

# Ocean Engineering

Ocean engineering addresses the design of off-shore and near-shore structures; design of high-speed ocean vehicles; study of oceanic and coastal zone processes.

The ultimate objective of the program is to provide aspiring engineers in the above fields with the required strong background in the basic principles, and sufficient familiarity with up-to-date computational techniques which are *directly* applicable to the design or assessment of engineered systems.

Several courses are offered in the program, including: Introduction to ocean and coastal engineering, environmental fluid mechanics, principles of hydrodynamics, physical oceanography, modeling of turbulent flows, dynamic response of structures, fluid/structure interactions, computational fluid mechanics, finite element methods, boundary element methods, design of offshore structures, and soil/structure interactions. Other related courses are offered in the departments of [Mechanical Engineering](#) and [Aerospace Engineering and Engineering Mechanics](#).

To apply to the Ocean Engineering (OE) Program, you must apply to the Department of Civil, Architectural, and Environmental Engineering (CAEE) at UT Austin and select Ocean Engineering as an option. In order to be considered for research or teaching assistantship you must apply to and be accepted by the OE program first. Depending on fund availability the best of the accepted applicants in OE will be considered for financial aid.

*Acceptance is decided collectively by the faculty, once ALL complete applications have been received. If you decide to apply for fall, we will contact you with our decision sometime in late March/early April of the same year. Please refrain from contacting individual faculty.*

[Apply Online](#)

## Resources

- Administrative contact person: [Kathryn McWilliams](#)  
Faculty advisor: Dr. Spyros Kinnas
- [Environmental and Water Resources Engineering area website](#)

## Research Centers

- [Computational Hydrodynamics Laboratory](#)
- [Offshore Technology Research Center \(OTRC\)](#)
- [Center for Water and the Environment \(CWE\)](#)