

# OCEAN SCIENCE AND ENGINEERING

## BACHELOR OF SCIENCE IN MARINE SCIENCE

Marine science is a multidisciplinary program focused on understanding complex coastal and oceanic processes, from the shore to the deepest reaches of the abyss, and all points in between. Marine science is often confused with marine biology, but the two fields are, in fact, quite different. Marine biology is the study of living organisms that make their homes in the ocean. While marine scientists can study marine biology, they are also trained in marine chemistry, marine geology and marine physics, as well, establishing a comprehensive understanding of ocean dynamics and the marine environment.

***Southern Miss offers the only undergraduate marine science degree in the state of Mississippi and one of only 16 programs in the nation.***

Marine scientists (oceanographers) specialize and perform applied research across all of the natural science disciplines, specifically as they relate to the ocean (marine biology, marine chemistry, marine geology and marine physics). As experts in marine environmental science, they provide science-based decision support for marine natural resources, wildlife, aquaculture, water quality, and ecological restoration and management efforts.

### The Student Experience

Marine science students first complete the required initial sequences in biology, chemistry, geology, physics and mathematics.

Afterward, students will begin working with more advanced topics in the fields of biological, chemical, geological and physical oceanography. Studies will include oceanographic cruises on the *R/V Point Sur*, our 135' research vessel, and hands-on training in the use of research-grade scientific equipment and field methods. The course of study culminates with students conducting a directed research project of their own

### MARINE SCIENCE COURSES

- The Oceans
- Ocean Policy and Management
- Marine Environmental Science
- Ocean Data Analysis
- Field Methods in Marine Science
- Marine Geographic Information Systems (GIS)
- Oceans and Climate
- Marine Pollution

### POTENTIAL CAREERS

- Coastal Wetland Restoration
- Environmental Protection
- Global Climate Monitoring
- Marine Biotechnology
- Marine Fisheries/Aquaculture
- Oceanography
- Ocean Modeling
- Remote Sensing
- Wildlife/Natural Resource Management



EOE/F/M/WETS/DISABILITY



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