

# Marine Conservation & Monitoring Certificate of Achievement Requirements Checklist

**12 unit certificate (Effective Fall 2024)**

The Marine Conservation and Monitoring certificate is designed to provide students with experience utilizing a variety of different research equipment, field-based sampling techniques, and analytical tools to collect, analyze and evaluate data. Particular attention is given to the collection of field data and how conclusions drawn from that data can be used to inform conservation-based policies.

Courses	Units
Marine Conservation & Monitoring Required Courses: <i>Need to complete each of the following courses</i>	
<input type="checkbox"/> MRSC A190 Marine Research & Monitoring Techniques	3.0
<input type="checkbox"/> MRSC A195 Marine Policy & Conservation	3.0
<input type="checkbox"/> GEOG A190 Digital Mapping: Introduction to GIS	3.0
<input type="checkbox"/> MARA A152 Boat Handling & Seamanship	3.0
<b>Certificate Units Required: 12.0</b>	

**Program Outcomes:**

1. Demonstrate a basic understanding of data collection methods and analysis as well as the role that monitoring programs contribute to our understanding of marine characteristics and processes.
2. Utilize scientific equipment and monitoring studies to illustrate the influence and interactions between the geologic, physical, chemical and biological processes and characteristics of the world ocean.
3. Demonstrate field-based foundational research and monitoring skills in the marine environment using specialized data collection equipment.

Career opportunities include marine monitoring for wastewater discharge, Department of Fish and Wildlife, U.S. Wildlife and Fisheries, Biological consulting agencies, California Coastal Commission, NOAA Observers, and both formal and informal educational programs focusing on the marine environment.