The GRE Mega-FAQ
version 0.4

Nitin Madnani
nmadnani@gmail.com
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Important

1. All the answers collected here are unofficial. They are derived from my own experiences with GRE/TOEFL and the application process and those of my acquaintances and friends.

2. You will find web addresses for most resources discussed here in the References section at the end.

3. You may use distribute this document openly. Commercial use is prohibited. You must preserve the name of the author in all versions.

4. The latest version of this document will always be available at http://www.umiacs.umd.edu/~nmadnani/grefaq.pdf. Please check back regularly at this address.

Motivation

I decided to write/assemble this FAQ because I was observing that a lot of people were posting the same questions over and over on the GRE Yahoo! Groups and other places as well. Instead of having to answer them again and again, I decided that this would be a much better way to address all of the recurring issues. This will always be a work in progress and I will keep adding new questions as they keep coming in. I am certainly not familiar with every aspect of admissions in the U.S. and will appreciate feedback if I omit something important or am mistaken about something. Feel free to email me at the above address.

1I may not be able to answer you or incorporate the new changes right away as I am usually pretty busy with my research or coursework.
Introduction

Before we go further, I am sure many readers would be interested to know more about me. Here’s my academic profile:

- Currently: 2nd year Ph.D. student, Department of Computer Science, University of Maryland, College Park.
- Funding: Graduate Research Assistant, Institute for Advanced Computer Studies.
- Previous Education:
  - M.S. (Computer Engineering), University of Maryland College Park.
  - B.E. (Electrical Engineering), Punjab Engineering College, Chandigarh, India.
- GRE Date: October, 1999
- GRE Score: 2260/2400 (Verbal: 700, Analytical: 760, Quantitative: 800)
- TOEFL Format: Older paper-based format.
- TOEFL Score: 667/677
- TWE Score: 6.0/6.0
- TSE Score: 50/60

Questions

I decided to formulate this document in the question-answer format so that most people can go directly to the questions that they have instead of having to go through the entire document. These questions are not in any particular order.

1. **What is the GRE? What are the important things that I need to know about GRE?**

   The GRE or Graduate Record Examination[^1], is a standardized aptitude test offered by a private educational testing and measurement organization known as ETS (Educational Testing Services)[^2]. This examination is designed to measure the candidate's aptitude for graduate study. It is the most widely used test in the United States[^3]. There are two forms of the GRE:

   ![Note:](image)

   "It is also used in other parts of the world but in this document, we are only talking about American universities."
• **GRE General Test**: The general test specifically measures the candidate's verbal, quantitative and analytical writing aptitude. The test is now most commonly offered in a computer-based format instead of the older paper-based format. (See next question for a more detailed description)

• **GRE Subject Test**: The subject tests are designed to test a candidate's knowledge of the subject matter in a particular discipline extensively. Subject tests are offered in the following 8 disciplines: Biochemistry, Biology, Chemistry, Computer Science, English Literature, Mathematics, Physics and Psychology. Some universities require these subject test scores in addition to the general test when applying to the Ph.D. program. Even if the test is not required, getting a good score in this test will definitely strengthen your application.

2. **What kind of questions do the different sections of the GRE general test carry?**

All questions in the general test are multiple-choice questions. The detailed descriptions are available at the GRE official site as referenced in the last question, but for the sake of completeness, I reproduce them here with little modification:

(a) **Verbal**: The verbal section measures your ability to analyze and evaluate written material and synthesize information obtained from it, to analyze relationships among component parts of sentences, to recognize relationships between words and concepts, and to reason with words in solving problems. There is a balance of passages across different subject matter areas: humanities, social sciences, and natural sciences.

(b) **Quantitative**: The quantitative section measures your basic mathematical skills, your understanding of elementary mathematical concepts, and your ability to reason quantitatively and solve problems in a quantitative setting. There is a balance of questions requiring arithmetic, algebra, geometry, and data analysis. These are content areas usually encountered in the 9th-12th standard curricula.

(c) **Analytical Writing**: The analytical writing section tests your critical thinking and analytical writing skills. It assesses your ability to articulate and support complex ideas, analyze an argument, and sustain a focused and coherent discussion. It does not assess specific content knowledge.

