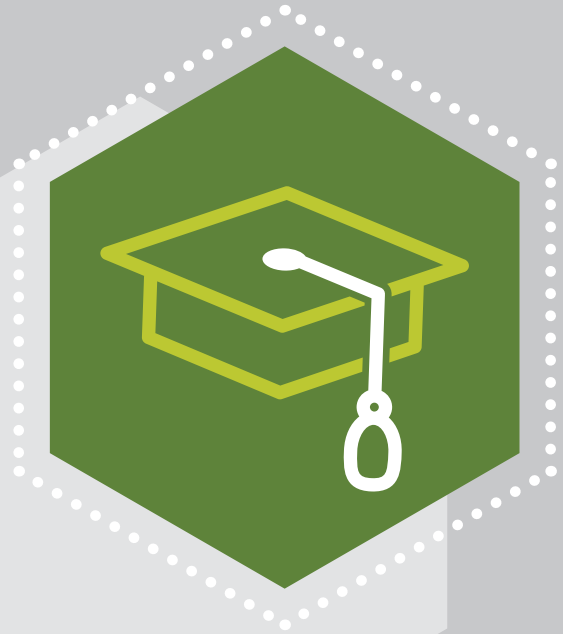




Beyond HMC: Graduate School, Fellowships and Gap Year



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Welcome to the Office of Career Services

The Office of Career Services assists students in every stage of their career development. Whether you are selecting a major, exploring occupations, searching for jobs and internships, or preparing for graduate school, we can help.

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Office Hours

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Weekdays,
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Drop-in hours

Monday–Friday
1–3 p.m.

Summer hours

9 a.m.–4:30 p.m.

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GRADUATE SCHOOL

Thinking of going to graduate school? Great! Graduate school is a big step. Depending on whether you are getting a master's degree or PhD, graduate school can be a commitment of seven years or more. If you want an advanced education or specialized knowledge, and a graduate degree is required to obtain your career goals, then graduate school is for you.

Questions to Ask Before Deciding on Graduate School

- What do you want to accomplish in your lifetime? (short- and long-term professional goals)
- Is graduate school necessary to achieve those goals?
- Are you interested in specializing in an area of study?
- Do you have the interest and ability to be successful in graduate school?
- Are you willing to invest the time and money in another academic program?
- Are you simply delaying career decision-making? (Not a good reason.)

When to Go

There are no absolute guidelines about when to go to graduate school. It is highly advisable to speak with faculty advisors and with people currently pursuing programs of interest to you. But what you hear from others is advice, not fact. Ultimately, you must make your own decision.

There are pros and cons to both immediate entry and delayed entry. Preference tends to be given to individuals with a few years of life/work experience, which tends to give individuals more knowledge on which to base their graduate studies.

However, many feel that going directly into graduate school after a bachelor's degree is easier, because there are many sources of information available on campus while an undergraduate. Also, faculty members are more likely to remember your achievements for recommendation purposes.

Where to Apply

You may want to consider asking a trusted faculty member for advice on programs they feel would be a good fit for you. What programs fit your interests? In what areas do you wish to specialize? Once you have an idea of what programs to apply to, consider the following factors:

- *The school and its department:* What is its reputation? How prestigious is it (if this is a factor for you)? What are the academic and professional objectives of that department?
- *Faculty:* Does their research interests match yours?
- *Financial support offered:* research assistantships, teaching assistantships—for PhD programs within STEM, most are covered. For M.S. programs, most are not.
- *Geographic location:* Do you like a big city? Do you care about the weather? Is your industry based there? Is there a social scene?
- *Size of student body and composition/cohort:* Is the department large? How large is the incoming class?
- *Faculty/student ratio:* How many students per faculty member?
- *Attrition rate:* Do all of their students graduate? If students leave, how many do and why?
- *Alumni:* What are alumni doing? Research? Academia? Industry? Are there networking opportunities with alumni?

Helpful Resources

Gradschools.com—Schools by subject and type
USNews.com/education—Rankings of schools
Topuniversities.com—Worldwide graduate programs
Researchconnection.com—PhD program mentors at universities
cuc.org—Registry for undergraduate researchers



Application Process

Spring, Junior Year

- Research programs (talk to faculty members about specific programs).
- Register for appropriate admission tests; check dates for specialty items.
- Check on application deadlines and rolling admissions policies.

