



MAKE WAVES.

BACHELOR OF SCIENCE IN
MARINE AND
COASTAL SCIENCE



MARINE AND
COASTAL
SCIENCE



ABOUT THE PROGRAM

B.S. IN MARINE AND COASTAL SCIENCE

The B.S. in Marine and Coastal Science (MACS) is a new cohort-based, interdisciplinary, and experiential program designed to provide students with the opportunity to engage in coastal and marine-focused research. Active learning experiences help students develop into confident, thoughtful, ethical scientists who are ready to address the growing challenges affecting marine and coastal environments.

Each year, a new cohort of students begins the program, engaging in hands-on research and learning experiences in and around the Salish Sea, with opportunities for focused, residential study at Western's Shannon Point Marine Center (SPMC) in Anacortes, about an hour from the main campus in Bellingham.



PROGRAM FEATURES

STUDY MARINE SCIENCE ACROSS DISCIPLINES

The new MACS major is a partnership between four existing academic departments (Biology, Geology, Chemistry, and Environmental Sciences) and Shannon Point Marine Center. You will have a unique opportunity to study marine science in an environment of interdisciplinary collaboration.

LEARN, WORK, AND THRIVE TOGETHER

Study marine science as a cohort, beginning with a research experience in your second year, and continuing through the third year with the core course series, and culminating with a capstone project in your final year.

GAIN RESEARCH EXPERIENCE

You will have opportunities to engage in mentored, hands-on research opportunities in your sophomore year through immersive study at the marine center in Anacortes, Washington.

ACCESS TO MARINE LABS & RESEARCH VESSELS

Spend time in the field, on oceanographic vessels, and in learning laboratories. Engage deeply in marine research and focused study of the Salish Sea.



HOW TO PREPARE

STEP 1: MEET WITH MACS ADVISOR

Schedule a meeting with the MACS program advisor to learn more about the major and preparatory courses, as well as the admissions process, including timeline and application requirements.

STEP 2: DECLARE AS A MACS PRE-MAJOR

If you decide to pursue Marine and Coastal Science as your major, declare as a pre-major as soon as possible to receive relevant updates, and stay connected with the program and the marine science community.

STEP 3: COMPLETE PREPARATORY COURSES

Enroll in, and complete preparatory courses for the major, in Math, Biology, Chemistry, Geology, and Physics.

STEP 4: APPLY TO THE MAJOR

Upon nearing completion of your preparatory courses, apply to the major by the program admissions deadline (January 15th).

STEP 5: START THE MAJOR

Upon admissions, enroll in MACS 210 (if you didn't participate in the MSS program) in spring quarter and start the major core series in the fall, starting with MACS 301, followed by MACS 302 and 303 in winter and spring. Flesh out your degree program through a variety of elective courses focused on your goals and interests. Electives can be found on the MACS Degree Guide.



ADMISSIONS



GENERAL ADMISSIONS INFORMATION

Once per year, the program admits a new cohort of approximately 30 students. Students begin the major as a cohort in the spring with *MACS 210: Introduction to Marine and Coastal Science Research*, and then move to the major core classes starting with *MACS 301: Marine and Geological Processes* in the fall.

The admissions application opens annually in November and closes on January 15th. Students apply on our website by submitting an online application found on the [MACS website](#). Typically, students will apply during fall quarter of their sophomore year.

