Applying to graduate school can be a daunting process! In order to make the application process more transparent and accessible, we have put together a timeline and helpful hints for those who are planning to apply to a graduate program. Please feel free to contact the officers of the DMCS Oceanography Graduate Student Association (OGSA) with any questions about Rutgers, applications, or graduate school in general.

If you are considering applying to graduate school and would like to work one-on-one with a graduate student mentor on your application materials, check out the DMCS Mentorship Program. The Mentorship Program pairs undergraduates with a graduate student mentor, and hosts events that help undergraduates with the graduate school application process.

Applying to Graduate School in Marine Science FAQs

Q: I want to apply to Rutgers to get a graduate degree in oceanography. What programs are available to me?

A: The Department of Marine and Coastal Sciences has three graduate programs: Masters of Operational Oceanography, Masters of Science in Oceanography, and PhD in Oceanography. All three programs have a thesis requirement. The application deadline for all three programs is January 1 each year.

Q: Do I have to pay for graduate school in marine sciences?

A: Usually, no. Standard MS and PhD programs cover tuition and student fees, and pay graduate students a modest stipend. Operational and Professional programs usually require the student to pay. If you are applying for a standard MS or PhD program and they require students to pay, that's a red flag!

Q: Should I apply to a Master's or PhD program?

A: This depends on (1) the program and (2) your own career goals. Typically, more funding is available for PhD students than Master's students, but this varies from program to program. For example, Woods Hole Oceanographic Institution-MIT joint program only accepts PhD students. Some programs emphasize support for Master's students and admit more Master's than PhD students. Some jobs require a PhD (e.g., academic teaching) some just require a Master's. A PhD is also a greater time commitment (5-6 yrs) than a Master's (2-3 yrs). Explore your options to see what will be best for you, and don't be afraid to ask the program for more information.

Q: What if I apply for a Master's program, get in, and decide I want to do a PhD?

A: The best thing to do is talk with your program director. You might be able to switch into the PhD program.

Q: What if the opposite happens – I apply for a PhD program, get in, then decide it's not for me?

A: The best thing to do is talk with your program director. Usually, you can switch to a Master's degree and finish that way.

Q: What's the difference between a Master of Science and a Master of Professional Science?

A: A Master of Science is academic focused, thesis required, usually doesn't cost money (tuition is covered). A Master of Professional Science usually doesn't have a thesis requirement, and is business- or industry-focused, and costs money.

Q: Do programs heavily consider GPA in an application?

A: Sort of. It depends on the program, and is worth asking about. For smaller programs, equally important is the rigor of the coursework. Or, getting good grades in classes that matter for what you're trying to do. Larger/highly competitive programs may value the GPA more. Below 3.0 is usually a red flag, however, in the personal statement if the student gives a reason for this and the rest of the application is promising.

Q: Do programs heavily consider the GRE?

A: Most programs are beginning to phase this out or make it optional, since it's not particularly indicative of a student's performance and a financial barrier to applying. Some large, highly competitive institutions, such as Scripps, still require it since they receive many applications.

Q: What do I put in a graduate application's personal statement?

A: The graduate personal statement is much different than the undergraduate personal statement. For detailed guidance, check out the Applying to Graduate School Timeline below.

Q: Is the application process different if you take a year off? Is this frowned upon?

A: Not at all. Deferring an application (like in medical school) is not something you can do in natural sciences (because of funding fluctuations, etc.) In your personal statement, you can mention you wanted to try other things, or take time off, etc., before making sure you wanted to go to graduate school (this shows maturity!), or take advantage of the flexibility to go travel, etc. After you graduate from undergrad is perhaps the most flexible time in your career; no one frowns upon you trying things out or taking time off.

Q: What if I don't have previous research experience?

A: Emphasize transferrable skills, adaptability, etc. Additionally, previous research experience is less critical for a MS vs. a PhD.

Q: Is it OK if I express interest in more than one advisor/talk with more than one advisor?

A: Yes! It can actually be beneficial in an application if you demonstrate ideas you can bring both advisors' work expertise together in a graduate thesis. Or express interest in both of their work, it's totally fine.

Q: What should I include in an email to a potential advisor?

