HOW TO PREPARE FOR GRAD SCHOOL APPLICATION

THE 12 MONTH PLAN

- 12-18 months before
  - Research your prospective graduate programs
    - Admissions requirements (including tests: GRE, GMAT, etc.)
    - Internships, graduate assistantships, fellowships, scholarships
    - Job placement statistics for recent graduates
    - Email prospective professors about their research
  - Research geographical area (Are you going to like it there? Remember, you might be there for a while)
    - Cost of living
    - Population/demographics
    - Climate/recreational opportunities
  - Seek council on how to prepare (you're already halfway there if you're reading this!)
    - How long does it take to get your degree?
    - Is it necessary for your ultimate career goals?
    - What professional organizations should you join?
    - Do your professors know what specific programs you are considering? What do they think?

DEADLINES

- Deadlines for funding are sometimes separate and are early then general admission
- Fall semester admission (early December to mid January)
  - Masters and Ph.D.
- Spring semester admission (late April to mid May)
  - Masters

WHAT TO LOOK FOR IN A PROGRAM

- Advisor availability above all!
  - DON'T BE AFRAID TO EMAIL AN ADVISOR/PROFESSOR YOU ARE INTERESTED IN!
  - See how many current graduate students he/she has.
  - How many students has he/she graduated recently?
  - How many papers does he/she write/publish a year?
- Security and Funding
- Living Perks: geography, location, size of school, cost of living
- Research Fields: resources, reputation, papers, presentations, articles
- http://grad-schools.usnews.rankingsandreviews.com/best-graduate-schools/top-engineering-schools/eng-rankings

GRADUATE SCHOOL RANKINGS: MECHANICAL

Rank	College	Deadline	Application Fee ($)	Ph. D. Student to Faculty Ratio
1 (tie)	MIT	15 December	75	5.6:1
1 (tie)	Stanford	6 December	125	7.2:1
3	UC - Berkley	2 December	90	5.4:1
4 (tie)	Cal Tech	15 December	100	5.2:1
4 (tie)	University of Michigan – Ann Arbor	15 December	75	4.3:1
6 (tie)	Georgia Tech	10 January	75	4.4:1
6 (tie)	University of Illinois – Urbana-Champaign	15 December	50	4.0:1
8 (tie)	Carnegie Mellon	31 January	65	4.5:1
8 (tie)	Cornell	15 December	105	4.3:1
8 (tie)	Purdue – West Lafayette	15 December	60	4.8:1

GRADUATE SCHOOL RANKINGS: ELECTRICAL / CHEMICAL

Rank	College
1 (tie)	MIT
1 (tie)	Stanford
1 (tie)	UC - Berkley
4 (tie)	Cal Tech
4 (tie)	University of Illinois – Urbana-Champaign
6 (tie)	Georgia Tech
6 (tie)	University of Michigan – Ann Arbor
8 (tie)	Carnegie Mellon
8 (tie)	Cornell
8 (tie)	Purdue – West Lafayette
8 (tie)	University of Texas - Austin

Rank	College
1	MIT
2 (tie)	Cal Tech
2 (tie)	UC - Berkley
2 (tie)	University of Minnesota – Twin Cities
5	Stanford
6	University of Wisconsin - Madison
7	University of Texas - Austin
8	Georgia Tech
9 (tie)	Princeton
9 (tie)	UC – Santa Barbara
9 (tie)	University of Delaware

GRADUATE SCHOOL RANKINGS: AEROSPACE / CIVIL

Rank	College
1	MIT
2 (tie)	Georgia Tech
2 (tie)	Stanford
4 (tie)	Cal Tech
4 (tie)	University of Michigan – Ann Arbor
6	Purdue – West Lafayette
7	University of Texas - Austin
8 (tie)	University of Colorado - Boulder
8 (tie)	University of Illinois – Urbana-Champaign
10 (tie)	Texas A&M – College Station
10 (tie)	University of Maryland – College Park

Rank	College
1	UC - Berkley
2 (tie)	University of Illinois – Urbana-Champaign
2 (tie)	University of Texas - Austin
4 (tie)	Georgia Tech
4 (tie)	Stanford
6	Purdue – West Lafayette
7	MIT
8	University of Michigan – Ann Arbor
9 (tie)	Virginia Tech
9 (tie)	Cornell

GRADUATE SCHOOL RANKINGS: COMPUTER / COMPUTER SCIENCE

Rank	School
1	MIT
2 (tie)	Carnegie Mellon
2 (tie)	Stanford
2 (tie)	UC - Berkley
5	University of Illinois – Urbana-Champaign
6	Georgia Tech
7 (tie)	University of Michigan – Ann Arbor
7 (tie)	University of Washington
9 (tie)	Cal Tech
9 (tie)	Purdue – West Lafayette

