The Graduate School Admission Process

Applying to graduate school is a time consuming and expensive process that requires a lot of planning and preparation. Before applying to a program, it is imperative to ponder on the questions provided below. There is no magic formula to ensure success in graduate school. On the other hand, students that do not understand the demands associated with post-graduate education or enroll in the wrong program put themselves at a higher risk of failure.

- Do I have a clear idea of my career goals?
- Why do I want to go to graduate school?
- What interest me the most?
- Do I have reasonable expectations about my life as a graduate student and beyond?
- Have I done my research to determine that graduate school is the right move for me?
- Where do I see myself after I finish my education?
- Which graduate programs address my interests?
- What are my best choices based on the programs’ quality, my qualifications as well as my personal and professional preferences?

Being admitted to graduate school is highly competitive. Many programs receive dozens, or even hundreds of applications for a limited number of slots. If you are serious about graduate school, you should give your very best to each application. The rest of this handout discusses the main component of the application packet and provides helpful hints on how to prepare them.

I. The application packet

In general terms, most graduate program admission packages include the following pieces of information:

1. Application Form
2. Undergraduate Transcripts
3. Entrance Exam Scores
4. Statement of Purpose
5. Letters of Recommendation
6. Interviews

1. Application Form – It is a general form requesting standard biographical and academic information including legal name, contact information, citizenship, gender, race, higher education institutions attended, test scores and program of interest. Some application forms also require a curriculum
vitae or a personal history summarizing the experiences that make the student a suitable candidate for graduate school. There is a nonrefundable application fee due at the time of application but some institutions and organizations like the Committee on Institutional Cooperation offer application fee waivers to students that meet certain eligibility criteria.

2. Undergraduate Transcripts – The transcripts provide a history of the courses you have taken as well as your overall performance as a student. Candidates interested in graduate programs in Biomedical Sciences should take as many relevant undergraduate courses as possible (e.g., Molecular Biology, Genetics, Biochemistry and Immunology), along with core courses in Science, including a year of Organic Chemistry, a year of Physics and at least 1 semester of Calculus. Graduate programs provide a list of the courses needed for admission and a quick screening of the courses taken during the undergraduate years is essential to determine if you meet the general eligibility criteria before you invest valuable time filling out an application.

Performance in undergraduate coursework is judged by the GPA. Most graduate programs have cutoffs around 3.0 but typically admit student with much higher scores and inform potential candidates about their target GPA on their websites. Even though GPA looks like an objective and simple number, it can be judged in different ways. Some programs examine the overall GPA, others concentrate on the GPA in Science and Mathematics courses, while others emphasize the GPA obtained in the junior and senior years. In some cases, admission committees and potential supervisors will look at the grades in specific courses that are critical to the proposed areas of study and research. For example, a student with a GPA around 3.5 that is applying to a program in Molecular Genetics and got A’s in Genetics, Molecular Biology, Biochemistry and Bioinformatics may have an advantage over another student with a higher GPA that didn’t do as well on the aforementioned courses.

3. Entrance Exams - Most programs require their candidates to take the Graduate Record Examination General Test, a standardized, timed, online examination of general skills that all undergraduates should master. The questions reflect the kind of thinking needed to be successful in graduate-level work and concentrate in the following 3 competencies:

- Verbal Reasoning – Measures the candidate’s ability to analyze and evaluate written material and synthesize information obtained from it, analyze relationships among component parts of sentences and recognize relationships among words and concepts.
- Quantitative Reasoning - Measures the student’s problem-solving ability, focusing on basic concepts of arithmetic, algebra, geometry and data analysis.
- Analytical Writing – Evaluates the person’s critical thinking and analytical writing skills, specifically the ability to articulate and support complex ideas clearly and effectively.

Some graduate programs and many competitive scholarships also require GRE subject test scores as part of their admission packet to supplement undergraduate records, letters of recommendation and other qualifications for graduate study. The scores provide common measures for comparing applicants of similar abilities. Some subject tests yield sub-scores that can indicate the strengths and weaknesses in an individual student’s preparation and may also be useful for guidance and placement purposes. Some programs require either the Biochemistry, Cell and Molecular Biology or the Biology subject tests while others leave it up to the student to choose among these tests as long as the scores are submitted prior to a predetermined application deadline.