A: Show you've looked into their work, past projects, explain what you're interested in. It's even good if you show you've explored other papers that their colleagues have published with them, to show you've made an effort to gain familiarity with the field.

Most programs strongly encourage you to reach out to a potential advisor before you submit your application.

Application Timeline

Keep in mind each university's graduate program has a different deadline, and adjust this timeline accordingly.

July – August

Action: Research potential schools and programs

Factors to consider when looking at schools:

> Are you more interested in being an oceanographer in a broader department or specialized within an oceanography department (i.e., would you rather be an oceanographer within a biology department or a biologist within an oceanography department?)
>
> How does the program provide funding to graduate students? How long is funding guaranteed? Are summers funded? Will you need to teach or be a research assistant to have funding?

Where is the school located? Will you be able to live comfortably in the area with the funding provided? Will you have a support network or be able to establish one there?

Program Requirements:

The requirements on department websites are loose. Not having taken a course will not make or break your application, so don't let the requirements prevent you from applying.

Have you taken the GRE? Does the program require the GRE?

Choosing a potential PI:

Is there a specific person at that university who does work you are interested in?

The individual is typically more important than the school itself. Schools with large oceanography programs are a good starting place, but also look into individuals. If you have familiarity with scientific literature, search for names associated with papers you have read.

Some PIs post about looking for students for established projects - consider whether you would prefer to come in as part of a project or want a more active role in designing your project.

Do you want to work with someone early in their career or more established? Consider the positive and negative about each of these and which best suits your academic needs. Large lab group or small group? All of these factors will influence your relationship and amount of interaction with your advisor.

Month Goal: Create a list of PIs you would be interested in working with.

September

Action 1: Contact potential advisors from your list of schools and programs

Before reaching out:

Once you have narrowed down a list of individuals you are interested in working with, spend some time researching exactly what that person does. From there, narrow the list even further.

Reaching out:

Once you have identified PIs and have a good understanding of their work, send an email. Ideally arrange to speak over the phone/zoom. Whether or not you get along with a potential PI is not emphasized enough by many applicants. Your relationship with your PI will set the tone of your PhD.

Be persistent – many PIs receive an unmanageable number of emails each day. Don't be afraid to send a follow-up.

Look into other department faculty. The more introductions you make, the more you'll learn about the department and program expectations. The more people you have vying for you on the inside, the better your chances.

Prepare a list of questions to ask the PI about their research and mentoring style.

Look into contact info of current graduate students. Talking one-on-one with them can help you get a better idea of the program atmosphere and expectations, plus stipend and health benefits for graduate students, which vary from institution to institution.

Questions to ask potential PIs:

What are the P.I.'s expectations for graduate students (certain number of hours per week, overall goals like publishing papers, self-directed vs collaborative, etc.) – make sure they align with your expectations for graduate school

Ask about where their research is headed. What they have done is online, but their ideas for future projects will be equally as important.

Ask for contact info of past students. They can tell you what it is like to work in this lab group.

Ask to be introduced to other graduate students in the department. They are likely to be honest about their experience in the department.

What were some qualities of your most successful past graduate students? (this will tell you what the P.I. really expects from students)

Ask about their placement (where do people from their lab end up working?)

Questions to ask graduate students in the program:

What is the stipend? Is funding consistent/secure?

What is the cost and quality of student healthcare?

What is the graduate student community like? (Group activities/level of camaraderie?)

Action 2: Reach out to potential letter of recommendation writers (most programs require at least 2, many require 3)

Who to ask:

If you have done research in the past, you want one of your letters written by someone representative of this time in addition to a professor from a class.

Many PIs know each other, so even if you choose not to reach out to someone you list on your CV for a recommendation letter, there is a chance potential PIs could reach out to that person.

Asking:

Make sure the person you ask to write your letter will write you a positive recommendation

When asking, include in your email that if the person is unable to provide you with a positive recommendation to let you know.

Reach out early in the process to give writers plenty of time to meet deadlines – give them at least a month, and preferably at least 6 weeks. Make sure to stay on top of deadlines and consistently remind writers of when/where letters need to be sent.

Give your letter writers all of the information they need (your updated CV, your personal statement, links to the department to which you are applying)

Be sure to thank your letter writers

Action 3: Look into fellowships for funding

Coming in with funding can make for a highly desirable applicant. Even if you don't get these fellowships, applying is a good learning experience and shows ambition on your part.

