

Ocean Engineering B.S. Suggested Course Tracks

Acoustics (loravu@uri.edu)

OCE360: Robotic Ocean Instrumentation Design (Semester 5)
OCE472: Sonar Systems Design (Semester 7)
OCE571: Underwater Acoustics I (Semester 7)
OCE555: Modern Oceanographic Imaging and Mapping Techniques (Semester 8)

*Other Recommended **Acoustics** Courses:*

OCE572: Acoustics Transducers (Semester 7)
OCE550: Ocean Systems Engineering (Semester 8)
OCE555: Modern Oceanographic Imaging and Mapping Techniques (Semester 8)
OCE575: Marine Bioacoustics (Semester 8, offered alternate years)

Coastal Engineering (cbaxter@uri.edu)

CVE354: Structural Analysis (Semester 5)
CVE381: Intro to Geotechnical Engineering (Semester 7)
OCE422: Offshore Structure Design (Semester 8)
CVE460: Steel Design of Structures (Semester 8)

*Other Recommended **Coastal Engineering** Courses*

OCE582: Marine Geotechnics (Semester 8)

Hydrodynamics & Naval Architecture (jmdahl@uri.edu)

MCE341: Thermodynamics (Semester 5)
EGR515: Hydrodynamics (Semester 7)
MCE366: System Dynamics (Semester 8)
OCE562: Modeling, Simulation, and Control of Marine Vehicles (Semester 8)

*Other Recommended **Naval Architecture** Courses*

OCE516: Biomimetics (Semester 8)
OCE517: Floating Body Dynamics (Semester 8)

Hydrodynamics & Waves (jmdahl@uri.edu)

MCE341: Thermodynamics (Semester 5)
EGR515: Hydrodynamics (Semester 7)
OCE510: Engineering Ocean Mechanics (Semester 7)
or
OCE514: Engineering Wave Mechanics and Near Shore Processes (Semester 7)
OCE512: Storm Surge Modeling (Semester 8)

Note: OCE510 and OCE514 are offered in alternating years.

Marine Geotechnics (cbaxter@uri.edu)

CVE354: Structural Analysis (Semester 5)

CVE381: Intro to Geotechnical Engineering (Semester 7)

OCE582: Marine Geotechnics (Semester 8)

OCE483: Shallow Foundations (Semester 8)

Ocean Renewable Energy (reza_hashemi@uri.edu)

EGR313: Numerical Methods for Engineers (**Technical Elective**, Semester 5)

EGR213g: Energy and Environment (**General Education**, Semester 6)

OCE513: Ocean Renewable Energy (Semester 7)

OCE422: Offshore Structure Design (Semester 8)

*Other Recommended **Ocean Renewable Energy** Courses:*

EGR515: Hydrodynamics (Semester 7)

ELE425: Renewable Elec. Power Systems (Semester 8)

OCE512: Ocean Waves & Surge Modeling (Semester 8)

MCE341: Thermodynamics (Semester 8)

Robotics (slicht@uri.edu)

OCE360: Robotic Ocean Instrumentation Design (Semester 5)

EGR515: Hydrodynamics (Semester 7)

OCE456: Foundations of Robotics (Semester 7)

OCE467: Design of Remotely Operated Vehicles (Semester 8)

*Other Recommended **Robotics** Courses:*

OCE562: Modeling, Simulation, and Control of Marine Vehicles (Semester 8)

Structures (jameshu@uri.edu)

CVE354: Structural Analysis (Semester 5)

CVE483: Foundation Engineering (Semester 7)

MCE466: Introduction of Finite Element Method (Semester 7 or 8)

OCE422: Offshore Structure Design (Semester 8)

*Other Recommended **Structures** Courses:*

OCE561: Introduction to the Analysis of Oceanographic data (Semester 7)