Fall, Senior Year

- Ask for letters of recommendation *early*.
- Order official transcripts.
- Complete applications.
- Write, review and finalize personal statement
- Complete the Free Application for Federal Student Aid (FAFSA) and Financial Aid PROFILE, if required.

Spring, Senior Year

- Arrange for campus visits where you've been accepted.
- Check dates and register for appropriate admission tests.
- Send thank you notes to people who wrote your recommendation letters.
- Investigate national scholarships and grants.

Application Forms

Most schools require only an admission application to graduate school. In some cases, an additional departmental application is required. Be aware of application deadlines. If admissions are handled on a rolling basis, it is to your distinct advantage to apply at the earliest possible date. Most are due between January and March, although there are some December deadlines.

Letters of Recommendation

Graduate school applications typically require three letters of reference (or recommendation). Be sure to request your letter in person rather than by email, and be gracious when asking. Give them at least four weeks, and up to eight, before your due date. It is important that the letter be a strong recommendation. (You should always ask, never assume this will be the case. Because if it isn't substantive, this can actually hurt your application.) Consider giving your recommenders a copy of your resume and your personal statement. Give them a "cheat sheet" of topics you wish for them to cover in their letter. (You worked 15 hours a week on the Homework Hotline while carrying a full course load, you were a mentor or proctor of your dorm, you were an officer in a club on campus, etc). Let them know to which programs you are applying, the due dates and how many letters you need. Remind them of your relationship—summer research, courses, grader/tutor, etc. Finally, make sure to thank your references in writing, and keep them updated on your progress.

Some schools will ask for a personal statement while others will ask for a statement of purpose.

Some might ask for both. The key difference between the two is that the statement of purpose should solely focus on the program and your future goals.

Personal Statement

Tailor your personal statement to the school to which you are applying. Is it a master's program or PhD? Is it a specialized program which lends itself to industry or academia? This may influence the content of your statement. Begin with an outline that includes the following topics:

- Personal background – What unique experience or background do you bring to the program? Did you overcome some challenge(s) which make you a particularly interesting candidate?
- Interests – How did you become interested in the field? Why do you want to study this field?
- Experience – What experience do you have in the field? Did your research include field/lab work which confirmed your interest in your area?
- Future Goals – What do you want to do after you finish your graduate degree? Where do you see yourself working?
- Graduate Program Appeal – Why do you want to join this particular program? Mention in your statement two to three possible faculty members that you would like to work with and why. (It is extremely important that each statement be unique to each program/institution!)
- Conclusion – Summarize your thoughts: goals, experience, strengths and motivation.

Statement of Purpose

Requirements vary widely in this regard. Some programs request only one or two paragraphs about why you want to pursue graduate study, while others require five or six separate essays in which you are expected to write at length about your motivation for graduate study, your strengths and weaknesses, your greatest achievements, and solutions to hypothetical problems. The statement should not be taken lightly.

Good grammar and writing are extremely important. In addition to OCS, seek help from faculty and the Writing Center if you need advice and guidance preparing your personal essay or other application materials. Write, rewrite and edit your essays!

GRADUATE SCHOOL

Transcripts

All transcripts must be official; that is, transcripts must be sent to admission offices directly from the Office of the Registrar.

GPA may be viewed in different ways:

- Cumulative
- Major
- Last two years
- Field of interest
- Changes (e.g., improvement)

Remember, while grade-point averages are important, they are not examined in isolation; the rigor of the courses you have taken, your course load and the reputation of Harvey Mudd College are also considered. The College sends a document explaining its grading system along with your official transcript.



Graduate Admission Tests

Most programs will not accept scores more than three to five years old.

- Graduate Record Examination (GRE)
- Law School Admission Test (LSAT)
- Medical College Admission Test (MCAT)
- Engineer-in-Training (EIT)
- Graduate Management Admission Test (GMAT)
- Dental Aptitude Test (DAT)
- Veterinary Aptitude Test (VAT)
- Optometry College Admission Test (OCAT)
- Pharmacy College Admission Test (PCAT)

Note: Some programs require subject-area exams.