The Test of English as a Foreign Language (TOEFL) is also required by most schools to assess the English language proficiency of non-native speakers. It examines the student’s reading, listening, speaking and writing capabilities under a timed, standardized setting. Non-native English speakers use the TOEFL to supplement the scores obtained in the verbal reasoning and the analytical writing sections of the GRE general test.
4. Statement of purpose - The personal statement is a 2 to 3 page document describing your interests, plan of study and career goals. For many evaluators, this is the core of the application because this is where you can set yourself apart from other applicants to convince the committee that your experience and interests are an excellent fit for your prospective program. More importantly, this is the only component of the application packet that is completely under your control. Therefore, every piece of the statement of purpose should be drafted to convince the committee beyond reasonable doubt that you should be admitted to the program. The statement should reflect your best writing while remaining true to your personal goals and intellectual interests.

A strong statement will demonstrate:

- that you know what you want to study and why it is important.
- that you researched their program and have compelling reasons to believe that you belong there.
- your persistence, commitment, dedication, motivation and intellectual curiosity.
- that you are a strong candidate that will succeed in the program.

Consider the following questions while working on the first draft of your statement of purpose:

- Preparation and motivation:
  - What is special, distinctive or impressive about you that sets you apart from other candidates?
  - What experiences (e.g., research projects, internships, independent study, seminars, classes or readings in the field) have brought you to this point in life?
  - What special skills enhance your likelihood of success?
  - Should you explain deficiencies or gaps in your academic record?

- Program understanding
  - Which faculty members are conducting research in your area of interest?
  - What specific aspects of their projects do you find compelling, meaningful or interesting?
  - Do they offer training opportunities that interest you?

- Helpful tips:
  - Tell a story – Provide concrete details about your life emphasizing the events that led you to your professional or educational aspirations.
  - Give specific examples that helped shape your core academic values – Instead of stating: “my summer internship provided a valuable experience”, provide details to sustain your claim. A student with a suitable research experience on Bioinformatics can state: “while working on my summer research project, I was introduced to powerful Bioinformatics tools that sparked my interest in the fields of gene therapy and personalized medicine, two of the research areas emphasized by faculty in your program.”
  - Give yourself plenty of time for an iterative writing process. Seek advice from your professors, consult grammar aids, visit the writing center on your campus and request the advice of writing experts.

5. Letters of recommendation - Candidates are usually required to provide 3 letters from professors, undergraduate internship mentors or research supervisors who know them well and can write about their capabilities and motivations as well as their readiness to attend graduate school and do research. Always ask a professor if he or she is willing to write a strong letter for you and do
not assume that you will always get a positive response. Professors will decline the request if they cannot honestly write a favorable letter, if they feel that they don’t know you well enough, or if they are unable to get the letter composed and sent in on time. Provide a document with as much information as possible to facilitate the writing process (e.g., previous research experience, honors, pertinent work and volunteer experiences, anything that sets you apart from others). Organize a package containing all the forms that the professor will need to fill out and make sure to complete all the sessions pertaining to the student. Students are usually asked if they would like to waive their right to see the letter. It is on your best interest to do so because the reader assumes that the person providing the recommendation can be honest if the student doesn’t read the letter in the future. If for any reason you have any reservations about the possible content of a letter provided by a professor, find somebody else that would be on a better position to write a good letter for you. A weak letter of recommendation could cost you the admission to graduate school.

6. Interviews – Some institutions invite their top candidates for interviews prior to making their final decisions. The interviews serve a dual purpose; on one hand, evaluators can gain a better feel about the candidate’s overall strengths and weaknesses while the prospective students can interact with possible mentors and current graduate students to ask questions that may help them decide if the institution is a good fit for them. It is important to dress and behave professionally during the whole interview visit. Prepare for the interview as much as possible (e.g., learn about the program, revisit your application packet and be prepared to discuss it, maintain good eye contact), practice possible scenarios and be yourself.