3. **When should I take the GRE?**
The answer to this question, as you would expect, depends on what semester you want to apply for. Going by estimated deadlines, if you are applying for the Fall, I would recommend that you write GRE at the latest by October. I say this because this gives you enough time to concentrate on the other parts of the application which are almost equally, if not more, important than GRE scores. If you are applying for Spring, you should have finished with the GRE by June at the latest. Make sure that you are aware of the available test dates at the center where you plan to take the test and schedule the test well in advance.

4. How do I register for the GRE?

If you have a credit card that you can use for paying the GRE test fee, the easiest way to register for the GRE is online - either at the official GRE website [5] or at the Thomson Prometric website [6], or even by calling the test center where you want to register. However, if you do not have a credit card, you can use a certified check or money order to pay but you then have to mail that to the Regional Registration Center where you plan to take the test [7].

5. How long does it take for ETS to report to the GRE scores to the first 4 universities? What about after that?

According to ETS's official policy, score reports are mailed to you and the 4 institutions, if you designate them on the day of the test, approximately 10-15 days after you take the test. I think we can safely assume the same duration for reporting the scores to new institutions as well, since it is completely electronic now. However, the scorecard is sent out to you personally via regular mail and, as such, you may not receive it until 3-4 weeks after your test. In order to report additional scores, use the Additional Score Reporting form which is available - with detailed instructions - at the GRE official website [8].

6. Can I apply for admission anytime during the year?

No. Most universities in the U.S. accept applications only two times in a calendar year. Before we discuss that, let me give you a brief breakdown of the academic year as. The academic year is usually divided into 4 semesters - Fall, Winter, Spring and Summer. The semesters are usually 13 weeks long but this is not a hard and fast constraint. The Fall semester starts somewhere between August and September and ends in late December or early January. The Spring semester starts in January and ends in May. The Summer semester starts in late May or early June and ends just before the Fall semester begins. Not all universities have
a Winter semester but if they do, it is a very short semester squeezed between the Fall and the Spring semesters. The semesters correspond very roughly with the eponymous seasons.

Now on to the actual answer of this question. Most universities will accept admission applications for the Fall and the Spring semesters of the academic year. Please beware, the some universities only entertain applications for the Fall semester.

7. **What are the deadlines for applying in Spring? In Fall?**

This is one of the silliest questions that I see asked around. Let me answer this one final time: Each university has its own deadlines for applications for the two semesters. There is no one deadline. If you want to find deadlines for specific universities, please consider using a very well known invention called **Google**. Find the website of the university, go to the section for prospective students and you will find all the deadlines listed there, along with almost all information that you could ever require. In general, please consider doing a little bit of research yourself before asking others.

If you still need a very general idea of the deadlines, Fall semesters usually have an application deadline of mid December or early January, whereas Spring deadlines are usually in August or September.

8. **Is there any difference between applying for the Fall semester and the Spring semester?**

Yes, there is absolutely a difference between those two semesters. The academic year in all United States universities begins with the Fall semester. Therefore, most assistantship and fellowship positions also begin at around the same time. In fact, some universities (like mine, for example) do not even entertain Spring applications unless you can demonstrate mitigating circumstances or you are an existing student. In short, if you are applying for the Spring semester you have the following disadvantages:

- You are applying in the middle of the academic year when the number of admits granted is definitely lower than in the Fall.
- Financial aid for the Spring semester is very rare.
- This is relatively unimportant but since the academic year starts in the Fall, all the core courses are offered mostly in the Fall. This may cause a little problem with planning your coursework.

Therefore, my advice is to apply in the Fall unless there are some exceptional circumstances and you cannot help it.
9. What will I need for my application, besides standardized test scores?