GRADUATE SCHOOL RANKINGS: BIOMEDICAL

Rank	College
1	Johns Hopkins
2 (tie)	Georgia Tech
2 (tie)	MIT
4	UC – San Diego
5	Stanford
6 (tie)	Duke (Pratt)
6 (tie)	UC - Berkley
8	University of Pennsylvania
9 (tie)	Boston
9 (tie)	Northwestern (McCormick)
9 (tie)	Rice (Brown)
9 (tie)	University of Michigan – Ann Arbor
9 (tie)	University of Washington

GRADUATE SCHOOL RANKINGS: ENVIRONMENTAL / INDUSTRIAL

Rank	College
1	UC - Berkley
2	Stanford
3	University of Illinois – Urbana-Champaign
4	University of Texas - Austin
5 (tie)	Georgia Tech
5 (tie)	University of Michigan – Ann Arbor
7 (tie)	Carnegie Mellon
7 (tie)	Virginia Tech
9 (tie)	Johns Hopkins
9 (tie)	MIT
9 (tie)	Yale

Rank	College
1	Georgia Tech
2 (tie)	UC – Berkley
2 (tie)	University of Michigan – Ann Arbor
4 (tie)	Northwestern (McCormick)
4 (tie)	Stanford
6	MIT
7 (tie)	Cornell
7 (tie)	University of Wisconsin - Madison
9 (tie)	Purdue – West Lafayette
9 (tie)	Virginia Tech

GRADUATE SCHOOL RANKINGS: MATERIALS / NUCLEAR

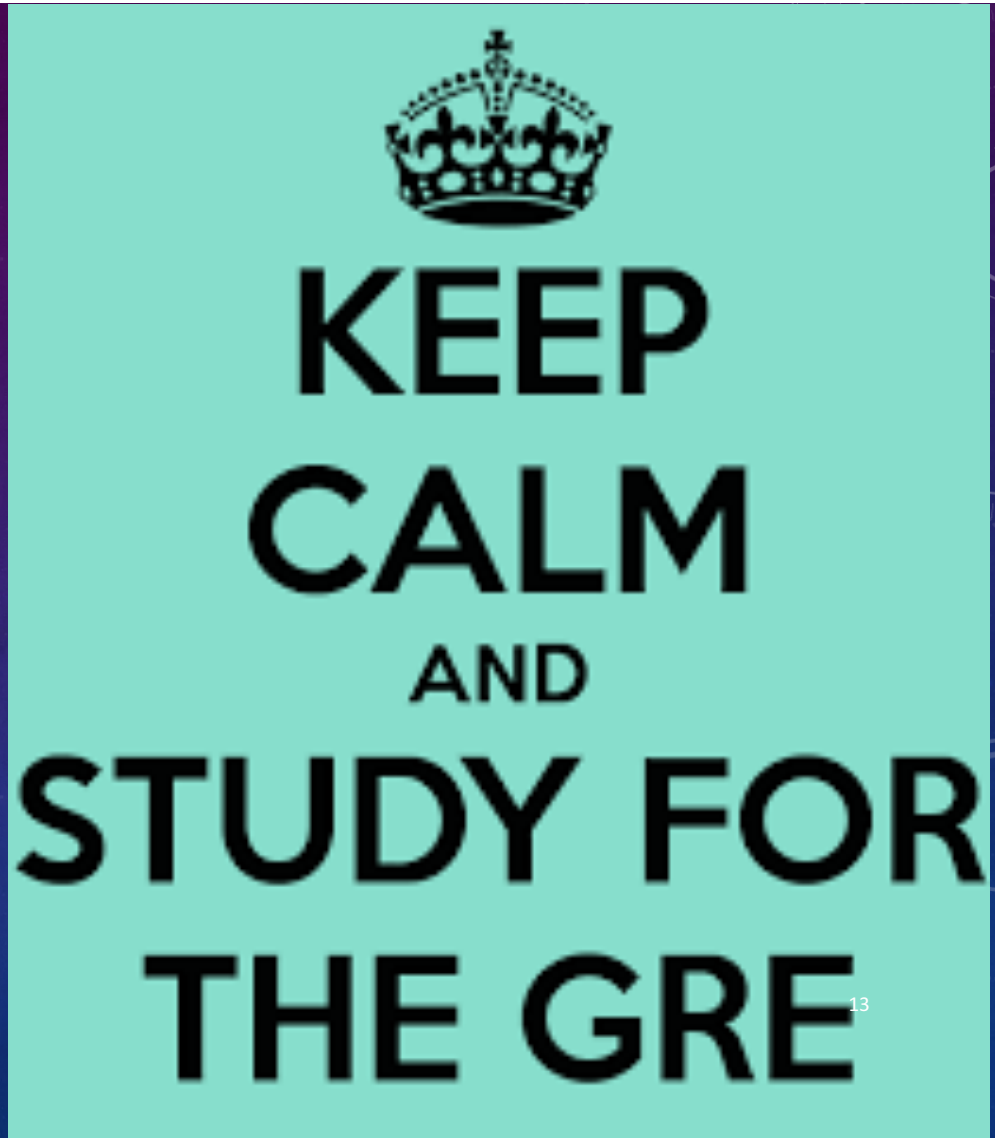
Rank	College
1	MIT
2 (tie)	Northwestern (McCormick)
2 (tie)	UC – Santa Barbara
4 (tie)	Stanford
4 (tie)	University of Illinois – Urbana-Champaign
6	UC - Berkley
7	Cal Tech
8	Georgia Tech
9 (tie)	Cornell
9 (tie)	University of Michigan – Ann Arbor

