

Academic Program

General Program Description

The academic program of the School of Marine Science is intended primarily for the student who wishes to specialize in marine science at the graduate level. Degrees offered are the Master of Science and Doctor of Philosophy in Marine Science. The school offers research opportunities and instruction at the graduate level in five general areas: Biological Science, Coastal and Ocean Policy, Environmental and Aquatic Animal Health, Fisheries Science and Physical Science.

Though the courses offered by the School are primarily for graduate students, advanced undergraduates (juniors and seniors) may participate. For instance, biology, chemistry, and physics majors can enroll in suitable 500- level marine science courses for credit toward the Bachelor's degree provided certain conditions (see College of William and Mary Undergraduate Program Catalog) are met. Undergraduates also may enroll for research credit to work on problems in marine science. The student is responsible for making the necessary arrangements with an individual School of Marine Science faculty member, and the consent of the chairperson of the student's major department is also required.

General Preparatory Requirements

Students who are interested in pursuing marine science as a profession should consult with their academic advisor or the Dean of Graduate Studies, School of Marine Science, early in their college careers to identify an academic program that will prepare them for graduate study in marine science. Students interested in Biological Science, Environmental and Aquatic Animal Health, or Fisheries Science should have a strong background in basic science, including a suite of contemporary biology courses, physics and chemistry (through organic), and mathematics through calculus and differential equations. The prospective chemical, geological or physical oceanography student should have an undergraduate degree with appropriate course work in chemistry, geology or related geophysical science, physics, meteorology, mathematics or engineering, and a solid quantitative background. Course work in statistics and competence with computers are particularly important.

Degree Requirements

General

Students generally are bound by the requirements stated in the catalog that is in effect when they enter the School. The department in which the student specializes and individual advisory committees may prescribe additional requirements for their students.

Residency

To fulfill the full-time academic residency requirement of the School of Marine Science, students must:

1. Successfully complete the core course requirements
2. Be a full-time student in good standing for two consecutive semesters

Satisfactory Progress

To continue in a degree program, a student must make satisfactory progress towards the degree. If the faculty of a department in which a student is enrolled determines that satisfactory progress is not being made, a student may be required to withdraw because of academic deficiency. The Academic Status and Degrees Committee reviews the progress of all students to insure that they have completed milestones toward completion of degrees in a timely fashion.

Registration Requirements

All active students (i.e., those working toward completion of a degree program who have not been granted leave) must register for a minimum of nine paid hours each semester, and one paid hour for each term of the summer session. Students must be registered in the semester during which they graduate. For a single semester, the student may be given research student status. This generally would be the semester in which the student completes the thesis and graduates.

Changes in Registration

All changes in students' schedules after the close of registration require approval of the instructors involved and the Dean of Graduate Studies. Students may not add courses after the last day for changes in registration as indicated in the calendar. If the student drops a course or courses before mid-semester but remains registered for other academic work, the course or courses dropped will be removed from the student's record. If the student drops a course or courses after mid-semester through the last day of classes but remains registered for other academic work, the grade of "W" or "F" will be awarded by the instructor in the course depending upon whether or not the student was passing at the time the course was dropped.

A student wishing to withdraw from a course (or courses) due to medical reasons after mid-semester may apply to the Academic Status and Degrees Committee for approval. With the approval of the request, a grade (or grades) of “W” will appear on the transcript.

Students may not drop a course after the last day of classes. If a student does not complete a course for medical reasons, “W” with appropriate notation will be entered on the record upon approval of the Dean of Graduate Studies and the appropriate authorities at the College.

System of Grading and Quality Points

The grades A (excellent), B (good), C (satisfactory), P (pass), in certain courses, D (unsatisfactory), and F (failure) are used to indicate the quality of work in a course. “W” indicates that a student withdrew from the College before mid-semester or dropped a course between mid-semester and the last day of class and was passing at the time that the course was dropped.

For each semester credit in a course in which a student is graded A, 4 quality points are awarded; A-, 3.7; B+, 3.3; B, 3; B-, 2.7; C+, 2.3; C, 2; C-, 1.7. P carries credit but is not included in a student’s quality point average; D and F carry no credit, but the hours attempted are included in the student’s average.

