



# Aquanauts: Spying on the depths

## Science Extension for Yr 9/10 Students

Getting to the moon is hard. Getting to the bottom of the ocean can be harder! Are you ready to join a rare breed of aquanauts and attempt the seemingly impossible? Trying to find out what's happening on the ocean bottom requires explorers to overcome some big issues. Water pressure, salt and electronics in the sea present a series of challenges. Are you up for that challenge? This year, for the first time, we are running a GATE residential programme to be based at Mistletoe Bay, Queen Charlotte Sound, for budding young ocean explorers.

### Participants

- Open to able and/or enthusiastic Year 9/10 students who are interested in engaging with the marine world
- Students must be in Year 9/10 and available for each day of the programme. Up to 3 students / school.

### Programme

- Monday 6 September to Friday 10 September, 2021
- Bus will depart Nelson September 6 (9 am) and return to Nelson Friday September 10 (5 pm)
- Thanks to the Ministry of Education, the cost to schools for the full programme, including accommodation, meals and boat costs is only \$57.50/student (incl of GST).

### Location

- The programme is based at Mistletoe Bay, Queen Charlotte Sound
- Transport provided for Nelson students to Picton and Blenheim students to meet group in Picton
- Transport to Mistletoe Bay from Picton will be provided via Steadfast Sailing Charter.

### Registration

- Register through this link: <https://www.otago.ac.nz/marine-studies/learning/science-extension/otago057187.html>
- Or use the QR code below (paper forms available on request).

**Limited spaces so please register before August 15, 2021**

**For further enquires please contact: [richard.dehamel@otago.ac.nz](mailto:richard.dehamel@otago.ac.nz)**



# Itinerary

## Monday 6 September – Exploration of local marine communities

AM Travel to Picton

PM “Voyage of Discovery Programme” aboard the Steadfast sailing charter, travel to Mistletoe Bay.

## Tuesday 7 September – Creating Underwater Aquabots

AM Design / Build Aquabots to meet requirements of tasks needed.

PM Discover the local catchment and discussion of environmental issues affecting local marine environment

## Wednesday 8 September – Field Testing of Aquabot and data collection

AM Field testing of Aquabots, observations and data collection.

PM Explore the Peninsula to get an overview of the bay and learn about sedimentation, historic land use, recreational influences

## Thursday 9 September – Interpreting the data

AM Last stages of Aquabot data collection, expanding range, controls, comparison sites.

PM Data analysis and interpretation  
Presentations of the information gathered from the Aquabot exploration in Mistletoe Bay

## Friday 10 September – Aquabot scientists unleashed...

AM Tidy up and pack up, Depart Mistletoe Bay for Picton.

PM Farewell Marlborough students and Nelson Students travel to Nelson