

**Master of Professional Science Degree Handbook**  
**(2016-2017)**

1. **Program Prerequisites** – The prerequisites for the M.P.S. degree programs are determined by each division/department as highlighted below.

**Marine Biology and Ecology (MBE) Tracks**

- Tropical Marine Ecosystem Management
- Marine Mammal Science

Pre-requisites:

1. Bachelor of Science degree (B.S.) or Bachelor of Arts degree (B.A.)
2. one year of General Biology + General Biology Labs
3. one year of General Chemistry + General Chemistry Labs
4. at least one semester of Calculus (for Science/Math majors)
5. 9 additional credits in natural science (Research in these fields may, in some cases, substitute for coursework hours.)

**Note to students:** Deficiencies in the required courses may be considered on a case-by-case basis for otherwise highly qualified students.

**Marine Ecosystems and Society (MES) Tracks**

- Aquaculture
- Coastal Sustainability
- Coastal Zone Management
- Exploration Science
- Marine Conservation
- Underwater Archaeology

Pre-requisites:

1. Bachelor of Science degree (B.S.) or Bachelor of Arts degree (B.A.)
- Fisheries Management and Conservation

Pre-requisites:

1. Bachelor of Science degree (B.S.) or Bachelor of Arts degree (B.A.)
2. one year of General Biology + General Biology Labs
3. one year of General Chemistry + General Chemistry Labs
4. at least one semester of Calculus (for Science/Math majors)
5. 9 additional credits in natural science (Research in these fields may, in some cases, substitute for coursework hours.)

**Atmospheric Sciences (ATM) Tracks**

- Broadcast Meteorology
- Computational Meteorology and Oceanography
- Weather, Climate, and Society
- Weather Forecasting

Pre-requisites:

1. Undergraduate degree in Meteorology, or closely related field

**Note to students:** Deficiencies in the required courses may be considered on a case-by-case basis for otherwise highly qualified students.

### **Ocean Sciences (OCE) Tracks**

- Applied Remote Sensing

#### Pre-requisites:

1. Bachelor of Science degree (B.S.) in Mathematics, Physics, Geosciences, Engineering, or an equivalent degree
  2. Successful completion of the following (or equivalent) undergraduate courses: Calculus, Statistics, Physics, Computer Programming (Matlab, IDL, C, or Fortran)
- Natural Hazards and Catastrophes

#### Pre-requisites:

1. Bachelor of Science degree (B.S.) or Bachelor of Arts degree (B.A.)
2. At least one of the following: one semester of Calculus or Statistics or 6 credits in Geoscience

**Note to students:** Deficiencies in the required courses may be considered on a case-by-case basis for otherwise highly qualified students.

2. **Course Requirements** - All students are required to take the course and internship credits outlined below:

24-28 graduate course credits

All students are required to complete 24 – 28 course credits. Within each track, there are compulsory classes and electives. Coursework is multi-disciplinary and thus, will be encouraged and accepted from multiple departments.

2-6 internship credits

Students are expected to complete an internship for 2 - 6 academic credits with an approved agency, institution, or business, culminating in a formal report.

### **All RSMAS students are required to take:**

**Research Ethics (RSM 600) – 0 credits**

3. **Academic Advisor and Faculty Mentor/Committee Chair** - Students will be assigned an Academic Advisor during their first semester in residence. The advisor must hold an appointment in the division representing each student's track selection. This individual will offer guidance regarding University expectations, coursework, registration, program details, and graduation requirements. At the beginning of the first semester, the student and the Academic Advisor will establish the curriculum to be followed, based on the student's personal and professional goals and M.P.S. track enrollment. Each student will also identify and request the involvement of a Faculty Mentor, who will act as the Committee Chair and as a resource to the student regarding career guidance and the selection of an appropriate internship. Track Coordinators typically act as Faculty

Mentors/Committee Chairs, but exceptions are permitted. Students should identify their mentor/chair no later than the end of the first semester.

