

OFF-CAMPUS STUDY - SPRING 2023

COLGATE IN NEW ZEALAND



Director:
Joel Sommers,
Department of Computer Science

Tentative Program Dates:
February - June 2023

Learn about the 2022-23 Colgate Study Groups and talk with Faculty Directors at the Study Group Fair at the Hall of Presidents on Wednesday, October 6th, 2021, 4:00–5:00: <https://www.colgate.edu/academics/off-campus-study/campus-opportunities/virtual-study-group-fair>

For more information about the program:
Please contact Prof. Sommers at jsommers@colgate.edu

Information Sessions will be held on:
Tuesday, October 19 at 11:30am in 315 McGregory Hall and
Wednesday, October 20 at 4:15pm in 315 McGregory Hall

Colgate University's

New Zealand Study Group takes students to Dunedin, New Zealand, one of the world's southernmost cities. Participants will live among students at Otago University and will take four classes at Otago, including "Maori Society", which is a broad survey of New Zealand's native Maori people. Participants will also take COSC 2xx: "Introduction to the Internet of Things" with the director, Joel Sommers. The course focuses on the role that Internet of Things devices have played in monitoring unique New Zealand wildlife. The study group will feature excursions that emphasize New Zealand's unique social and natural environments. Students from any major are welcome.

Courses taken on this study group satisfy the Core Global Engagements requirement.



About Dunedin

Human settlement in New Zealand is incredibly recent, with Polynesian explorers arriving less than one thousand years ago. European settlers arrived in the 19th century and Dunedin boomed with discoveries of gold and development of local agriculture to supply the British market. The University of Otago is New Zealand's oldest university, founded in 1869, and currently serves around 20,000 students, making it especially prominent in a city of 100,000 residents.

Dunedin's location in the southern part of New Zealand's South Island allows the study group to travel to a variety of locations, including mountains, fiords, beaches, and forest. Nature lovers will thrill at the Royal albatross colony and yellow-eyed penguins on Otago peninsula. Air travel within New Zealand is straightforward and will likely permit a trip to the North Island as well.

Dunedin is a relatively safe city, though typical precautions are recommended. While New Zealand is geologically volatile, major earthquakes or volcanic eruptions are very rare in Dunedin.

The University of Otago

The University of Otago is New Zealand's oldest university, founded in 1869. It has over 20,000 students, mostly undergraduates. These undergraduate students include many who are working toward law or medical degrees, which are pursued by undergraduates in New Zealand. Classes in medicine may be available to Colgate students, depending on prerequisites and local instructor permission.

You will be enrolled as full-time students at the university, and will have access to its full range of student activities and support services. You will be able to join sports clubs, music or theater groups, social clubs, outdoors activities and more.

Director's Course:

COSC 2XX. Introduction to the Internet of Things Instructor: Joel Sommers

New Zealand's geographic isolation has caused it to be home to many species that are found nowhere else on earth. Human arrivals to New Zealand, starting with Polynesians (Maori) and continuing with white settlers from Great Britain resulted in the extinction of the Moa, Haast's Eagle, Huia, and many other birds and other species. Species such as the Kakapo, Kereru, Takahe, and Tuatara, however, have seen their once low numbers begin to grow in part because of better monitoring and data collection through Internet of Things (IoT) devices.

This class offers an introduction to topics in embedded systems and the Internet of Things (IoT), with a particular focus on monitoring of unique New Zealand species. Both hardware and software for computing devices that interact with the physical world will be considered. Hardware topics include embedded processors, energy efficiency, I/O, sensors, and actuators. Software topics include IoT network protocols, state machines, embedded programming, and data storage and analysis. Additional topics considered may include social and ethical issues such as security, privacy, and reliability. No prior background in computer science is assumed.

Study Group Excursions

Classes at Otago begin in late February and the semester runs until the middle of June. Before then we will travel around the South Island together, seeing both remote alpine wilderness, glaciers, rainforest, and lakes.

During the mid-semester break we will travel to the North Island to Wellington, in order to visit the capital city, center of government and culture. During the semester in Dunedin, we will visit the Otago Peninsula together, including the Royal Albatross colony and yellow-eyed penguins. We will likely also take other day trips, such as to the Catlins, south of Dunedin.

Living Arrangements

Colgate students will not be housed as a group but will rather live in Otago's University Flats. These are apartments located adjacent to the campus and shared with other students, including at least one New Zealander. University Flats are self-catered, with supermarkets close by to buy supplies. Uni Flats residents also have access to a gym.

Costs

For details of student expenses on this study group, please see Student Cost Estimate Sheets.

Passports and Visas:

You must confirm that your passport is valid through December 2023. All students participating on the Spring 2023 New Zealand Study Group will be required to obtain visa. With participation on this study group comes the responsibility of understanding and complying with visa requirements. If you will not be traveling on a U.S. passport it is imperative that you contact an adviser in Off-Campus Study and International Student Services, 101 McGregory, to learn as much as you can about the visa requirements. For some students there are significant requirements to be met that take time, advance planning, and incur costs.

Calendar and Deadline:

The study group application will open on Wednesday, October 6, 2021, and will close on Wednesday, November 3, 2021. All applications are on the Colgate University Off-Campus Study website and are submitted online at offcampusstudy.colgate.edu. Interviews will be arranged by email, and the faculty director will announce admissions decisions in January 2021. You must have a GPA of 3.0 in order to be considered. (This is a requirement for admission to the University of Otago.) All majors are welcome.