

GATE-2013

- The Graduate Aptitude Test in Engineering (GATE) is conducted by the seven IITs (Indian Institute of Technology) and IISc (Indian Institute of Science), Bengaluru.
- It is an all India examination for admission to Master's program in engineering, to the best engineering colleges and institutes in the country.
- GATE is held to assess the potential of undergraduate engineering students, to pursue higher education in engineering. It is an evaluative test to determine the possession of skills by students and aptitude for engineering for further studies.
- The score may also be used by Public sector units for employment screening purposes.
- This year **Indian Institute of Technology Bombay** is the **Organising Institute for GATE 2013**

How to Prepare :

- The GATE tests the basic knowledge that you possess in various fields. So you should prepare thoroughly by understanding the basics and fundamentals of the subject.
- The questions are derivations and applications of these basics. Be careful to note that mugging formulas does not help, as the questions are not on jotting them down.
- They test your ability to derive conclusions from the basic formulas and how good you are at applying them to solve questions.
- The first step is to understand the basics and know their applicability.
- The second step is to practice. Solve previous year's papers, mock question papers, and various test available. This will not only help

practicing what you have studied, but also give you an understanding of the question paper format, aid in time management and not work you up on the test day. You will know what to expect as far as the format is concerned. It will also reveal your weak and strong areas, and thus you can then concentrate on those.

- Solving previous years papers gives you a fair idea of what the actual paper would be like. It also brushes up your basics and exposes your areas of improvement
- Solve as many test papers as possible. This actually is the best way to keep improving as you prepare for GATE
- You should set up a real test ambiance while solving papers, with no breaks, no disturbance and set time. This is a very effective arrangement, and duplicates the real test environment, thus preparing you better.
- To clear the GATE, you need a few months of dedicated practice and study. Knowing the basics of all years and your subject well is the key to crack the GATE.

NEW CHANGES IN GATE-2013

1. 15 subject papers will be conducted by an ONLINE computer based test: AE, AG, AR, BT, CE, CH, CY, GG, MA, MN, MT, PH, TF, XE, and XL.
2. Female candidates are exempted from paying the application fee.
3. All candidate related information and grievance redressal will be available in a single GATE Online Applicant Interface.
4. Applicant photograph and signature must be uploaded during online application.
5. A new formula will be used for calculating the GATE score. Given below
6. Biometric information (Photograph and fingerprint) may be captured on the day of the exam examination for randomly selected candidates.
7. **Numerical answer type questions in ONLINE papers:** In the ONLINE papers, the question paper will consist of questions of multiple choice type and questions of numerical answer type. For multiple choice type questions, each question will have four choices for the answer. For numerical answer type questions, each question will have a number as the answer. Each online paper will have 15 or more marks worth of questions requiring numerical answers where possible.

GATE Score

From 2013, the GATE score will be computed by a new

The GATE Score of a candidate is computed from:

$$S = S_q + (S_t - S_q) \frac{M - M_q}{\bar{M}_t - M_q},$$

where,

- S = GATE Score (normalised) of a candidate,
- M = Marks obtained by a candidate in a paper,
- M_q = Qualifying Marks for general category candidates in the paper,
- \bar{M}_t = Average Marks of top 0.1% or 10 (which ever is higher) of candidates in the paper,
- S_t = GATE Score assigned to \bar{M}_t (around 900), and
- S_q = GATE Score assigned to M_q (around 300).

M_q is usually 25 marks (out of 100) or $\mu + \sigma$, which ever is higher. Here μ formula. is the mean of marks in a paper and σ is the standard deviation.

Importance of GATE Exam:

- Good campus placements are available with attractive salary packages in IISC or IIT'S if u get good score in GATE exam.
- Some of the prestigious organizations like INDIAN OIL CORPORATION & BARC, Mumbai call for interviews for scientist jobs, based on GATE score/percentiles. Those who get good GATE scores, are generally selected.
- You will get scholarship of Rs.8000/- per MONTH if you are qualified in GATE and studying M Tech in IISC or IIT's.
- And Also you will get an UGC scholarship of Rs.5000/- per MONTH if you are qualified in GATE and studying M Tech in any college, based on GATE score

Eligibility:

Only the following categories of candidates are eligible to appear for GATE 2013. Necessary supporting documents must be submitted ONLINE or by post during the submission of the application form for the exam. Please read this carefully and make sure that your year of qualification is not later than what is specified below.