4. **Committee** – All MPS students must have a graduate committee of at least 3 members. This committee will include a committee chair, who is usually the faculty mentor, an additional faculty member from UM, and one outside committee member, who is usually the direct supervisor at the student’s internship. Each member should be an expert in the student’s chosen track, and more specifically, the topic of their final report. Though deviations from these guidelines are possible, they must be approved by the MPS dean and director. The “Appointment to Student Committee” form solidifies the committee and is due during the second semester in residence.
5. **Comprehensive Examination** – A comprehensive examination is required of all M.P.S. students prior to beginning an internship. The exam will be written and will typically be based on core course content. *Each division determines the content and form of the examination* in a given year-class, according to general school guidelines. In the event of a failure, a student may be re-examined once, upon the advice of the student's advisor and at the discretion of the faculty of the division. If granted, the re-examination must be given before the end of the following semester. The M.P.S. Office should receive written notification of the examination results. *Students who fail the re-examination are subject to dismissal from the school.*
6. **Pre-Internship** - Before being allowed to begin an internship, a student must:
  - a) submit the “Appointment to Committee” form
  - b) submit the “Internship Agreement Form” + **a 1 page summary of the proposed project**, highlighting the timeline, goals, expectations, and objectives of your internship
  - d) complete at least 12 credits, with a minimum grade point average of 3.0
  - e) remove all "I"s or deficiencies
7. **Internship** - Each student will be required to complete an internship with an organization engaged in some activity associated with marine and/or atmospheric science and identify an Internship Supervisor. Such organizations can be national or international agencies, private corporations, or foreign governments with clearly defined marine-oriented programs or activities. Internships can be either paid or unpaid by the organization, or interns can complete the internship by formal participation in a University sponsored program in some area of marine science. The “Internship Commitment Form” is due BEFORE a student engages in an internship. Additionally, a detailed synopsis of a proposed contribution to the hosting organization is required as a formal proposal, preferably before the internship begins, but *no later than 3 weeks after the start date*. The internship proposal will include: an introduction to the topic (i.e. a literature review), a statement of the problem, the purpose of the study, methods and materials (i.e. the proposed activities and analyses), a timeline, and plans for disseminating the information. The internship proposal template and guidelines are available on the M.P.S. website: <http://mps.miami.edu/forms/>. In addition, a strict requirement for the completion of the M.P.S. degree is an oral presentation, preferably offered to the hosting organization, and a detailed report.

Institutions may release an intern before the end of the proposed time commitment, and

an intern may also terminate the position with an institution at any time, provided there are significant reasons not to proceed. In either case, due process will include a conference with the intern, the supervisor, and the student's academic committee members. The resolution of any problems should occur during this meeting. However, should the problems continue, or are deemed to be irreparable/irrevocable, the internship may be terminated, and the plans for the involved student will be reevaluated by the student's committee.

8. **Internship Report** - The final grade (pass/fail) will be based on a written report and an oral presentation. The internship report is not a summary of involvement but rather a contributory assessment of the experience, including developmental insight and a summary of any research performed. Copies of the final, approved report should be distributed as follows:

One electronic copy to each member of your committee

One copy for the representative agency, institution, or business (electronic and/or hard copy, at their request)

One electronic copy via e-mail + the original (hardcopy) title page to the M.P.S. Office