II. The review process

Graduate admission committees are usually made up of faculty members of the program and many departments also include a current graduate student as part of the admission team. They evaluate every component to assess the overall quality and strength of the application. The statement of purpose is used to determine that the student has a good idea of what he or she wants to do and how the program will help the student achieve these goals. The essay should demonstrate that the student knows the program in detail and that he or she is familiar with the faculty members affiliated to the program as well as the research and educational opportunities offered at the particular institution. Evidence that the student has been in contact with the graduate admission officer and the faculty members of his or her choice are a plus. Students with impressive academic records that fail to convince the committee that they are a good fit for the program and that they have the skill set needed to thrive in graduate school are usually not admitted to the program.

Previous research experience in an area related to the particular program is also evaluated extensively. Even though research can be exciting and intellectually rewarding, it is also a labor intensive and tedious process that may be a source of setback and frustration. Research also requires competencies that are not usually taught on regular courses. All other things being equal, the committee will choose students who have undergraduate research experience because they have previous relevant training and should have a better idea of what they are getting themselves into. Related extracurricular activities like participating in scientific seminars and meetings are also seen favorably.

Undergraduate transcripts are used to evaluate the reputation of the schools attended, the student’s academic performance and the overall academic preparation in Science. Some members give special attention to the courses directly related to the chosen field of graduate study to assess the student’s preparation to do graduate work as well as the student’s commitment to his or her goals. For example, a student interested in a graduate program in Cell Biology that didn’t take advanced
courses in the area is disadvantaged over an equally qualified individual (i.e., same GPA and similar GRE scores) who took several classes related to this field.

Letters of recommendations are used to obtain opinions of professors that know you well and are in a good position to speak about your capabilities and motivations, your likelihood to succeed in graduate school as well as your potential as a future respectable colleague in the field. It is imperative to choose your referees carefully. Give them as much information as possible in order to increase the possibility of receiving a strong letter of recommendation. A letter that simply states that the student obtained an "A" in a course is not enough. The committee assumes that the student selected the best faculty members that could speak on his or her behalf. If the people in the finest position to highlight the candidate’s capabilities cannot state what sets this student apart from the rest, why should the student be admitted to the program?

Aside from the student’s credentials included in the application packet, the committee takes into account how strongly a faculty member wants a student to come and join their research team. In fact, strong support from one of the department’s faculty members can override some deficiencies that you might have. This is particularly important for candidates interested in smaller programs with limited budgets that admit students based primarily on the faculty members’ capacity to provide support for new students.

III. Accepting an offer

Graduate school in the United States have set April 15 as the national deadline for final and binding decisions. Students must accept or decline all graduate admission offers by this date. It is also recommended to acknowledge your offers promptly. If you receive multiple acceptance notices, decline the less desirable program as soon as possible to allow the graduate committee to extend an invitation to another student. Remember to be professional in all your communications.

IV. Timeline for application

The Committee on Institutional Cooperation prepared the following idealized timetable for graduate school application for students currently enrolled in College. It is recommended to devote as much time as possible to the application process to compile the strongest possible packages tailored to each individual program.

- **Summer before the senior year**
  - Begin working on the personal statement
  - Explore graduate programs (faculty, entrance requirements, deadlines)
  - Request information from the programs of interest
  - Begin studying for the GRE

- **September**
  - Seek advice on your personal statement (faculty, writing experts…)
  - Study the graduate programs of interest and narrow your choices down
  - Register to take the GRE

- **October**
  - Take the GRE
  - Finalize the statements of purpose for each program
  - Order academic transcripts
November
- Work on the applications
- Request letters of recommendations

December
- Submit the applications before the due dates

January
- Follow up on the applications

February - March
- Visit the institutions, if possible
- Submit the Federal student financial aid (FAFSA)

April
- Receive admission letters (usually by April 1)
- Accept or decline offers no later than April 15

References:


