



Some tips on GATE Preparation

By Rohith R (Alumni of GAT - graduated in July 2017)



About me

- I am Rohith - currently pursuing M.Tech in CSE from International Institute of Information Technology Hyderabad (IIIT - Hyderabad)
- Studied B.E in CSE from Global Academy Of Technology (2013 to 2017)
- Worked as an intern during 8th semester of my B.E at Juspay Technologies Pvt. Ltd (Apr 2017 - Oct 2017)
- Worked at NTT Data Global Delivery Services (Oct 2017 - Aug 2019)
- Secured All India Rank 699 in GATE 2020 (GATE score - 59.33)
- Appeared for PGEE (exam conducted by IIIT-H) and got selected for IIIT-Hyderabad's M.Tech programme in CSE (2020-2022)
- Currently studying M.Tech CSE...just finished my first semester.

Informal about me 🤪

- Don't mistake me for a topper. I was an average student throughout my engineering.
- Average student with 2 backlogs...yes you got me right...2 backlogs
- Average student with an aggregate of just 61.44% ...just above the eligibility criteria of NTT Data 😊

Note: I'm not suggesting you to maintain such low grades in B.E. This has some consequences 😓 - ISRO exam criteria is 65%. Some (not all) companies that visit IIIT-H ask for 8 CGPA criteria. As told by seniors, most of the companies that visit IIIT-H do not have this, but some do have such criteria. This might be true in other colleges too.

- Had appeared for GATE-2019 and couldn't manage time for studies along with job at NTT Data.
- I ended up not even qualifying in GATE-2019. (Qualifying score in GATE-2019 was 28.xx and I ended up getting a score below than that)
- I quit my job in August 2019...so that I can devote 5 months full time for GATE-2020
- Then, finally appeared for GATE-2020 and scored 59.33 (All India Rank - 699)
- Appeared for PGEE and got selected for M.Tech CSE from IIIT-Hyderabad.
- Now, struggling at IIIT-H to maintain good grades...So, the struggle continues... 😓

Why higher studies?

- Let me be honest with you guys, our college is not a Tier-1 college in India yet. (Hope it will be one day soon 😊😎). Product based companies like Google, Apple, Amazon(for developer role), Facebook, Netflix etc. do not visit our college campus.
- **Product based companies:** They build software products and get paid for it. You get to work and know about the current technology used in the industry. You get paid more. Your growth rate will be higher too in these companies. ([link for some motivation](#)) Ex: Facebook, Amazon, Google etc.
- **Service based companies:** They are focussed on providing services to the already built software. Services could be software maintenance or handling small changes in the software. My work at NTT was L3 support - kind of software maintenance - finding the root cause for some failure/error and reporting it to the client within the agreed SLA time (high priority ones had less time...3-4 days and low priority ones had more time...mostly in weeks). How to prepare for these companies? - I prepared from Indiabix and brushed up some programs before interview. I participated in GD round well by putting forth points I thought made sense. (I don't remember my GD topic 😞) And luckily I got selected. Ex: NTT Data, Accenture, Mindtree, Infosys, IBM (has both products and services) etc.

Why higher studies? (continued)

- Is higher studies the only way to get into product based companies? - Not necessarily. You can get into product based companies (especially startups) if you work on your coding skills. You can prepare from Leetcode, interviewbit etc. Getting into competitive programming will also help (codeforces, codechef, hackerrank, hackerearth etc.). Apply for internships from internshala and somehow try getting into a startup. You could choose this if you do not want to study further, but get into a job.
- Even though there are ways to get into product based start-up, I would still recommend you to go for higher studies. (This is just my opinion, I could be wrong as well 😊)
- Pursuing higher studies will provide great exposure - will make you aware of various fields in computer science. You will get to do some nice projects which will add weightage to your resume.
- There might be some fields that might interest you - higher studies provides an opportunity to pursue your studies in such fields.
- You might even be interested to get into research - higher studies is like a gateway for that.