Every university has detailed and specific guidelines in their application brochure about the documents that they will need you to submit with the application. However, it is good to have a general idea of the sort of documents that are usually needed for an application to be deemed complete. Here is a list:

- **College Transcripts**: A transcript is another name for a marksheet provided by your college or university at the end of each semester, that lists in detail the courses taken and the grades obtained in these courses. You are allowed to send notarized copies of your transcripts with the application. The admission will then be contingent upon your providing the original transcripts when you join. Another point is that since you will usually send out your applications before you have graduated from your college, it is okay to provide the marksheets only up to that semester. However, you will need to provide the rest when you join.

- **Letters of Recommendation**: Most universities require you to provide three letters of recommendation. The faculty members in your department are the best people to ask for these letters. However, if you did an internship at another institution or corporation, getting a letter from your mentor or supervisor would be a big plus. Some universities will provide actual recommendation forms that you may get filled out by your references, in lieu of letters. In general, a good letter of recommendation would touch upon not only your academic achievements but also your analytical and problem-solving skills and preferably provide some anecdotal examples.

- **Statement of Purpose**: This will possibly turn out to be the most important document in your application. A statement of purpose can best be described as a document for your academic past and the future. It should clearly describe why you chose your particular academic discipline, why you are interested in pursuing graduate study in that discipline or why you are interested in a different discipline than the one you did your bachelor’s degree in. It should also clearly outline the ideas you have about what you would like to do and what you are interested in researching. It is very important that these ideas and interests mesh with the interests of a group of a faculty member at that university, which you should find out and mention in the statement. You should also read some of the research that the group or the faculty member has published in conferences and journals to find out more about the kind of research that they do and the direction that it is headed in. This will help you immensely.

- **Financial Support Statement**: Another important document is the
10. **How do I prepare the financial support statement? Why is it important?**

The financial support statement is a declaration of your financial assets to prove to the admissions committee of a university that you will be able to support yourself during your graduate study program. However, it is not the case that you will necessarily have to declare enough assets to cover the entire cost of the first year. It is actually up to you what you want to do here. There is usually a question on the application asking something along the lines of “Will you be able to attend this university if you are not provided any financial aid?” If you answer that question in the affirmative, you should show as many assets as possible in the financial statement so that they will see that you can support yourself during your stay there. However, if you say “no” to that question, then they know that your acceptance of the admission offer is contingent on provision of financial aid and they will not put as much emphasis on the financial statement.

The reason the financial statement is so important is because it is essential to procure what is commonly known as the **I-20 form**. The *Certificate of Visa Eligibility for Nonimmigrant F-1 Student Status* is commonly known as the I-20. This is the document issued by a university through the internet-based Student and Exchange Visitor Information System (SEVIS) for presentation at the U.S. embassy to apply for an F-1 Student visa; it must also be presented to an immigration official upon entry into the U.S. In short, you will not get a visa without an I-20 and you will only get an I-20 if you satisfy the financial constraints. Therefore, the financial statement is critical to the application process.

11. **How do I decide which universities to apply to?**

This is one of the most frequently asked questions and the answer is not as straightforward as you would like it to be. This is one of the highly subjective questions that you will be encountering as you proceed through the application process. Before we talk about the factors
that should influence your decision, let me provide a few useful sources of information about Graduate Schools in the US:

- **US News Rankings:** Every year, the periodical *US News & World Report* comes out with their rankings of US Graduate Schools categorized by the various disciplines. These rankings are based on factors such as the number of graduating PhD students, the number of permanent faculty members, and the amount obtained by the faculty in research grants etc. It is important to note that these rankings are not the only rankings out there. These are just relatively more comprehensive and more trusted rankings than the other ones. Only the general rankings are usually available for free. If you want detailed rankings in your own discipline, they are usually just a google-search away. If you cannot find them, email me and I will try and get them for you.  

- **PhDs.org:** This is a very useful website based on the graduate school statistics provided by the National Research Council. The one really good thing about this website is that you can actually use the interactive rankings form to generate rankings according to your own criteria. This comes in handy when you want to weight things like financial aid much higher than other factors.

- **USEFI Centers:** USEFI(United States Education Foundation in India), also known as the Fulbright Commission, is an organization that was started in 1950 for the purpose of promoting academic exchanges between India and the United States. They are headquartered in Connaught Place in New Delhi and have offices in the other 3 metropolitan cities as well. They have detailed guides about all US Universities and also hold various seminars about finding fellowships and scholarships for your graduate study in the US. I would definitely recommend doing some serious research in their offices for coming up with a preliminary list of the universities.