9. **Oral Presentation** – A strict requirement for the completion of the M.P.S. degree is an oral presentation, preferably offered to the hosting organization. Oral presentations should be no longer than 20-25 minutes in length, should include a visual component (e.g. PowerPoint), and may not be scheduled until all committee members have edited at least one draft of the internship report. Additionally, the PowerPoint (or equivalent) must be reviewed and edited by your Committee Chair, and all committee members are expected to attend the presentation, either in person or virtually. If you plan to present at RSMAS, please coordinate with your committee to identify a mutually agreeable time and date, and then schedule your presentation with the M.P.S. Office. In order to graduate, you must submit a PDF copy of your presentation to the M.P.S. Office via e-mail.
10. **Conference** – Though not mandatory, M.P.S. students are strongly encouraged to attend a scientific conference during their academic residency at RSMAS.
11. **Residency** – For full-time students, residency will be limited to 24-months within a continuous 30-month period. A student who has not completed all of the requirements for graduation within this time period will be required to petition the division for continuation. Graduate coursework and associated credits completed at RSMAS are valid for a maximum of 5 years. If a student does not graduate within 5 years of starting the M.P.S. program, they must be reevaluated for enrollment and continuation.
12. **Transfer of Credits** – A total of 6 credits may be transferred into the M.P.S. degree program from an outside institution, provided that those credits did not result in the conferral of another degree and were completed within 5 years of the start date of the M.P.S. program. However, all courses must be evaluated by the Academic Advisor and approved by the instructor of the equivalent RSMAS class prior to transfer/acceptance. Classes for which there is no equivalent course at RSMAS are not eligible for transfer.
13. **University of Miami Credits Taken as an Undergraduate** – If pursuing an M.P.S. degree in either ATM, MBE, or OCE you may complete 6 credits of required graduate coursework while in residence as an undergraduate. If pursuing an M.P.S. degree in

MES, you may complete 12 credits of required graduate coursework while in residence as an undergraduate. However, none of those credits can fulfill undergraduate graduation requirements.

14. **M.P.S. vs. M.S. Distinction** - Students in the M.P.S. degree program must complete a minimum of a 3-6 month internship and submit a written internship report for approval by their committee. Students in the M.S. program must submit a M.S. thesis, which is an original research project synthesized into a manuscript comparable in scope and content to a peer-reviewed journal publication. The M.P.S. project may be conducted as part of research conducted at RSMAS or another academic institution, or as part of a collaborative effort with a federal, state, local, or non-governmental agency, or a private institution.
15. **Transfer from M.P.S. to M.S.** – Students interested in transferring from the M.P.S. program to the M.S. program must obtain pre-approval from the Associate Deans of Graduate and Professional Studies, and all requests for transfer must be made PRIOR to the start of the second semester in residence. Transfers from the M.P.S. to the M.S. will not be considered after students have completed more than 15 credits of graduate coursework.

If approved, the student must identify and communicate with a faculty member with shared research interests and obtain a verbal commitment from that faculty member to act as their M.S. Faculty Advisor. Then, the student must compose a 1-page research plan, describing a publishable quality, original research project. The Faculty Advisor and the department Program Director must review the plan, and transfer to the M.S. program will be subject to their approval of the proposed research. When/if approved, the Faculty Advisor, Program Director, and Associate Deans must sign the “Transfer from M.P.S. to M.S. Program” form for submission to the Graduate Studies and M.P.S. offices.

16. **J.D./M.P.S. Students** – The graduation requirements for students enrolled in the joint J.D./M.P.S. program differ from students enrolled in the M.P.S. program alone. Students in the joint degree program are only required to complete 24 credits, and these credits are typically comprised of 24 course credits and 0 internship credits. The student’s total work in the joint program, whether related to courses, seminars, or an individual research project at the School of Law or RSMAS, must result in a substantial, written analysis (publishable quality) of marine law, policy, or related scientific issues. Students may use their required upper-class research paper, or law review, at the School of Law to fulfill this requirement. Thus, joint J.D./M.P.S. students are expected to form a committee and submit the “Appointment to Student’s Committee” form, take and pass the Comprehensive Exam, and submit a report from a legal internship (must be marine related) or a paper published in their law journal that is vetted and approved by all committee members. Joint J.D./M.P.S. students are exempt from submitting the Internship Commitment Form, the Internship Proposal, and the oral presentation is optional but may be requested by your committee.
17. **Graduation** – All M.P.S. students, including joint J.D./M.P.S. students, must submit a graduation request using CaneLink during the semester in which they plan to graduate. All required forms, including the Clearance Form and the final internship report (approved and cover page signed by all committee members), must be submitted to the M.P.S. Office no later than the Graduate School Deadline for Completion of Dissertation/Thesis, which will be communicated via e-mail and is indicated on the UM

Academic Calendars online page: <http://www.miami.edu/index.php/registrar/calendar/>.