Preparing for product based companies

- Preparation for product based companies will be similar even if you do higher studies. (I am practicing from GFG while preparing these slides 😊).
- Preparing for product based companies will also make you well prepared for service based companies.
- In almost all product based companies - first round will be of coding. To clear this you'll have to be strong in coding. Get started with competitive programming. Geeks for Geeks is a good platform to get started. ([GFG free course](#) - you can check out some of their paid courses too - like "DSA self paced").
- The only way to improve in coding is by practicing. Even if you take any online course, first you will need to try coding the problem on your own and then see the solution later.
- Create accounts in sites like leetcode, codechef, hackerrank, hackerearth, codeforces etc.
- Get started by doing 5 questions everyday from any of these sites. (4 easy + 1 medium or 3 easy + 2 medium) - [some leetcode questions provided by seniors at IIIT-H](#)
- Around 80% of the competitive programmers use C++ (You can check this in hackerearth)
- C++ has STL (Standard template library) support - this is lacking in C. And C++ is also faster than many heavy languages like java. ([This video will help in getting started with C++ STL](#))

GATE preparation to become a good engineer

- Apart from getting admissions in premiere institutes in India, preparing for GATE also has other perks that might interest you. Preparing for GATE will also prepare you for technical interviews. On the other hand preparing for exams like GRE has very less perks - fancy English words will not be of much help. Quant preparation might help in clearing aptitude rounds of companies.
- Our curriculum (VTU) is more focussed on learning theory and not having to worry about how it is applied in the real world. I remember myself mugging up programs for Algorithms lab and typing the same mugged up program in the labs. This doesn't help in anyway. I remember mugging up answers in Operating Systems course too. All these do not shape you to be a good engineer. 😭
- Preparing for GATE will force you to understand subject as applied to the real world - at least it will put you in that path. 😊 You will learn Operating System concepts like semaphores, processes, threads etc. You will learn about transactions - recoverable, serializable etc. in Databases. Ignore if you don't know these - I just wanted to motivate you. Even I don't remember them clearly now - need to revise them. 😡

Why I chose GATE over GRE

- I had taken online course to crack GRE exam - I guess in my 5th semester (from GREedge)
- I hated preparing for GRE especially the Verbal ability part...I'm not a fan of fancy English words. (I love Kannada - ಕನ್ನಡವೇ ನಮ್ಮಮ್ಮ 🤩🙏 - I like English too, but not fancy English 😊).
- Other reasons why I didn't choose higher studies in foreign universities:
 1. Higher studies abroad involves a **huge investment** - Minimum of 30 lakhs...can go upto 70 lakhs or more in some cases. On the other hand higher studies in India will be well within 10 lakhs if you get into private colleges like IIIT-H (You can take education loan for this)...well below 5 lakhs if you get into central government funded institutes like IISc, IIT's, NITs. You also get a stipend of Rs.12,400 every month from AICTE if you qualify GATE.
 2. Studying abroad will mostly need you to do a part time job to manage your expenses - this can be very stressful. I believe this will impact your studies too. On the other hand if you choose to study in India, i.e after qualifying GATE - you get paid stipend without having to do a part time job.

GATE Preparation Strategy - slide 1

- Major role of my GATE preparation was **GATE Overflow**. Firstly, create an account in GATE Overflow (GO) site. Download the PDF of all previous questions from GO (it's called GO PDF). This will help a lot in your preparation.
- From where to study concepts? - You can make use of standard books, there are also free video content available on YouTube. You can download soft copies of textbooks - [from here](#).
- You can choose to buy online course from [GATE applied course](#) (I had taken this...It's good), [Ravindra Babu Ravula](#), [GATE book](#) or any other online course. Or you can stick to referring standard books, some YouTube free videos. This choice is left to you - whichever seems easy and doable.
- Read toppers experiences from Quora, their preparation strategy etc. This will help you frame your own strategy.