OK, now that we have resources for you to find out information about all the universities, let's talk about what all should factor in your thinking:

- **Research interests:** It is important to understand that the programs of graduate study in the US that we are talking about here - M.S and Ph.D. - entail research. You should have a clear idea of the areas in your discipline that intrigue you and that you are interested in exploring further. If the only reason you want to do an M.S. is to get a more lucrative software engineering or programming, this might not turn out to be important for you during your M.S but you will certainly need it to get admitted. Your statement of research (also known as the statement of purpose) should be very well focused.
and plainly describe your reasons for pursuing graduate study. You might be able to secure an admission with a weak SOP, but certainly not financial aid.

Once you have your research interests decided, find the universities that do good research in these areas, get lots of grants for the same and also hire a lot of students in these labs. Use the above resources and also try and contact other students from your college that have gone to the US, since they may have a better idea about these things.

- **Test Scores:** Test scores are not the sole deciding factor in your admission, as most people think. They are certainly important as they indicate your aptitude for graduate study, but that's all they are - an indication. If you get too low of a score, you will certainly have problems getting into the relatively higher-ranked universities. Getting an extremely good score will help. However, if you are in the relatively upper percentile range of, say 1400-1500, your exact score does not matter. Yes, that's right. Once you are in that range, it is all the same.

  The only part TOEFL scores play is to determine your English speaking and comprehension skills. If you test in the right range, their work is over. If you test too low, however, universities may admit you only on the condition that you will attend some English classes once you get to the U.S.

- **Alumni:** I would suggest that you strongly consider universities where students from previous batches of your college have secured admission and financial aid. Chances are that if they have admitted students from the past and have been generally satisfied with their quality, they will almost certainly admit you as well.

- **Geographic factors:** Sometimes it is also important to consider the location of the university that you are considering applying to. Industries concentrated in particular states tend to hire heavily from the universities around them. For example, Dell - which is based in Austin, Texas, hires a lot of engineers from Texas A&M University, University of Texas at Austin and University of Texas at Arlington. If you are interested in automotive engineering, consider applying close to Detroit, where the Big Three (Ford, General Motors and Chrysler) are based. Similarly, Maxtor - a hard-drive and storage appliance corporation based in Denver - hires engineers from University of Colorado at Boulder.

I think that about sums up the not-so-short answer to this oft asked question.
12. **How do I prepare for that infernal Verbal section of the GRE?**

Another very common question for Indian students and also another very subjective question. Each and every one of us has a different way of learning new things and so there can't be any one way for all of us to prepare. I think the best thing I can do here is to outline the way that I prepared for this section and hopefully a lot of you will get some good pointers and direction.

(a) **It's all about the roots:** Blindly stuffing the meaning of words into your brain by going through some list is the worst way to prepare for this section. You will have to remember an unmanageably large chunks of information. As engineers, you should realize that if you can remember words together as groups, the storage efficiency will be much higher. The easiest way to remember groups of words is to via their etymology, or the way that the word originated. If you remember the roots, you will be able to infer the meaning of even a completely new word that you encounter for the first time. Let's look at an example. Consider the word *euthanasia*. If you learn the roots of this word, you will learn that:

- *eu-* is a Greek root, meaning “good”
- *-thanasia* is derived from the Greek “Thanatos” who was the god of death.

Therefore, the complete word means “good death”, which is what we know. Now, say you come across the word *thanatophobic*. Chances are that you have not seen this word before. No need to panic! Roots will always help you out:

- We know that *thanato-* refers to “death”.
- Everyone knows (or should know) that *-phobic* means “someone afraid of something”.

Therefore, this adjective refers to someone afraid of dying. Voila! A very good book which emphasizes learning the roots of words is *Word Power Made Easy* by Norman Lewis [13].

