Ocean Futures (Coastal and Marine Science), BS

GFSEACMSBS

The health of our oceans is critical to our future. Dive into a world of discovery and be part of a use-inspired research community working to understand the challenges coastal communities and marine systems face, and develop innovative solutions for a thriving planet.

Program description

The Bachelor of Science program in ocean futures with a concentration in coastal and marine science builds on a foundation in coastal and marine system science to focus on physical, chemical and biological aspects; ecosystem functioning; biogeochemistry; and ocean interaction with the climate system. Students gain knowledge of integrated ocean science, but also cognitive skills in critical and futures thinking, information and digital literacy, and problem-solving. The concentration offers research opportunities studying coral reefs, biogeochemical cycling, ocean dynamics and land-sea interactions. It provides preparation for graduate study in a variety of fields, such as biological, chemical and physical oceanography; coastal ecosystem science; and coral reef science.

Healthy human futures depend on healthy ocean futures, and vice versa. According to the United Nations, about 40% of the world's population presently lives within 100 kilometers of the coast. The flourishing of societies and the planet requires a holistic approach to support healthy ocean and coastal ecosystems in the face of a changing future. Addressing the growing challenges the ocean faces requires transdisciplinary study and use-inspired research that works toward culturally appropriate solutions for local to global stewardship of the future oceans. The BS program in ocean futures is designed to grow the next generation of ocean stewards, community leaders, innovators and researchers and build capacity for transformational changes in societal perspectives and practices related to the oceans. Students develop interpersonal skills in leadership, civic and global responsibility, and cultural sensitivity.

One of the benefits of this program is the opportunity for students to gain additional experience through offerings at the <u>ASU Bermuda Institute of Ocean Sciences</u>, <u>Center for Global Discovery and</u> <u>Conservation Science</u> in Hawai'i, and opportunity for study in Antarctica.

This major is eligible for the Western Undergraduate Exchange program at the following location: Tempe campus. Students from Western states who select this major and campus may be eligible for reduced nonresident tuition at a rate of 150 percent of Arizona resident tuition plus all applicable fees. Students should click the link for more information and eligibility requirements of <u>the WUE program</u>.

STEM-OPT for international students on F-1 visas

This program may be eligible for an Optional Practical Training extension for up to 24 months. This OPT work authorization period may help international students gain skills and experience in the U.S. Those interested in an OPT extension should <u>review ASU degrees that qualify for the STEM-OPT extension</u> at ASU's International Students and Scholars Center website.

The OPT extension only applies to students on an F-1 visa and does not apply to students completing a degree through ASU Online.

At a glance

- College/school: College of Global Futures
- Location: <u>Tempe</u> W or <u>Online</u>, <u>ASU Local</u>
- Second language requirement: No
- STEM-OPT extension eligible: Yes
- First required math course: MAT 251 Calculus for Life Sciences
- Math intensity: Moderate

Curriculum

View 2025 - 2026 curriculum

View curriculum archives

Concurrent program options

Students pursuing concurrent degrees (also known as a "double major") earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

Admission requirements

General university admission requirements:

All students are required to meet general university admission requirements. <u>First-year</u> | <u>Transfer</u> | <u>International</u> | <u>Readmission</u>

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about <u>ASU tuition and financial aid</u> options to find out which will work best for them.

Change of Major requirements

A current ASU student has no additional requirements for changing majors.

Students should visit the <u>Change of Major form</u> for information about how to change a major to this program.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may <u>view the program's ASU Online page</u> for program descriptions and to request more information.

ASU Local

It is now possible to earn an ASU degree with <u>ASU Local</u>, an integrated college experience in which students take advantage of in-person success coaching and programming experiences on site while completing one of 130+ undergraduate online degree programs, all of which come with online faculty interaction and tutoring support.

Transfer options

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use <u>MyPath2ASU®</u> to outline a list of recommended courses to take prior to transfer.

ASU has <u>transfer partnerships</u> in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and they help students save time and money in their college journey.

Global opportunities

Global experience

With more than 300 Global Education program opportunities available to them, students of all majors, including programs in the College of Global Futures, are able to tailor their experience to their interests and skill sets. Whether in a foreign country, in the U.S. or online, students build communication skills, learn to adapt and persevere, and are exposed to research and internships across the world, increasing their professional network.

Beyond these, students in the BS in ocean futures program have special opportunities to enhance their learning in locations like Bermuda, Hawai'i and Antarctica. Students can find programs specific to their interests on the <u>College of Global Futures study abroad</u> webpage and additional opportunities and information on the <u>ASU Global Education Office</u> website. These sites also include additional information about applying for funding to support global travel.

Career opportunities

The BS program addresses the crucial role of healthy oceans and coastal communities in the future of the planet and human well-being. Graduates are prepared for professional roles in high demand across sectors such as county, state and federal agencies, along with nongovernmental and community organizations. Graduates are equipped to work collaboratively with diverse communities to become the next generation of leaders dedicated to stewarding coastal and marine resources.

Career paths include:

- conservation manager
- environmental consultant
- environmental scientist
- fisheries manager
- marine biologist
- marine educator
- marine research assistant
- marine research technician
- marine scientist
- natural resource manager

Example job titles and salaries listed below are not necessarily entry level, and students should take into consideration how years of experience and geographical location may affect pay scales. Some jobs also may require advanced degrees, certifications or state-specific licensure.

Career	*Growth	*Median salary
<u>Biological Scientist (General)</u>	3.9%	\$87,300
Biologist	3.9%	\$87,300
Data Scientist 🖕	35.2%	\$103,500
Environmental Analyst	4.1%	\$64,460
Environmental Specialist 🔶	5.8%	\$48,380
Field Researcher	-3.8%	\$60,410
Fish and Wildlife Biologist	3.0%	\$67,430
<u>Hydrogeologist</u> 🔶	4.8%	\$144,440
<u>Life Scientist</u> 🔶	5.2%	\$83,930
Sustainability Specialist 🔶	4.1%	\$75,990

* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

🐥 <u>Bright Outlook</u>

Contact information

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