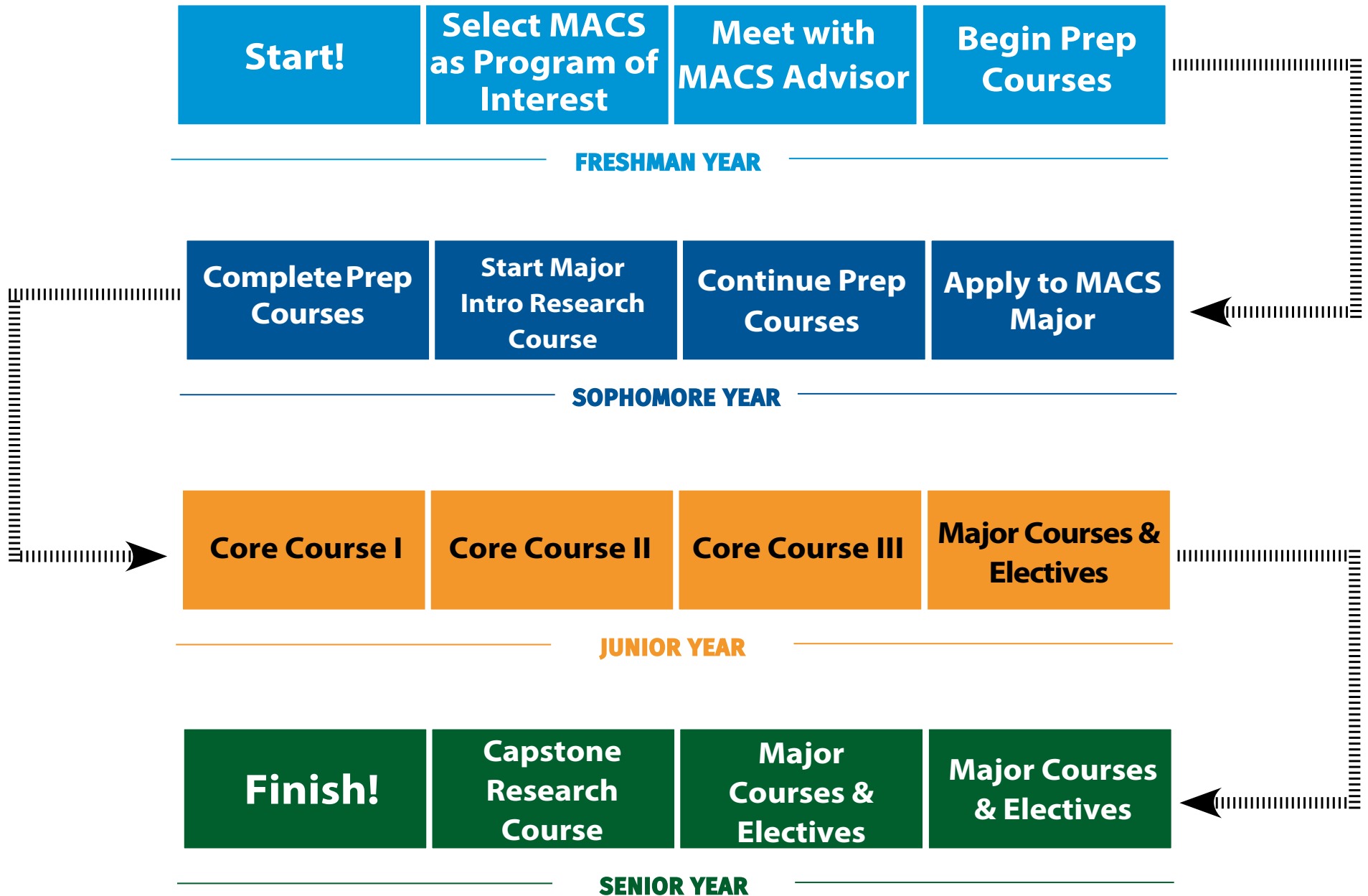
ELIGIBILITY REQUIREMENTS TO APPLY

Students are eligible to apply for admissions to the major when they have completed or will complete by the end of spring quarter all of the major preparatory courses listed below.

- » MATH 124 – Calculus and Analytic Geometry I
- » MATH 125 – Calculus and Analytic Geometry II
- » CHEM 161 – General Chemistry I
- » CHEM 162 – General Chemistry II
- » CHEM 163 – General Chemistry III
- » GEOL 211 – Physical Geology
- » BIOL 204 – Introduction to Evolution, Ecology, and Biodiversity
- » PHYS 161 – Physics with Calculus I



MAJOR STUDENT ROADMAP



Note: This roadmap reflects a student who decides to pursue the MACS major upon starting at Western.



SAMPLE STUDENT SCHEDULE

YEAR 1

MATH 118 - Precalculus II
GUR - General University Requirement Course
GUR - General University Requirement Course

MATH 124 - Calculus & Analytic Geometry I
GEOL 211 - Physical Geology
GUR - General University Requirement Course

MATH 125 - Calculus & Analytic Geometry II
CHEM 161 - General Chemistry I
GUR - General University Requirement Course

YEAR 2

PHYS 161 - Physics with Calculus I
CHEM 162 - General Chemistry II
GUR - General University Requirement Course

BIOL 204 - Intro to Evolution, Ecol., & Biodiversity
CHEM 163 - General Chemistry III
GUR - General University Requirement Course

BIOL 205 - Intro to Cellular & Molecular Biology
MACS 210 - Intro to Marine & Coastal Sci. Res.
GUR - General University Requirement Course

YEAR 3

MACS 301 - Marine Physical Processes
BIOL 206 - Intro to Organismal Biology
GUR - General University Requirement Course

MACS 302 - Marine Geological Processes
300+ Major Elective
ESCI/BIOL 340 - Biostatistics

MACS 303 - Marine Ecological Processes
300+ Major Elective
GUR - General University Requirement Course

YEAR 4

300+ Major Elective
300+ Elective
Elective

MACS 310 - Marine Science & Society
300+ Elective
Elective

300+ Major Elective
300+ Elective
MACS 493- Adv. Marine & Coastal Sci. Research

*Sample schedule reflects a student who tests/places into Math 115/118 and completes the biology series. Each student schedule will vary.

CONTACT INFORMATION

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WWU is an equal opportunity institution.