(b) **Flash Cards:** Another very popular and effective method is using flash cards for writing down words and their meanings. I used flash cards to write down not only the different meanings but also examples of usage for particularly difficult words. I went through them every night and every morning.

(c) **Read, Read and Read:** I know that most people begin GRE preparations with a short window of time but if you are smart enough to
be starting a year or 2 years early, the one thing that I cannot stress enough is the importance of reading. It may be newspapers or periodicals, sports or automotive magazines, fiction novels, classic literature or anything else with a relatively richer vocabulary that you enjoy reading. Just reading will not help you prepare, however. The point is that anytime you come across a word that you have not seen before or do not remember, look it up right there and then in the dictionary and enter it on a flash card along with the usage. At the end of the day, force yourself to write a paragraph in which you use every new word that you came across today. This turned out to be very useful for me.

(d) **Practice Makes Perfect**: For certain questions like Reading Comprehension exercises, all of the above will certainly help you but you must keep practicing. You know what else helps with RCs? General Reading!! If you are able to read, say, today's editorial and understand the premise behind and also the arguments the author makes to support or disprove that premise, you will have no problems with these kind of questions.

13. **How do I decide on the list of universities to which I have to send the GRE scores at the end of the test?**

   Do not, by any means, consider this as a casual exercise. Ideally, you should have already decided on your list of universities before you take the GRE and so you can choose 4 from that list. However, we know that since GRE scores are a big factor in selecting the universities, most people do not have such a list. The straightforward solution is to have multiple lists. Make 3 lists of universities - one that you really want to apply to provided you get a great GRE score, one that you will apply to if you get average scores and the last fall back list which you use only if you screw up the test very badly. The US News and PhDs.org rankings explained above should be instrumental in helping you create these 3 lists. Doing it this way means extra work but it also means that you use test fees more efficiently by applying to the right universities.

14. **I did not do as well on the GRE I had expected. Should I retake the test or apply with my current scores?**

   This is a tricky question. Assuming you can afford to retake the test and the dates are available, there are a couple of other criteria that you should keep in mind when making this decision:

   (a) **Do you have enough time?**
       If the first time you took your GRE was already kind of cutting it
close (late October or so), you will have little time to do any more substantial preparation.

(b) Will it help?
If the reason your first test did not go so well was because of poor time management or factors other than lack of preparation, retaking the test might make more sense. However, you should take steps to ensure that the same factors do not appear the second time you take the test. So, if the cause was, say, lack of time management then you should do more practice with actual timed tests to make sure that you figure out how to best manage those precious minutes. If it was silly mathematical mistakes, practicing will help there as well.

15. If I decide to take the test again, which scores will be reported?

The official ETS policy\footnote{15} is to report all the scores that you have obtained in the past 5 years. Not the best of the bunch and certainly not the average. Of course, the university you are applying to might have its own policy on how to normalize scores for students who have taken the test more than once and these policies are not known. If I had to guess, I would say that they would consider the latest scores as the official ones.

16. What is the difference between applying for an MS and applying for a PhD? The eligibility criteria for both the degrees seem to be the same?

I have been getting this question a lot in the past few weeks. A PhD and an MS are two very different things. Even though the eligibility criteria (usually specified in terms of minimum GRE & TOEFL scores and minimum GPA) are the same for the both, that's where almost all the similarity ends. Let me break down the differences that I think are important:

- **Research:** The biggest difference is what you are actually expected to contribute in terms of research.

A PhD or a \textit{Doctor of Philosophy} was originally awarded to a learned individual who had achieved the approval of his peers and who had demonstrated a long and productive career in the field of his/her choice. It indicated that this individual had dedicated his life to learning and to the acquisition and spread of knowledge. I can safely argue that the expectations of a PhD aspirant are not very different in today's world. You are expected, as a PhD candidate, to come up with an original idea in your field and carry out novel research based on that idea. To this end, you are required to produce
and defend a thesis or a dissertation, that documents your idea, all your experiments towards the exploration of that idea and the conclusions that you reached. Remember that the keyword here is original.

For an MS, the research contribution is usually substantially lower. As an MS student, you might also be required to write an MS thesis but that does not necessarily need to be inspired by original research. You are allowed to, for example, take an already existing idea and propose some modifications or revisions to it.

