

Major Proficiency Courses (16-18 Credits)

Natural Sciences (10 credits)

- BIOL 204/L – Intro to Org, Ecol, Evolution (3+1)
- CHEM 103 or 205 – General Chemistry (3)
- PHYS 101 or 101H or 107 – Intro Physics (3)

Disciplinary Perspectives (3-4 credits)

Choose from a variety of options in anthropology, biology, chemistry, conservation, economics, environ. science, geology, GIS, physics, or public policy. Scan QR code for details.

Quantitative Skills (3-4 credits)

Choose one from the following options:

- BUAD 231 – Business Stats (3)
- CSCI 141/L – Intro to Programming (4)
- ECON 307 – Princ/Methods of Stats (3)
- MATH 111 – Calculus I (4)
- MATH 131 – Calculus for Life Sci (4)

Major Curriculum (36 Credits)

Includes courses from common core, major electives, and capstone requirements.

Major Common Core (25 Credits)

Complete all courses as follows:

- MSCI 230 – Intro to Mar Science (3) (COLL 200)
- MSCI 250 – People, Society & Coast (3)
- MSCI 305 – Coastal & Marine Geology (3)
- MSCI 310 – Motion of the Ocean (3)
- MSCI 315 – Biological Oceanography (3)
- MSCI 320 – Coastal & Marine Chemistry (3)
- MSCI 360 – Field/Research Methods (4)
- MSCI 365 – Quantitative Methods (3)

Major Capstone (COLL 400) (3 Credits)

Choose one from the following options:

- MSCI 460 – Capstone Studies in Mgmt & Policy (3)
- MSCI 491 – Senior Res. (3) (pre-/co- req: MSCI 492)
- MSCI 495/496 – Honors Research (3 + 3) (pre-/co- req: MSCI 492)

Major Electives (8 Credits)

Courses available through the Batten School:

- MSCI 201 – Marine Sci Mash-up (1)
- MSCI 331 – Coastal Env: VA Eastern Shore (3)
- MSCI 332 – Coastal Env: North Wales (3) (COLL 300)
- MSCI 333 – Coastal Env: Topics (1-3) (COLL 300)
- MSCI 340 – Marine Biology (3)
- MSCI 343 – Marine Fisheries Science (3)
- MSCI 390 – Research in Coastal & Marine Sci (1-3)
- MSCI 398 – Mar Science Seminar (1)
- MSCI 404 – Microbial Processes (2)
- MSCI 411 – Marine Pollution (3)
- MSCI 422 – Holocene Coastal Evolution (3)
- MSCI 425 – Ethics in Marine Science (3) (COLL 350)
- MSCI 429 – Fish Physiology (3)
- MSCI 456 – Coastal GIS (3)
- MSCI 457 – Economies of the Coast (3)
- MSCI 492 – Intro to Advanced Research (1)

Courses available through other W&M Schools:

- ANTH 350 – Topics: Voices in Conservation (3)
- BIOL 427 – Wetlands Ecosystems (3)
- BIOL 457 – Mar Invertebrate Biology (3)
- BIOL 460 – Adv Seminar: Mar Ecology (3)
- BIOL 461 – Marine Ecology & Conservation (3)
- ECON 322 – Env & Natural Resource Econ (3)
- GEOL 310 – Regional Field Geology: Bahamas (3)
- GEOL 324 – Paleoclim. & Paleocean. (3)
- GEOL 325 – Paleontology (3)
- GIS 420 – Adv GIS Analysis/Prog (3)

Scan the QR Code to View
Full Curriculum and
Planned Course Offerings



See Reverse Side
for Suggested Course Sequencing

Suggested Course Sequencing During First Two Years

Proficiency Courses to Complete in Years 1 & 2:

- BIOL 204 + Lab – Intro to Organisms, Ecology and Evolution (3+1)
- CHEM 103 – General Chemistry (3) **OR** CHEM 205 – Advanced General Chemistry I (3)
- PHYS 101/101H – General Physics I (3) **OR** PHYS 107 – Physics for Life Sciences (3)
- *(as possible, complete Disciplinary Perspectives & Quantitative Skills course, but these are not pre-requisites for other courses and can be completed as late as your final semester)*

Suggested Marine Science Courses to Complete in Years 1 & 2:

- **Semester 1 (Fall):** MSCI 201 – Marine Sci Mash-up (1)
- **Semester 2 (Spring):** MSCI 230 – Intro to Mar Science (3) (major-required)
- **Semester 3 (Fall):** MSCI 250 – People, Society & Coast (3) **AND** MSCI 305 - Coastal & Marine Geology (3) (both major-required)

Recommended Other Marine Science Courses in Year 2:

As pre-requisites are completed

- **Spring:** MSCI 310 – Motion of the Ocean (3) (major-required)
- **Spring:** MSCI 315 – Biological Oceanography (3) (major-required)

Fall Immersion Semester at VIMS (Admissions Required)

see: https://www.vims.edu/academics/wm_undergrad/major/immersion-semester/

Core Courses Offered as Part of the Fall Immersion Semester:

- MSCI 320 – Coastal & Marine Chemistry (3) (major-required)
- MSCI 360 – Field/Research Methods (4) (major-required)
- MSCI 365 – Quantitative Methods (3) (major-required)
- Miscellaneous, rotating MSCI electives to account for full load of 15 credit hours

Students Interested in Graduate School in Coastal & Marine Sciences

Students interested in continuing on to complete an advanced degree in the fields of coastal and marine sciences should discuss options with a faculty advisor. Specialization in a subfield of interest (biology, chemistry, geology, physics, social sciences) is strongly recommended. This may include additional coursework (e.g., at least a second semester, and likely up to four semesters, of the core science courses and additional quantitative skills) and/or a minor or secondary major in that discipline.