Rank	College
1	University of Michigan – Ann Arbor
2	MIT
3	Texas A&M – College Station
4	University of Wisconsin - Madison
5	UC - Berkley
6	North Carolina State
7	University of Tennessee - Knoxville
8	Georgia Tech
9	University of Illinois – Urbana-Champaign
10 (tie)	Penn State – University Park
10 (tie)	Purdue – West Lafayette

THE 12 MONTH PLAN CONTINUED

- 6-8 months before
  - Start your graduate school application
    - Keep spreadsheet of research, program contacts, calendar of deadlines
    - Reach out to see who is willing to write you a letter of recommendation
    - Start essay/personal statement
    - What other documents do you need?
- 4-6 months before
    - Test Prep
    - Take the GRE!
    - Keep working on your application
      - Have others read your essays, give critiques
- 2 months before
    - Give clarification and instructions to those writing your letters of recommendation
- 1 month before
    - Send official transcripts
    - Send GRE scores if not already
    - Keep working on your applications, Don't forget to SUBMIT ON TIME!

See my GRE presentation on how to prepare!



PERSONAL ESSAY/STATEMENT

- NOT like your college acceptance letter
- Explain your choosing graduate school and *that* particular school
- Explain your research interests
- Emphasize technical knowledge and skills
- Have your personal statements looked over by several people, try to make one a professor or graduate student

LETTERS OF RECOMMENDATION

- Typically you need at least three (3)
- Prestige matters
  - Tenured professors better than associate professors
  - Additional titles (Director or Dean) better
- Have a personal component
  - They should be able to speak of you personally
  - Not just "Student XXX got an 'A' In my class"
  - Guide professors on what you would want them to speak about
    - Potentially send template to professors so they do not have to take their time to write his/her statement
- Ask EARLY

WHEN YOU VISIT GRADUATE SCHOOLS AFTER ADMISSION

- Advisor availability above all!
  - DON'T BE AFRAID TO EMAIL AN ADVISOR/PROFESSOR YOU ARE INTERESTED IN!
  - See how many current graduate students he/she has.
  - How many students has he/she graduated recently?
  - How many papers does he/she write/publish a year?
- Security and Funding
- Living Perks: geography, location, size of school, cost of living
- Research Fields: resources, reputation, papers, presentations, articles

WHEN YOU VISIT GRADUATE SCHOOLS AFTER ADMISSION CONTINUED

- Do your homework!
- Tour labs, speak to current graduate students
- Come with questions, resources and facilities, qualifying exams versus required courses, etc.
- Interview with potential advisors

IMPORTANT QUESTIONS TO ASK

- What projects are you looking to bring people on for?
- How long will those last?
- What would I be doing on a daily basis?
- How many graduate students do you currently have?
- How much are they publishing?
- Where do some of your past students work? (Do you encourage them towards academia or industry?)

QUESTIONS?

- Some questions / statements have been repeated because it is important aspects of graduate life that must be inspected before making a decision

FOR MORE INFORMATION

- Please contact Mitzi Dennis
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  - grad.swe.ufl@gmail.com
- Or contact anyone on eBoard
  - http://sweufonline.weebly.com/

REFERENCES

- https://www.petersons.com/graduate-schools/guide-students-graduate-school.aspx
- http://nau.edu/uploadedFiles/Administrative/EMSA_Sites/Folder_Templates/_Forms/Test%20Prep%20%20-%20Graduate%20School%20Suggested%20Timeline.pdf