Qualifying Degree (Short)	Qualifying Degree/Examination (Descriptive)	Description of Eligible Candidates	Year of qualification cannot be later than	Copies of Certificates to be submitted	
				Passed in the year 2012 or earlier	Expected to complete in 2013 or later
B.E./B.Tech/B.Arch	Bachelor's degree in Engineering/Technology/Architecture (4 years after 10+2/Post B.Sc./Post-Diploma)	4th year or Completed	2013	Degree Certificate / Provisional Certificate / Course Completion Certificate	Certificate from Principal
MSc/M.A./MCA equivalent	Master's degree in any branch of Science / Mathematics / Statistics / Computer Applications or equivalent	Final year or Completed	2013	Degree Certificate / Provisional Certificate / Course Completion Certificate (pertaining to Masters degree)	Certificate from Principal
Int. M.E./M.Tech or DD (after 10+2 or Diploma)	Integrated Master's degree programs or Dual Degree programs in Engineering / Technology (Five year programme)	4th/5th Year or Completed	2014	Degree Certificate / Provisional Certificate / Course Completion Certificate	Certificate from Principal
Int. M.E./M.Tech (Post BSc)	Post-BSc Integrated Master's degree programs in Engineering / Technology (Four year programme)	2nd/3rd/4th year or Completed	2015	Degree Certificate / Provisional Certificate / Course Completion Certificate	Certificate from Principal
Professional Society Examinations (equivalent to B.E./B.Tech/B.Arch)	B.E./B.Tech equivalent examinations, of Professional Societies, recognized by MHRD/UPSC/AICTE (e.g. AMIE by Institution of Engineers-India, AMICE by the Institute of Civil Engineers-India)	Completed section A or equivalent of such professional courses	NA	Professional Certificate/ Provisional Certificate/ Course Completion/ Membership Certificate issued by the Society or Institute	Copy of Marksheet for Section "A"

Certificate from Principal:

Candidates who have to submit a certificate from their Principal, as determined from the above table, have to obtain a signature from their principal on a certificate that will be printed on the application PDF file provided after completion of [online application submission](#).

Candidates with backlogs:

Candidates who have appeared in the final semester/year exam in 2012, but with a backlog (arrears/failed subjects) in any of the papers in their qualifying degree should submit

1. A copy of any one of the marks sheets of the final year, OR
2. A letter from the principal indicating that the student has a backlog from an earlier semester/year to be cleared, and therefore cannot produce a course completion certificate now. This certificate will also be present in the last portion of the PDF application form provided to you after you [submit application online](#).

NOTE:- Pre-final year students: Pre-final year students are NOT eligible to write GATE 2013.

Paper Pattern :

- The examination consists of a single paper, which contains 65 questions. The total marks is 100, and the allotted time to complete it is 3 hours. The question paper has a '4-multiple choice questions' format. And is objective type.
- there will be an additional section in the paper (for all subjects) – the General Aptitude section, which will consist of 10 questions, of 15 marks.
- Q.1 to Q.25 (25 questions) carry one mark each (subtotal 25 marks). Q.26 to Q.55 (30 questions) carry two marks each (sub-total 60 marks). Questions Q.56 – Q.65 belong to General Aptitude (GA). Questions

Q.56 – Q.60 (5 questions) carry 1 mark each (sub-total 5 marks) and questions Q.61 – Q.65 (5 questions) carry 2-marks each (sub-total 10 marks). Questions Q.48 – Q.51 (2 pairs) are common data questions. Question pairs (Q.52, Q.53) and (Q.54, Q.55) are linked answer questions. The answer to the second question of the linked answer questions depends on the answer to the first question of the pair. If the first question in the linked pair is wrongly answered or is unattempted, then the answer to the second question in the pair will not be evaluated.

- **NEGATIVE MARKING:** For Q.1 – Q.25 and Q.56 – Q.60, 1/3 mark will be deducted for each wrong answer. For Q.26 – Q.51 and Q.61 – Q.65, 2/3 mark will be deducted for each wrong answer.
- The question pairs (Q.52, Q.53), and (Q.54, Q.55) are questions with linked answers. There will be negative marks only for wrong answer to the first question of the linked answer question pair i.e. for Q.52 and Q.54, 2/3 mark will be deducted for each wrong answer. There is no negative marking for Q.53 and Q.55.
- Questions on Engineering Mathematics will carry about 15% of the total marks (excluding General Aptitude section) in all the papers bearing the codes AG, BT, CE, CH, CS, EC, EE, IN, ME, MN, MT and PI.
- GATE has relative marking scheme. That means that an applicant's rank is dependent on how others have performed. It is a relative score. So you can never be sure, even if you have answered most questions correctly. Also there is negative marking – one third of marks deducted for every wrong answer.
- in the online papers, the question paper will consist of 60 questions of multiple choice type and 5 questions of numerical answer type. For multiple choice type questions, each question will have four choices for the answer. For numerical answer type questions, each question will have a number as the answer.