In addition to the grades A, B, C, P, D, F, and W, the symbols “G” and “I” are used on grade reports and in the College records. “G” is given to work in progress towards Masters (MSCI 599) or Ph.D. (MSCI 699) research, since there is insufficient evidence upon which to base a grade. “I” indicates that because of illness or other major extenuating circumstances, the student has postponed, with the explicit consent of the instructor, the completion of certain required work. “I” automatically becomes “F” at the end of the next semester if the postponed work has not been completed.



Required Courses

All students

By the end of a student's second year in the School of Marine Science, the student must have passed the following core courses with a grade of B- or better: MSCI 501 A-D, MSCI 501L, MSCI 502, MSCI 504 and MSCI 505.

Students in Biological Science

MSCI 526, MSCI 601A (Spring semester).

Students in Coastal and Ocean Policy

MSCI 542, MSCI 601E (Spring semester) and distribution requirements as specified by the department.

Students in Environmental and Aquatic Animal Health

Students must take at least two departmental offerings as well as MSCI 601B (Fall and Spring semesters).

Students in Fisheries Science

MSCI 528, MSCI 601C (Spring semester) and one of the following: MSCI 625, MSCI 667, MSCI 670 or MSCI 672.

Students in Physical Science

Required courses for the different disciplines in Physical Science are as follows: Physical Oceanography: MSCI 520; Geological Oceanography: MSCI 522; Marine Chemistry: MSCI 524, MSCI 601D (Fall and Spring semesters). In addition, all students in Physical Science must take at least one advanced course (550-level or higher) appropriate to the student's specialty.

Language Requirement

Proficiency in a foreign language is not required; however, a student's advisory committee may require demonstration of foreign language skills.

Retaking a Course

Degree credit is granted only for non-core coursework in which a student earns a grade of "C" or above. A graduate student may repeat one non-core course in which a grade of "C" or lower is received. In the case of core courses a student must receive a grade of B- or above. Students will be allowed to make up for a core class deficiency either by taking a comprehensive exam or by repeating the course. When a course is repeated the initial grade earned remains a part of the student's record and is included in computations of quality point requirements. Any stu-

dent receiving more than one “D” or “F” in a program of study will not be permitted to continue in the School of Marine Science.

Transfer of Academic Credit

On the recommendation of the Academic Status and Degrees Committee and the approval of the Dean of Graduate Studies, a regular student may apply up to 15 hours of graduate credit for courses equivalent to the SMS core courses (MSCI 501-505) earned at another accredited institution. Command of material in MSCI 501-505 must still be demonstrated.

Students can petition for up to six hours of other graduate work not already applied toward another degree, but the total transfer cannot exceed 15 hours. The credits must have been earned in courses appropriate to the students program in SMS and must fall within the time specified by the general college requirements for degrees.

Credit may be transferred only for courses in which the student received a grade of “B” or better and may not be counted in compiling his/her quality point average at William and Mary.

Qualifying Exam

Administered by the Student’s Advisory Committee, the qualifying examination will be chaired by a moderator who is not a member of the student’s Committee. The exam will be advertised and open to any interested faculty members of the College. The exam should be taken well in advance of the student’s thesis or dissertation defense, usually by the end of the third semester (M.S.) or fourth semester (Ph.D.).

The student must satisfactorily demonstrate knowledge of facts and theory in his/her field of specialization and in other subject areas as required by the student’s Advisory Committee. For a M.S. student a solid foundation in the fundamentals of marine science as it pertains to their research is expected. For the Ph.D. a comprehensive understanding of their chosen field of study and of how their research represents a unique contribution to that field is required.

Leave of Absence

A student may request a leave of absence from the program for a specific period of time. Leaves of absence will relieve the student of the obligation of paying tuition during the approved absence from the program. It is understood that a student on leave of absence is not present on campus and drawing upon campus resources. A student must terminate the leave of absence and be a registered student in the semester in which his or her degree requirements are completed or in which he or she graduates. A leave of absence does not automatically extend the time limit for completion of degree requirements.

Probation

Students will be placed on probation if their cumulative average is less than B (< 3.0). In the case of a grade deficiency in a core course, the student must retake the course and receive a grade of B- or better, or successfully pass a comprehensive exam. The grade of any retaken course will not be counted in the student's cumulative average. Probation will last until a student's cumulative average is raised to at least a B (3.0), and will in no circumstances last longer than one calendar year. Failure to raise their cumulative grade average to B within one calendar year will result in dismissal from the School of Marine Science. Reinstatement is possible only after successful appeal to the Academic Status and Degrees Committee.