- **Qualifying examination**: Another important difference, partially related to the point I made above, is in the official requirements of the degree. The coursework for an MS and a PhD is usually comparable, but for a PhD, you need to pass a qualifying examination that usually test your knowledge of your research area. Qualifying examinations or quals may be written or oral. The written examinations are quite comprehensive and thorough. You are usually given 2 chances to pass these examinations. Oral examinations usually take the form of Q&A session where you answer the questions put to you by a committee.

On the other hand, for an MS, all you usually need to do is take the prescribed amount of coursework and write a thesis. As I said, the amount of coursework involved in an MS might be comparable to that for a PhD, depending on the program requirements.

- **Admission Criteria**: The eligibility criteria may be the same for both the applications but an admissions committee will consider different factors when choosing PhD students, as opposed to MS students. It is very difficult, if not impossible, to say what these factors may be in either case. All I can tell you is that when you are applying for a PhD, your aptitude for research is the primary factor. Indicators for this aptitude may include prior research experience, technical publications and letters of recommendation from faculty members at your undergraduate institution. Of course, the same aptitude will be a factor when you apply for an MS but I believe that it might not be the primary one. Other things such as academic credentials, work experience and GRE scores might be weighted higher in that case.

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4The actual number usually varies from university to university. Even if you have exhausted the allowable number of tries, you might be given another chance if you can prove the existence of mitigating circumstances.

5the latter might not be required if you opt for the non-thesis option.
• **Employment**: I was once told by my advisor that the PhD degree-holders are the ones that actually *solve* a problem and MS degree-holders are the ones that implement that solution. I don’t quite agree with such a black-and-white demarcation of responsibilities, but I think it a decent approximation to the real world. If you graduate with an MS, your primary responsibilities will include implementation and development as opposed to solving problems or coming up with new ideas. I think an example always illustrates this distinction better. My former roommate graduated with an MS in Computer Engineering and his research was in Computer Architecture. He has now been at the AMD Design Validation & Verification team for 2.5 years and works on verification of processor designs. It does not entail a lot of original research but it is certainly not just programming, either. He has to use concepts from VLSI design, data structures and computer architecture and apply them to his work. The actual processor design, however, was conceived by a team of scientists whose members, most probably, hold PhDs in their respective fields.

17. **Since PhD applicants have a higher chance of getting financial aid compared to MS students, can I apply for a PhD and then just leave with an MS?**

This is another common question. The answer is an unequivocal and emphatic NO. The primary reason is that this would be completely unethical. You are defrauding the professor who will most probably fund your graduate studies out of his grant money while under the impression that you will be contributing to original research and publications with him. Another thing to think about would be that most universities do NOT provide the option to get a terminal Masters’ degree if you drop out of the PhD program, so if you do leave it would be with nothing.

However, if you do want to do a PhD in the future but you are not sure whether you want to do it from the same university where you are applying for an MS, feel free to mention this in your SOP.

18. **I have some questions that are not answered by your FAQ. Where do I ask them?**

I am a member of the Yahoo! groups admission_2006_GRE_US [14] and gre-toefl-tse [16]. They are great places to ask questions and interact with other fellow graduate study aspirants. Of course, the right way to ask the question is to first search the groups’ messages because someone may already have asked the same question and had it answered. Please follow this established netiquette and do not blindly post a mes-
sage asking your question. Another great place to ask questions, especially for engineering and physical sciences students is Edulix [17]. Some very competent and smart people dwell in the edulix forums [18] and will be happy to help you out with your queries.

Another very important thing about asking question is the way that a question is worded. I will never ever answer emails like:

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Hi All
hi, i am willing to take admission for the spring 2006 for my MS, so tell me the univs I should apply to.
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That is the worst way to ask a question. The people you are asking need information such as your academic profile, your GRE scores, your reasons for applying in the Spring instead of the Fall, your research interests and any other information that you are going to consider when applying to the US. Please take time to provide such information.

Feedback

I would appreciate any feedback on this document at the email provided above.

References