You may wish to purchase a preparation manual for the specific test you plan to take, or you could consider private short courses. Most test preparation companies, like Princeton, Kaplan and Test Masters, offer free trial run tests online and sometimes at other Claremont Colleges. Watch for announcements.

Financial Aid

Types of Aid Available

Financial Aid: Grants, Scholarships and Fellowships

Most are outright awards that do not require repayment. Often they provide the cost of tuition and fees plus a stipend to cover living expenses. Some are based exclusively on financial need, some exclusively on academic merit and some on a combination of need and merit. Grants are awarded to those with financial need; fellowships and scholarships often are based on ability—financial need is usually not a factor. Examples of federal agencies that fund fellowship and trainee programs for graduate students in STEM are: National Science Foundation (NSF); the National Institutes of Health (NIH); and the National Consortium for Graduate Degrees in Engineering Science (GEM).

Work: Research (RA) and Teaching (TA) Assistantships

Most universities offer RA and TA opportunities for graduate students. As a research assistant, you will receive full or partial tuition and/or a stipend in exchange for working in a faculty member's lab. As a teaching assistant, rather than a researcher, you will earn a stipend (and/or free tuition) teaching or assisting with undergraduate courses.

Loans (Federal Aid)—FAFSA

All applicants for federal aid must complete the Free Application for Federal Student Aid (FAFSA). This application must be submitted after January 1, preceding enrollment in the fall. It is a good idea to submit the FAFSA as soon as possible after this date. There is a paper form, or you can apply online at www.fafsa.ed.gov. Report your income and asset information and specify which schools will receive this data. Two to four weeks later, you will receive an acknowledgment, the Student Aid Report (SAR), on which you can make corrections.

Can I defer?

Most programs will allow you to defer if you receive a prestigious fellowship, and most understand if you have a personal emergency. However, this isn't acceptable if you're just not ready.

Where Alumni Have Studied

On the OCS website, search for Majors to Careers to see a comprehensive list of where HMC students (by major) have studied.

FELLOWSHIPS AND AWARDS

HMC students have won many prestigious fellowships, grants and awards. Watch for news about faculty information sessions regarding these competitions. Here is a selection of these programs along with brief descriptions and due dates. Check with the Office of Dean of the Faculty for programs that have a faculty advisor.

U.S. Government

- **Department of Energy, Computational Science Graduate Fellowship**

Support and guidance for some of the nation's best scientific graduate students. Due in October.

- **Fannie and John Hertz Foundation Fellowships**

Fellowships for the exceptionally talented in the study of applied sciences and engineering. Due in October.

- **NASA Graduate Student Research Program**

Fellowships for graduate study leading to master's or doctoral degrees related to NASA research and development in the fields of science, mathematics and engineering. Due in February.

- **National Defense Science and Engineering Graduate Fellowship Program**

Fellowships for those who have demonstrated ability and special aptitude for advanced training in science and engineering. Due in January.

- **National Science Foundation**

Awards of up to \$15,000 in stipends and \$9,500 in tuition and fees per year for three years to support graduate study in the areas of mathematics, physical science, biological science, engineering, behavioral science or social science. Due in November.

- **NSF Graduate Research Fellowship Program (GRFP)**

Funding for research-based master's and doctoral degrees at U.S. institutions. The fellowship covers a three-year stipend and cost-of-education allowance. NSF seeks applicants exhibiting intellectual merit and whose work may have a broad impact. Due in October.



International

- **Churchill** – Scholarship program to promote exchange between the United States and Great Britain and to enable outstanding American students to do graduate work in engineering, mathematics and science at Churchill College, University of Cambridge. Due in October.

- **Fulbright** – A scholarship for rising seniors and recent graduates interested in graduate study and research abroad. Due in October.

- **Gates** – A merit-based scholarship in any subject area for students to pursue a graduate degree or a second bachelor's degree at the University of Cambridge. The scholarships are for one to three years, with a possible extension to a fourth year. Due in October.

- **Marshall** – An award that finances two years of postgraduate study that results in a bachelor's or master's degree at select universities in the U.K. Due in October.

- **Mitchell** – An award for tuition, room and board and a \$12,000 stipend for post-graduates to pursue one year of study at institutions of higher learning in Ireland and Northern Ireland. Due in September.