GATE Preparation Strategy - slide 2

- Is watching video content or referring standard textbooks, making notes enough? - No not at all. **It is only 30% of your preparation.** The rest of the preparation is solving GO PDF, test series and revision.
- Once you complete a topic - you must solve questions on that topic from GO PDF. First try solving the question on your own, if you're not able to solve the question, read answers from GO. Read all comments too. If the concept is not clear you'll need to watch the video content again or read the concept from the standard book again. You can choose to form study groups to discuss too - if that helps you.
- Reading answer and comments from GO might lead you to an alternative method of solving a question
- You can't leave any topic if you're aiming to get a rank within 1000. (For General Merit - scoring a rank above 1000 might not fetch a good institute, so getting a rank below 1000 is safer.)

GATE Preparation Strategy - slide 3

- You will also need to take tests. Take any 2 test series. I recommend Made Easy test series (some questions are provided have video solutions too) and Ravindra Babu Ravula. You can choose any 2. There are lot of test series available.
- Regularly take topic/subject tests of the topics you've covered. This itself is a kind of revision.
- Make a note of mistakes you made in tests - you can use this for revision. Even while solving GO PDF, make a note of questions you couldn't solve in first attempt.
- Finish all the topics at least before 2 months of the GATE exam. This is for people preparing for 1 year.
- At least the last 2 months must be reserved for full length tests.
- If you're planning to prepare for 2 years, plan to finish early and try devoting more than 2 months for full length tests. I would suggest 4-6 months for full length tests if you're preparing for 2 years.

My preparation strategy - GATE 2020

- Here's the preparation strategy I followed: (For GATE 2020)
1. I completed watching video lectures, making notes from them etc. by first week of December. I was also giving subject/topic/multi-subject tests, solving questions from GO along with this.
 2. **Solving questions from GO is very important.** I had solved almost all questions from GO PDF. (I couldn't manage time to solve Aptitude - I had covered the remaining subjects). This is very very important. Solving questions from GO will boost your confidence. You can solve GO PDF multiple times if you can manage time. (you can if you're preparing for 2 years - which I recommend 💪)
 3. From the first week of December I concentrated on full length tests. I used to take one full length test almost everyday (some days 2 full length tests). Taking these tests will help you know how to manage time. I would suggest you to take minimum of 30 full length tests before appearing for GATE. Make a note of mistakes that you made and use them for revision.

My preparation strategy - GATE 2020

4. Initially, when I started taking full length tests in December, my score would be in 30's and also 20's sometimes. Please don't get demotivated by this. You will improve gradually. In the month of January I started scoring in 40's. This is the reason you must devote at least 2 months for full length tests. (4-6 months if you're preparing for 2 years)
5. Along with taking full length tests from December, I had enrolled for Centre Based Test (CBT) from Made Easy. One CBT was in the month of December and the other was in the month of January. I had enrolled for both CBTs. Taking CBT will help you get accustomed with centre like environment for GATE. Adding to this, Made Easy CBT questions are framed with most likely questions.

What went wrong? - My GATE 2019

- I had decided to prepare for GATE-2019 along with the job at NTT Data. I used to attend offline classes in the weekends from “The GATE Academy”. Classes were held in Jayanagar.
- I had prepared notes for only some subjects and also watched video content of some. I had major subjects like Algorithms still pending to make notes. Like I have said before, doing this is just 30% of the preparation, but is very important. Practicing questions from GO, taking test series and regular revision is also the part of preparation.
- I attended classes till last week of December. I didn’t take any full length tests till last week of December. When I took a test in January, I scored really less and I knew it would not be practically possible to improve my score in less than a month. I appeared for GATE - 2019 and didn’t even qualify.
- This is just my opinion: “The GATE Academy” has great teachers - no doubt about it. But the classes were conducted till end of December. This can impact preparation - as from December, the main focus must be Full length tests.
- I decided that offline classroom coaching isn’t suitable for me. (I hated travelling to Jayanagar). So, took online coaching from [GATE applied course](#). Later, I took the risky decision of quitting job at NTT Data and prepare 5 months full time for GATE - 2020.

