½ hours
Admissions Offered Into: VIT Chennai, <u>VIT Vellore</u>, VIT Andhra Pradesh and VIT Bhopal.

SRMJEEE

The SRM Joint Engineering Entrance Examination (SRMJEEE) is conducted by SRM Institute of Science and Technology
Pattern-**The entrance examination consists of 125 questions**

**Direct admissions is provided to the top 1000 IIT JEE Rank holders along with the top rank holders of central and state board of examinations.

Admissions Offered Into: SRM University Kattankulathur, SRM University Ramapuram, SRM University Ramapuram Par – Vadapalani and SRM University Ghaziabad.

COMEDK UGET

Engineering courses offered by the Associations of Medical, Dental and Engineering private colleges in the state of Karnataka through COMEDK UGET conducted by the Consortium of Medical Engineering and Dental Colleges of Karnataka (COMEDK).
Duration of exam- 3 hours based on the syllabus of the 10+2 standard.
Pattern- 180 multiple choice questions
Admissions Offered Into: Around 181 engineering institutes affiliated to COMEDK UGET

KIITEE

The Kalinga Institute of Industrial Technology is the conducts KIITEE.

Mode of exam- online

Pattern-3 sections – Physics, Chemistry and Mathematics.

Admissions Offered Into: Kalinga Institute of Industrial Technology

SITEEE

Symbiosis Institute of Technology Engineering Entrance Examination (SITEEE) is conducted annually by Symbiosis Institute of Technology (SIT**).**

Note-JEE Main and MHT CET qualified applicants are also eligible for admission..

 The entrance exam consists of 100 questions and the total marks is 200.

Duration of SITEEE -150 minutes.

Admissions Offered Into: Symbiosis Institute of Technology (SIT)

AMUEEE

AMUEEE is a University level entrance examination conducted by Aligarh Muslim University for admissions into the available B.Tech programmes.

Exam Duration - 3 hours

 Pattern- objective based150 questions from Physics, Chemistry and Mathematics.

Admissions Offered Into: Aligarh Muslim University

MHT CET

State Common Entrance Test Cell, Mumbai will conduct the MHT CET 2023 or Maharashtra Common Entrance Test for admissions to first-year of BE/BTech courses in Maharashtra state.

Mode of exam- Pen and paper based

Note-Class 12 students having domicile of Maharashtra will be eligible to apply for MHT CET 2023.

AP EAMCET

Jawaharlal Nehru Technological University (JNTU), Kakinada will conduct the Andhra Pradesh Engineering, Agriculture, Medical Common Entrance Test- AP EAMCET for admissions to Agriculture, Engineering, and Medical courses offered by various institutes.

Duration of exam- 3 hour

Mode of exam-online

Top Government Engineering Colleges Without JEE Mains

Government colleges offering engineering without JEE Mains -

Serial No.	College Name	Admission Test
1.	Malaviya National Institute of Technology (MNIT), Jaipur	SAT
2.	Veermata Jijabai Technological Institute (VJTI), Mumbai	MHT CET
3.	Andhra University College of Engineering (AUCE), Visakhapatnam	AP EAMCET
4.	College of Engineering (COEP), Pune	GATE, MHT CET
5.	Maharaja Sayajirao University of Baroda (MSU), Baroda	GUJCET
6.	Lalbhai Dalpatbhai College of Engineering (LDCE), Ahmedabad	GUJCET
7.	The Institute of Chemical Technology (ICT), Mumbai	MHT CET
8.	Harcourt Butler Technical University (HBTU), Kanpur	UPCET
9.	Institute of Engineering and Technology (IET), Lucknow	UPCET
10.	College of Engineering, Trivandrum	KEAM
11.	Jawaharlal Nehru Technological University College of Engineering (JNTUHCEH), Hyderabad	TS EAMCET

12.	University College of Engineering, Osmania University, Hyderabad	TS EAMCET
13.	Government College of Engineering, Karad	MHT CET
14.	Dr. Ambedkar Institute of Technology (AIT), Bangalore	COMEDK UGET, KCET
15.	Sri Venkateswara University College of Engineering (SVUCE), Tirupati	AP EAMCET

** Some of the above-mentioned colleges may accept JEE Mains as a qualifying score along with their own entrance tests.

Engineering Colleges in Delhi

➤ Ambedkar Institute of Technology- affiliated to the Guru Gobind Singh Indraprastha University, IPU CET
➤ Amity School of Engineering and Technology
➤ Bhagwan Parshuram institute of Technology
➤ Bharati vidyapeeth's college of Engineering
➤ Faculty of Engineering and Technology-Jamia Millia Islamia
➤ G.B. Pant Govt. Engineering College
➤ Guru Teg Bahadur Institute of Technology