- **Rhodes** – An award for tuition fees and a maintenance allowance for two to three years for a postgraduate student at the University of Oxford. Due in October.

- **Rotary Ambassadorial Scholarship** – An annual scholarship for one year to a graduate student outside of the U.S. with a stipend of up to \$25,000. Due in March.

- **Watson** – A fellowship that enables college graduates of unusual promise to engage in a post-graduate year of independent study.

- **Whitaker International Fellows and Scholars Program**

This program sends young biomedical engineers outside the U.S. or Canada for one or more of the following activities: conducting academic or scientific research in a university or laboratory; pursuing coursework at an academic institution; interning at a policy institute or in an industrial or non-profit setting. Due in January.

FELLOWSHIPS AND AWARDS/GAP YEAR

Other Scholarships

- **Barry M. Goldwater** – Annually funded by Congress to encourage outstanding undergraduate students to pursue careers in mathematics, the natural sciences or engineering and to foster excellence in those fields. Due in January.
- **Jack Kent Cooke** – A scholarship of up to \$50,000 each to attend graduate or professional programs. Due in April.
- **Ford Foundation Predoctoral Fellowships** – Graduate scholarship offering three years of support toward a PhD for those committed to a career of research and teaching at the college or university level. Applicants should have the capacity to respond in pedagogically productive ways to the learning needs of students from diverse backgrounds and show sustained personal engagement with communities that are underrepresented in the academy as well as an ability to bring this asset to learning, teaching and scholarship at the college and university level. Due in November.
- **Mellon Mays Undergraduate Fellowship** – Provides up to two summers and two school years of paid research plus up to \$10,000 in loan repayment for underrepresented students intending to pursue careers as college faculty. Due in March.
- **Napier Fellowship** – A \$5,000 award to graduating seniors for a creative leadership project. Due in November.
- **Harry S. Truman** – An annual grant granted to juniors aspiring to leadership positions in federal, state or local governments or in non-profit and education sectors. Stipends for senior year and graduate study. Due in November.



The gap year is an opportunity to take time after college to gain practical, professional and personal awareness. While it can take many forms, it's a time to do something other than graduate school or traditional, full-time employment. The length of time varies. Here are a few places where Mudders have gone and what they have done.

Where Mudders Went



What Mudders Have Done During Their Gap Year



Worked outdoors



Studied for grad school entrance exams



Achieved a physical goal



Obtained certifications



Researched



Taught English



Did community service



Traveled



Worked/ interned

Things to Consider

Identify your goals for the year—what is it that you want to do that you couldn't when you were in school? Gain experience in a new field? Explore a new part of the world?

How will you afford the year? Some students choose to work a part-time job, while volunteering or studying for an exam.

Where will you live? Housing is one of the biggest expenses during a gap year.

How do you imagine yourself talking about this in future interviews? There doesn't necessarily have to be a linear connection between what you do in your gap year and what you want to do in the future, but you need to consider how you'll talk about the experience to future employers or grad schools. They'll want to know how you grew. What did you learn?

Recent Gap Year Adventures

- Worked as a divemaster in Hawaii for four years and traveled once a year to different countries (mathematics)
- Tutored children in Korea and backpacked through Southeast Asia for one year (physics)
- Taught English in Japan for a year through the JET Program (physics)
- Volunteered with Peace Corps in multiple majors before starting medical school

- Worked at a diagnostic research facility as a temp while researching/gaining experience to apply to graduate school (biology and chemistry)
- Worked as an academic consultant in Shenzhen, China, before starting graduate school (engineering)
- Worked for a year, then spent a year traveling in Asia and Europe. Also taught English in Nepal for a month (biology and chemistry)
- Did a one year, postbac internship at MIT Lincoln Laboratory (CS/mathematics)
- Did a postbac internship with Medtronic in Ireland (engineering)
- Did a postbac internship with Dolby Labs (engineering)
- Taught for the JET Program (mathematical and computational biology)
- Worked as a biology field research assistant (engineering)
- Applied to medical school (mathematical and computational biology)

See the OCS website for a list of resources regarding gap year opportunities.

Harvey Mudd College

Student Affairs | Office of Career Services

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