GATE preparation strategy - Summary

1. Learn concepts from video lectures/ standard books. Keep taking subject/topic/multi-subject tests of the covered portions. Solve GO PDF questions. The earlier you finish this the more better - you can devote the remaining time for full length tests. (Minimum of 2 months for full length tests is required)
2. **Solve every question from GO PDF.** This is very important. You can't skip any topic if you want to get a rank below 1000. (For General Merit students - Only ranks below 1000 can fetch a decent seat...For IITs - ranks below 300 is required, IISc Bangalore - ranks below 100 is required)
3. Devote minimum of 2 months for full length tests. (This is minimum..you can devote 4-6 months if you're preparing for 2 years)
4. Take Centre Based test (I had taken 2 CBTs from Made Easy). This will help in simulating exam like environment. (Not sure if Made Easy will conduct CBTs, provided the Covid-19 situation...Hoping everything gets back to normal by that time).

What to do if I screw up GATE?

Don't worry! Sometimes things can go wrong in those 3 hours...What to do in those cases? **Apply for other exams! Also you can choose to give another attempt - GATE.** There are many exams that have portions similar to GATE. The list is as follows:

PGEE - exam conducted by IIIT - Hyderabad. Syllabus is a subset of GATE syllabus.

ISRO - exam to get a job as a junior scientist in ISRO. Similar to GATE syllabus. (It seems they ask repeated questions from GATE 😊). I guess they have an eligibility criteria of 65%, I couldn't apply as I had 61.44%.

DRDO - job as a scientist at DRDO. Only GATE qualified students are invited to apply.

BARC - exam to get a job in Bhabha Atomic Research Centre. They even sponsor higher studies in some cases. Syllabus is mostly similar to GATE syllabus.

NIELIT - job at National Informatics Centre as a scientist. Exam - similar to GATE syllabus.

CMI - exam to pursue masters in Chennai Mathematical Institute. This is a research based institute. They offer computer science courses too.

ISI - exam for masters from Indian Statistical Institute - Kolkata.

JEST - exam for masters in institutes like IISc, IMSc

There could be many more exams like this which I'm not aware of. Periodically keep searching in the internet for application calls for these exams/roles. Read about the eligibility criteria of these exams/roles on the internet. (I'm not aware). Also be active on GO - people post about these exams on blogs in GO.

What needs to be the plan? - My suggestion

- **Main focus - GATE.** It is great if you get a good rank in your final year itself. You can immediately join Masters after graduation.
- This doesn't mean that you ignore placements. Attend placements. Getting a job in a service based company will be your safety net. If you couldn't do well in GATE, you can join the service based company and attempt GATE along with job the next year. (Quitting job for GATE preparation is very risky and I don't recommend it. Try hard preparing along with the job.)
- If you can get into a product based company/startup. It's great. You will have to decide if you still want to do Masters. (Masters will provide you a greater exposure - so you might want to prefer that. The choice is left to you.)
- Apply for other exams/roles that have similar to GATE syllabus or require GATE qualification. This will also be your safety net. 😊

Some Motivation

Please remember that all this motivation is volatile, the only thing that helps you is DISCIPLINE. (Be motivated. Just motivation doesn't work out at times, only discipline helps.)

- [Stop being lazy and start taking action by Jocko Willink, Joe Rogan and others.](#)
- [Discipline = Freedom by Jocko Willink](#)
- [Talent vs Attitude by Harsha Bhogle](#)
- [Story of Rock Lee](#) - (some motivation for Naruto fans 😊)

GATE related tips:

- [How to study for long hours by Akanksha Mittal](#)
- [Strategies for 55+ marks in GATE](#)
- [How to do revision effectively and smartly for exams by Akanksha Mittal](#)

Thank you!
All the very best!

I hope all of you will get a better GATE rank than I have and guide your juniors!
Make India the country with the world's best Engineers! 🧐