Important Dates

GATE Online Applicant Interface (website) Opens	Saturday	1 September 2012 (00:00 Hrs)
Last date for Submission of Online Application (website closure)	Sunday	30 September 2012 (23:00 Hrs)
Last date for the receipt of printed version of ONLINE Application at the respective zonal GATE Office	Monday	8 October 2012
Last date for request of change of city	Tuesday	20 November 2012
Availability of admit card on Online Application Interface	Wednesday	5 December, 2012
GATE 2013 Online Examination for Papers: AR, CE, GG, MA, MT, PH and TF	Sunday	20 January 2013 (09:00 Hrs to 12:00 Hrs)
GATE 2013 Online Examination for Papers: AE, AG, BT, CH, CY, MN, XE and XL	Sunday	20 January 2013 (14:00 Hrs to 17:00 Hrs)
GATE 2013 Offline Examination for Papers: CS, ME and PI	Sunday	10 February 2013 (09:00 Hrs to 12:00 Hrs)
GATE 2013 Offline Examination for Papers: EC, EE and IN	Sunday	10 February 2013 (14:00 Hrs to 17:00 Hrs)
Announcement of results on Online Applicant Interface	Friday	15 March 2013 (10:00 Hrs)

➤ **Application Submission Process :**

1. **Application Process:** For GATE 2013, candidates need to register and fill the application ONLINE only by accessing the zonal GATE websites of IISc and seven IITs. The application process is complete only when a print out of the filled ONLINE application with the candidate's signature and a good quality photo affixed in the appropriate place is received by the respective GATE office along with necessary documents, if any, on or before 8 October 2012. Please note that application forms are NOT available for sale anywhere.
2. **Downloadable Admit Card:** Admit cards are NOT sent by mail anymore. Admit cards can only be downloaded from the zonal GATE websites from 5th December 2012 onwards. Bring the admit card to the test center along with at least one original (not photocopied / scanned copy) and valid (not expired) photo identification.

GATE is conducted through the constitution of eight zones. The zones and the corresponding administering institutes are:

- Zone 1 - Indian Institute of Science Bangalore
- Zone 2 - Indian Institute of Technology Bombay
- Zone 3 - Indian Institute of Technology Delhi
- Zone 4 - Indian Institute of Technology Guwahati
- Zone 5 - Indian Institute of Technology Kanpur
- Zone 6 - Indian Institute of Technology Kharagpur
- Zone 7 - Indian Institute of Technology Madras
- Zone 8 - Indian Institute of Technology Roorkee

Selection Criteria after getting GATE SCORE:

M.Tech Programme:

the selection is, generally, based on GATE score. However, some IITs, NITs and other university colleges may conduct a written test / Interview for selection into M.Techs. In such a case, the GATE score is given 70% weightage and remaining 30% weightage is for the written test / Interview. The exact procedure will be known by referring to the information brochure issued by the colleges for admission into M.Tech.

* In IISc Bangalore, IIT Madras, Kharagpur, Roorkee, the selection is based on GATE score. However in other colleges apart from GATE score, a written test or interview is being conducted for selection into M.Tech.

* In IIIT, Hyderabad the admission is based on written test and interview

MS Programme:

Offered by most of the IITs and IISc. The MS course is equivalent to M.Tech. It involves research work and takes minimum of 2^{1/2} to 3yrs to complete the course. Very few seats are available in the IITs. Admissions are taken twice in a year (in June & Nov. months). Admission are based on GATE score + Degree marks + interview. Candidates with more than 90 percentile GATE score and good academic record

(> 70% marks) have chances of getting admission.

**Suggested order of preferences for M.Tech specialization:
in Electronics & Communication Engineering (ECE)**

1. Communication Systems.
2. VLSI / Micro Electronics.
3. Computer Science if interested Strongly recommended in the present day industrial scenario.
4. Digital Electronics
5. Systems & Signals
6. Instrumentation & Controls

**Suggested order of preferences: for Computer Science and
Information Technology**

1. Software Engineering & Programming
2. Computer Science and Engineering
3. Network & Internet Engineering or Distributed Computing Systems
4. Information Technology
5. Multimedia
6. Embedded systems

**Suggested order of preferences: for Electrical & Electronics
Engineering (EEE)**

1. VLSI / Micro Electronics
2. Electronic Design & Technology (Chip Design)
3. Computer Science Engineering, if interested. Strongly recommended in the present day industrial scenario.
4. Systems & Signals
5. Digital Electronics
6. Instrumentation & Controls

7. Aerospace Engineering
8. Power System Operation & Control (PSOC)
9. Power Electronics (Machine Drives)
10. Power Systems
11. High Voltage Engineering (Only IISC)

Suggested order of preferences: for Mechanical Engineering (ME)

1. design,
2. manufacturing,
3. industrial engg,
4. thermal engg
5. Aerospace,
6. energy systems,

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