There is a limited number of times you can apply for some national fellowships, for example, the National Science Foundation's Graduate Research Fellowship (GRFP). You are able to apply to the GRFP once before you are in graduate school, and once in your first two years of graduate school.

Look into deadlines and whether or not there is a limitation on how many times you can apply, or what stage of graduate education you must be in to qualify for funding.

Many specialties have their own fellowship funding subsets – it is worth it to ask potential PIs if they know of any new opportunities in your field.

October

Action 1: Write your personal statement

The graduate school personal statement is different from the undergraduate personal statement. This is not about getting to know you as a person but getting to know you as a scientist. While you should give background, it should focus on how you developed skills and interests that will make you a good graduate researcher. Here you are not only showcasing what you have done, but your potential.

Look for examples online
MIT guide to the personal statement

If there is anything in your undergraduate experience that could cause concern, (e.g., lack of research experience, bad grades, worked full time during undergrad, reasoning for a negative relationship with former PI) the personal statement is the place to include that information. For people with lower-than-average GPAs this can make a difference.

Try to avoid trite phrases and cliches (admissions people don't want to read extensively about your childhood love of the ocean, they want to hear about your science)

The first paragraph is usually the hardest. If thinking of how to start it is holding you up, skip the intro and come back to it.

The personal statement should have an inevitable conclusion. Even if your path seemed winding, write as if it was all leading to science. Everything you mention should be moving your towards your end goal, which you should clearly establish.

Make sure to include at least a paragraph about what you specifically like about/want to do at the university you are applying to. Name specific faculty members and their work. Summarize how the skills you mention developing in previous paragraphs will help you achieve your graduate study goals. What stood out about this university and research group?

Tips from faculty on the DMCS Graduate Admissions Committee:

Does the applicant have the right attitude/understanding of graduate school (is the person applying because they have nothing else to do, or do they understand it's a way to advance their career to where they want to

go/be/do, do they understand the time/dedication involved, and the amount of independent work and thinking it requires?

Opening paragraph: Should focus on your motivation (stay away from cheesy “love of the ocean” approach). Put your **strongest foot forward** in this paragraph/first two paragraphs instead of listing everything in chronological order, so you can capture their attention (we are a small program and we receive 50-60 applications/year, larger institutions receive 100s)

Emphasize what you want to do after graduate school (you don’t need to know exactly, but show some thought into what you’ve generally considered; does not need to be academia/professor, can be gov’t, industry, etc…)

Mentioning how you deal with failure is important -- there is going to be a lot of failure in science and during your grad degree, showing you can deal with failure shows you can make it in a graduate program and a scientific career

Important to have one paragraph specific to the place you’re applying, show you’ve researched the program and show that you think the program is a good fit for you. Don’t sugarcoat/brown-nose, just show you know you’d be a good fit/what you like about the program

Include if you have talked with potential advisor(s)/PIs and what you want to work on with them

Action 2: Compile and/or edit your CV/resume

You don’t have to include everything you have ever done. Try to focus on what is relevant to the field you’re applying to work in, or highlight interdisciplinary skills.

Keep verb tenses consistent!

Use impactful language (succinct, action-focused phrases, numbers and metrics)

Look for examples online (make sure they are for the right field)

Action 3: Prepare for transcript submission

Request transcripts early (one month minimum)

Know the requirements (official, unofficial, high school)

November

Action: fine-tune your application

You should have a rough to final draft of your personal statement. Have as many people look over it as possible.

Don't wait until the last minute! Especially if you are asking for feedback. It is unfair to hurry someone to meet your deadline.

Ask science contacts from your past to look over your application materials.

December

Action: submit your applications

Pretend the deadline is earlier than it is in reality. Get your final materials submitted on time.

Ask for information about open houses if applicable. It is important to see a school in person, and to meet your prospective advisor and other graduate students. Having a face associated with your name can come in handy when it is time for the admissions committee to look over your application.

(Deadline to apply to Rutgers Graduate Program in Oceanography/Masters of Operational Oceanography: January 1)

Keep in mind each university's graduate program has a different deadline, and adjust this timeline accordingly.