The oceanography M.S. integrates the expertise and skills of ocean scientists and engineers. The research-centric program focuses on the study of ocean currents and waves, coastal processes, planktonic and benthonic organisms, marine meteorology, hydroacoustic applications and trace-metal pollution identification and distribution.

**Why Oceanography at Florida Tech?**

With Florida Tech only minutes away from some of the most diverse marine environments in the world, the Indian River Lagoon and Atlantic Ocean, you have unique hands-on access to pursue your research. Florida Tech's oceanography program is designed to align with your career interests and goals by offering various specializations including:

- **Biological Oceanography**—This concentration provides training in all areas of oceanography with emphasis on biological aspects, including phytoplankton, zooplankton and coral reef ecology.

- **Chemical Oceanography**—Work with scientists studying pollutants to help reverse manmade damage to our oceans. This concentration provides practical training in marine and environmental chemistry, including bioremediation and elements integral for biological processes.

- **Coastal Zone Management**—Help protect and manage our shores through research on local and global cause and effect relationships of human activities in the development and use of environmental resources in the coastal zone.

- **Geological Oceanography**—Discover unknown topography of the deepest depths of the ocean through hands-on research on erosion control and coastal margins, marine particle composition and sea floor acoustics.

- **Physical Oceanography**—The most quantitative concentration, it includes advanced courses in mathematics and engineering. Research topics include salinity, heat storage and density.

**The Life Aquatic**

Much of the instructional work on estuarine and coastal waters is conducted as part of applied research contracts that use the program's small motor-powered skiffs and chartered vessels, including our 85-foot R/V Thunderforce, for river, estuarine and offshore work. Access to the ocean is through Port Canaveral and/or Sebastian Inlet where the Gulf Stream can be reached in about three hours. These routes to the sea also provide convenient access to the Bahamas and the Florida Keys for further research opportunities.

**WHAT TO EXPECT**

Florida Tech's oceanography program combines classroom course work, 24-hour laboratory access and direct ocean access to collect data on our research vessels. In all concentrations, emphasis is placed on a strong scientific background for the student so that they are prepared for employment by academia, industry or government.
Faculty
Our oceanography program includes highly skilled faculty who have completed fellowships at places such as the Rosenstiel School of Marine & Atmospheric Science and University of Miami. Our department head is a fellow in both the American Meteorological Society and Marine Technology Society. All of our professors come from extensive research backgrounds and are on the cutting edge of their fields, including Kevin Johnson, ecology panel chair for the National Science Foundation’s Graduate Research Fellowship Program.

Research
With pollution and climate change affecting millions across the world, understanding its effect on ocean environments is integral to discovering solutions. Graduate student research is focused on deep-sea, coastal and estuarine environmental factors effected by pollution, climate change and natural processes and contributes to numerous publications and technical reports.

Institute of Marine Research (IMR)
Using shared facilities, the Ralph S. Evinrude Marine Operations Center and the Vero Beach Marine Laboratory (VBML), IMR works on advancing marine research, education and outreach by coordinating management of our facilities, student research and encouraging interdisciplinary research. It also integrates marine research with government and non-government institutions, foundations and industries.

Vero Beach Marine Laboratory (VBML)
This facility serves as a field station for the university in support of research and teaching in the marine sciences. The beachfront location of VBML provides easy access to field study sites for work on the biology of coastal organisms and study of physical and geological processes of the coastal zones.

Doctoral Program
Our dynamic doctoral program enables students to choose a specialization that most aligns with their career goals, including biological, chemical, geological and physical oceanography, as well as coastal zone management. A doctorate in oceanography enhances salary potential and prepares graduates for fulfilling careers in academia or industry. For full-time doctoral graduate research assistants, full-pay tuition scholarships are available.

Careers
According to the U.S. Department of Labor, oceanography and its related fields are fast growing, as jobs are expected to increase 11% by 2020. Many graduates go on to continue their research or work for the National Oceanic and Atmospheric Administration, U.S. Fish and Wildlife Service, Florida Department of Environmental Regulation or NASA.