

OCEAN TECHNOLOGY CERTIFICATE

This program is available at the following location:

- Corvallis

This certificate is available as a standalone program (<https://registrar.oregonstate.edu/standalone-certificates>).

The Ocean Technology undergraduate certificate program provides students with specialized training that integrates oceanography, engineering, technology, and data analysis. The certificate is designed to equip students with knowledge and applied skills required by employers across the Blue Economy.

Contact Information

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Certificate Code: C552

Upon successful completion of the program, students will meet the following learning outcomes:

- Apply ocean science and technology skills, including marine instrumentation, field and lab methods, and data analysis tools to collect, interpret, and communicate information about ocean and coastal system.
- Integrate interdisciplinary knowledge such as ocean science, engineering, data science, and emerging technologies to inform ocean solutions that support decision makers, managers and ocean resource users.
- Evaluate the societal and career relevance of ocean technology skills, including their roles in promoting ocean literacy, supporting workforce needs, enhancing science communication, and fostering lifelong learning.

Code	Title	Credits
Required Core		
OC 201	+*OCEANOGRAPHY	4
OC 301	OCEANOGRAPHIC DATA ANALYSIS	4
OC 390	OCEAN TECHNOLOGY PRINCIPLES & PATHWAYS	3
Select 3-4 credits from the following practical courses:		3-4
OC 295 & OC 296	INTRODUCTION TO FIELD OCEANOGRAPHY - LAND and INTRODUCTION TO FIELD OCEANOGRAPHY - SEA	
OC 490	OCEAN INSTRUMENTATION, SENSORS AND PLATFORMS	
OEAS 497	+RESEARCH IN EARTH AND ENVIRONMENTAL SCIENCES	
OEAS 498	+INTERNSHIP IN EARTH AND ENVIRONMENTAL SCIENCES	
Electives		
Select 12-13 credits from the following courses:		12-13
CE 311	FLUID MECHANICS	
ECE 201	DC AND TRANSIENT CIRCUITS	
ECE 202	AC AND FREQUENCY DEPENDENT CIRCUITS	
ECE 320	ELECTRONIC CIRCUIT DESIGN I	
ECE 323	ELECTRONICS II	

ENGR 211	STATICS	
ENGR 212	DYNAMICS	
or ME 217	MECHANICAL ENGINEERING DYNAMICS	
ENGR 213	STRENGTH OF MATERIALS	
FW 430	INTRODUCTION TO SCIENTIFIC DIVING	
GEOG 360	GISCIENCE I: GEOGRAPHIC INFORMATION SYSTEMS AND THEORY	
GEOG 380	REMOTE SENSING: PRINCIPLES AND APPLICATIONS	
GEOG 481	SATELLITE IMAGE ANALYSIS	
NS 311	NAVIGATION	
OC 295 & OC 296	INTRODUCTION TO FIELD OCEANOGRAPHY - LAND and INTRODUCTION TO FIELD OCEANOGRAPHY - SEA (if not used above)	
OC 490	OCEAN INSTRUMENTATION, SENSORS AND PLATFORMS (if not used above)	
OEAS 497	+RESEARCH IN EARTH AND ENVIRONMENTAL SCIENCES (if not used above)	
OEAS 498	+INTERNSHIP IN EARTH AND ENVIRONMENTAL SCIENCES (if not used above)	
Total Credits		27

- * Baccalaureate Core course. Applies to general education requirements for undergraduate students in a catalog year up to 2024-2025
- + Core Education course. Applies to general education requirements for undergraduate students in catalog year 2025-2026 and beyond

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