Withdrawal from the Program

Withdrawal from the program constitutes termination of the student's program of study in the School of Marine Science. Withdrawal may be voluntary on the part of the student or be imposed by the School of Marine Science for reasons of academic deficiency. A student who fails to register for a regular semester (Fall or Spring) once the student has begun his/her graduate study and who has not requested a leave of absence or permission to withdraw, will be placed on a leave of absence for one semester by the Dean of Graduate Studies. If the student has not applied for a leave of absence prior to the end of registration for the next regular semester, or if the Dean of Graduate Studies is not able to justify continuing the leave of absence, the student's record will be marked "withdrawn unofficially."

If the student withdraws from the College before mid-semester, a grade of "W" will appear on the record for each course in progress at the time of withdrawal. After mid-semester through the last day of classes, students who withdraw from the College will be awarded a "W" or "F" by the faculty member teaching each course in progress at the time of withdrawal.

Reinstatement after Withdrawal

A student wishing reinstatement after withdrawal must reapply to the School of Marine Science under the procedures in effect at the time of reapplication.

Extension of Time Limit

Classified (regular) students who have exceeded the time limit for degree completion and who have not been granted a time extension by the Dean of Graduate Studies will not be permitted to register in the School of Marine Science.

Degree of Master of Science

The milestones to be accomplished and requirements for the degree are:

1. The student must select a suitable major professor, who must be a faculty member of SMS/VIMS, as soon as possible following admission. The student and the major professor will choose an Advisory Committee, which must be approved by the Dean of Graduate Studies. The major professor and Advisory Committee direct the student's program.
2. The Advisory Committee, chosen by the student and approved by the Dean of Graduate Studies, must consist of at least four members. A majority of the Committee's members must be members of the faculty of SMS/VIMS, although persons with appropriate qualifications from outside SMS/VIMS may serve on the committee. For students with a specialty in biology or fisheries science, at least one member must be from the discipline of physical or environmental science. For students with a specialty in physical or environmental science, at least one member must be from the discipline of biological or fisheries science. For students with a specialty in coastal and ocean policy, at least one member must be from another discipline within SMS/VIMS.
3. At least one year of each student's program must be spent as a full-time resident student as defined in the general degree requirements.
4. At least 36 credit hours of advanced work, of which at least 9 credit hours must have been earned in courses numbered 550 or above with a cumulative grade point average of 3.0 or better, are required for the M.S. degree. In addition, a student must have registered for thesis (MSCI 599) for at least one semester. No more than six thesis credits may be counted toward the minimum 36 credits required for the M.S. Credits more than seven (7) years old and earned in the program in which the student is currently enrolled will be deleted from the accumulation of credits required for a degree. Credits acquired while enrolled in previous programs here or elsewhere generally are not subject to this limitation.
5. Upon a favorable recommendation of the student's Advisory Committee and the Academic Status and Degrees Committee, followed by a majority vote of the Academic Council and the approval of the Dean of Graduate Studies, a student may be admitted to candidacy after completion of the following requirements:
 - a. The student must have achieved a grade point average of B (3.0) or better, averaged over all courses taken for credit at the time of application for admission to candidacy.
 - b. All core courses required by the School of Marine Science (MSCI 501A-D, MSCI 501L, MSCI 502, MSCI 504, MSCI 505) must be passed with a grade of B- or better (or successful completion of a comprehensive examination administered by core class instructor) or officially exempted, based on prior coursework and all

other courses specifically required by the student's department and Advisory Committee must be completed.

- c. The qualifying examination and prospectus must be completed.
6. The student must present a seminar to the marine science faculty, staff and students on a thesis topic approved by the major professor, the Advisory Committee and the Dean of Graduate Studies, and must defend this thesis before his/her major professor and committee. The defense of the thesis shall be separate from any other examination. Full details of this requirement can be obtained from the Office of the Dean of Graduate Studies.
7. All requirements for the degree must be completed within three calendar years after commencing graduate study. In exceptional cases, if recommended by the Academic Status and Degrees Committee, the Dean of Graduate Studies may approve time extensions.

