Ocean engineering is a multidisciplinary field of technology applied to the ocean environment. It combines aspects of civil, mechanical and electrical engineering with naval architecture and applied oceanography. Ocean engineering students gain fundamental expertise in chemistry, math and physics and build in-depth knowledge of coastal processes, ocean systems and design technologies.

**Why Ocean Engineering at Florida Tech?**

One obvious advantage to studying ocean engineering at Florida Tech is the university's proximity to the Atlantic Ocean, which enables early and frequent access to the marine environment—something that not every school can offer. Another benefit to studying ocean engineering at Florida Tech is being able to work alongside top ocean, civil, electrical and mechanical engineers, as well as renowned oceanographers, meteorologists and environmental scientists. In addition, ocean engineering at Florida Tech is hands-on, field and laboratory intensive, and seagoing.

**Your First-Year Experience**

As an ocean engineering major, you begin building your applied marine science and engineering expertise in your first year through courses in oceanography and a faculty team-taught introduction to ocean engineering. Professors advise you in your studies and are always available to answer questions and offer support. All ocean engineering students’ first-year experiences also include a design and construction project, which requires students to use their knowledge in a real-world application. Even as freshmen, students may be invited to work alongside faculty on funded projects.

**QUICK FACTS**

- All classes are taught by full-time faculty with doctorates in their fields.
- Student organizations include the Society of Naval Architects and Marine Engineers and the Marine Technology Society.
- High-achieving students may become members of Tau Beta Pi, a national engineering honor society.
Ocean Engineering

Ocean engineering is interdisciplinary in nature. It is the profession of applying science to solving engineering problems in the marine environment.

What to Expect
Ocean engineering is a demanding major that features many challenging courses and projects. Undergraduates are treated as capable scholars; they share the same technologies, laboratories and classrooms as graduate students. Classes are small, quantitative and focused. The program as a whole is very hands-on, field and lab intensive, and seagoing.

Facilities & Labs
In addition to shared ocean science labs, ocean engineers have access to laboratories for fluid mechanics, wave dynamics, underwater technology, corrosion and biofouling, instrumentation, materials, and electronics.

Faculty Research Areas
Ocean engineering faculty conduct research in diverse areas of interest, some of which include:
- hydrodynamics and sediment transport
- ship motions in shallow water harbors
- high-speed small craft hydrodynamics
- ship corrosion and biofouling
- artificial reef design
- converting wave and current energy into clean electricity
- design of novel marine technologies

Careers
Students who graduate with a degree in ocean engineering are likely to find careers designing structures and vehicles for marine environments. Graduates of Florida Tech’s ocean engineering program have gone on to work for:
- National Oceanic and Atmospheric Administration
- Oceaneering, Inc.
- U.S. Army Corps of Engineers
- U.S. Navy
- Various coastal engineering and petroleum companies

Graduate Study
Graduates of the ocean engineering program at Florida Tech are prepared to pursue advanced degrees in ocean engineering and related fields and have gone on to study at graduate schools such as:
- Massachusetts Institute of Technology
- University of Rhode Island
- Stanford University
- University of Delaware
- Technical University—Delft

Human Touch
Our small student-to-faculty ratio means that students get lots of face-time with professors and often work closely with them in the laboratory on innovative research projects.

Students interested in underwater vehicles have access to multimillion-dollar Bluefin Autonomous Underwater Vehicles.

Areas of Focus
Students can specialize in coastal engineering, hydrographic engineering, marine vehicles (naval architecture), marine materials and corrosion, and underwater technology.

Senior Design
As seniors, all engineering students complete a capstone project that challenges them to design, develop, prototype and present a complex engineering system.

Immersive Experience
Florida Institute of Technology is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate, baccalaureate, master's, education specialist and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Florida Institute of Technology. Florida Institute of Technology does not discriminate on the basis of race, gender, color, religion, creed, national origin, ancestry, marital status, age, disability, sexual orientation, Vietnam-era veterans status or any other discrimination prohibited by law in the admission of students, administration of its educational policies, scholarship and loan programs, employment policies, and athletic or other university sponsored programs or activities.