

# Oceanography

## Understanding the Sea

Oceanography is the study of global physical processes at work in the sea; the dynamic chemistry of oceans; the nature of currents, waves and tides; the history of oceans as revealed by underwater geology and sediments; the complex web of ocean life; and the way that all of these processes and systems interact.



Oceanographers at Otago make a real difference. We are developing models to explain climate change, figuring out how sea-level rise will affect our coastline, investigating the best way to use tidal power, and working to protect vulnerable ecosystems from human impacts.

University of Otago is uniquely placed to study these interlinked processes and their effects on our lives. The Southern Ocean is on our doorstep, with a wide range of marine environments easily accessible to our research fleet. We work in shallow harbours and the deep ocean, sub-Antarctic Islands and majestic fiords, temperate coastlines and tropical reefs.

**Oceanography is now available as an undergraduate major in Sciences at Otago.**

**A BSc in Oceanography allows students with a passion for marine science to explore the global ocean and enter the workforce with a range of highly-desirable skills.**

### CAREER OPTIONS

A degree in Oceanography leads to careers in management, navigation, modelling, and science. You could work in the fishing industry, in regulatory organisations such as the Ministry for Primary Industries, for research institutes or universities, conservation groups or private companies.

### BACKGROUND REQUIRED

We recommend students have at least three of year 13 Biology, Calculus, Chemistry, Statistics, and Physics.

### MAJOR SUBJECT PAPERS REQUIRED

MARI112

### STRONGLY RECOMMENDED PAPERS

EAOS111, MATH170, PHIL105

### THEN ADD

relevant papers in BIOL, CELS, CHEM, COMO, ECOL, GEOL, MATH, PHSI.

### NOTE:

Health science first years may enrol in MARI112 as their optional eighth paper, thus allowing them to continue in Oceanography if they wish to do so.