Degree of Doctor of Philosophy

The milestones to be accomplished and the requirements are:

1. The student must select a suitable major professor, who must be a faculty member of SMS/VIMS, as soon as possible following admission. The student and the major professor will choose an Advisory Committee, which must be approved by the Dean of Graduate Studies. The major professor and Advisory Committee direct the student's program.
2. The Advisory Committee, chosen by the student and approved by the Dean of Graduate Studies, must consist of at least five members, at least one of whom must be from outside the College of William and Mary. A majority of the Committee's members must be members of the faculty of SMS/VIMS, although persons with appropriate qualifications from outside SMS/VIMS may serve on the committee. For students with a specialty in biology or fisheries science, at least one member must be from the discipline of physical or environmental science. For students with a specialty in physical or environmental science, at least one member must be from the discipline of biological or fisheries science. For students with a specialty in coastal and ocean policy, at least one member must be from another discipline within the SMS/VIMS.
3. A minimum of three years of graduate study beyond the baccalaureate is required. At least one academic year must be or have been spent in residence as a full-time M.S. or Ph.D. student of the College of William and Mary at either the Williamsburg or the Gloucester Point campus, or both, as defined in the general requirements above.
4. At least 42 credit hours of advanced work, of which at least 15 credit hours must have been earned in courses numbered 550 or above with a grade point average of 3.0 or better, are required for the Ph.D. degree. In

addition, a student must have registered for dissertation (MSCI 699) for at least one semester. At least 9 but no more than 12 dissertation credits may be counted toward the minimum 42 credits required for the Ph.D. degree. Credits more than seven (7) years old and earned in the program in which the student is currently enrolled will be deleted from the accumulation of credits required for a degree. Credits acquired while enrolled in previous programs here or elsewhere generally are not subject to this limitation.

5. Upon a favorable recommendation of the student's Advisory Committee and the Academic Status and Degrees Committee, followed by a majority vote of the Academic Council and the approval of the Dean of Graduate Studies, a student may be admitted to candidacy after completion of the following requirements:
 - a. The student must have achieved a grade point average of B (3.0) or better, averaged over all courses taken for credit at the time of application for admission to candidacy.
 - b. All core courses required by the School of Marine Science (MSCI 501 A-D, MSCI 501L, MSCI 502, MSCI 504, MSCI 505) must be passed with a grade of B- or better (or successful completion of a comprehensive examination administered by core class instructor) or officially exempted, and all other courses specifically required by the student's department and Advisory Committee must be completed.
 - c. The qualifying examination and prospectus must be completed.
6. The student must present a seminar to the marine science faculty; staff and students on a dissertation topic approved by the major professor, the Advisory Committee and the Dean of Graduate Studies, and must defend this dissertation before his/her major professor and committee. The defense of the dissertation shall be separate from any other examination. Full details of this requirement can be obtained from the Office of the Dean of Graduate Studies.
7. All requirements for the degree must be completed within the following time frame:
 - 4 years with a Master's Degree from the School of Marine Science
 - 5 years with a Master's Degree from another Institution
 - 6 years with direct admittance (bypass Master's Degree)In exceptional cases, if recommended by the Academic Status and Degrees Committee, the Dean of Graduate Studies may approve time extensions.

8. Dissertations will be published by having a master microfilm negative made from each original dissertation. Each dissertation, when submitted, must be accompanied by two copies of an abstract of not more than 350 words. This abstract or summary will be published in Microfilm Abstracts for national distribution. No dissertation will be accepted without this abstract. The candidate for the Doctor of Philosophy degree must pay a fee for the above services before it is conferred. All dissertation research, however, should be planned, conducted and reported with a view toward publication of the results in peer-reviewed scientific journals.

General Statement of Policy

The School of Marine Science and the College of William and Mary have an Affirmative Action Policy and are committed to attracting underrepresented students into marine science. The School's Admissions Committee considers applicants without regard to sex, race, color, religion, national origin, sexual orientation, or disability. Admissions criteria are based on past and potential academic and research performance.

The facilities and services of the College are open to all enrolled students on the same basis, and all standards and policies of the institution, including those governing employment, are applied accordingly.

Senior citizens of Virginia who wish to take advantage of fee waiver privileges in order to attend courses at William and Mary are invited to contact the Office of Admissions for full details.

The College reserves the right to make changes in the regulations, charges and curricula listed herein at any time.

Honor Code

The Honor Code, first established at William and Mary in 1779, remains one of the College's most cherished traditions. It assumes that principles of honorable conduct are familiar and dear to all students, and hence dishonorable acts will not be tolerated. Students found guilty of cheating, stealing or lying are subject to dismissal. The principles of the Honor Code and the method of administration are described in the Student Handbook (www.wm.edu).