



## Draft Itinerary for AUIP New Zealand Engineering and Urban Planning Program

*Please note: This itinerary is a sample of potential program activities, based on previous years' programs. Deviations from this plan may be expected.*

### **Day 1: Depart U.S. for New Zealand**

### **Day 2: En route to New Zealand**

(lose a day crossing the International Dateline)

### **Day 3: Auckland**

We fly into Auckland and start with a brief look around the city, including a visit to New Zealand's tallest building, before we settle into our hotel. There we'll have our orientation and an introduction to the program modules before finishing off with a Welcome Dinner.

### **Day 4: Auckland**

Today we begin our series of lectures from local academics and engineers as we lay a foundation of understanding of urban engineering in New Zealand. In the afternoon, we'll make a field trip to Rangitoto Island to explore the dormant volcanic threat that lurks underneath New Zealand's largest city.

### **Day 5: Auckland**

Our informative lectures continue as we delve deeper into construction techniques and their relevance to New Zealand's conditions. In the afternoon, we visit the Auckland Museum, one of the city's grandest buildings and a wonderful repository of information and relics of the country's natural and human history.

### **Day 6: Auckland**

We'll combine field work and lectures today before wrapping up the evening with a chance to mix and share dinner with local engineering students from the University of Auckland. Then it's time to prepare for tomorrow and our move south to Wellington.

### **Day 7: Auckland to Wellington**

Today we fly from the largest city to the capital city. Located at the bottom of the North Island, Wellington is a compact, vibrant community. It sits close to the boundary between the Australian Plate and the Pacific Plate and is a great place to begin our lectures on earthquake engineering. We'll also have a panel discussion with members of the Institute of Professional Engineers of New Zealand and the Structural Engineering Society.

### **Day 8: Wellington**

This morning we'll hear from academics and municipal government about earthquakes and community planning for disaster. After lunch, we'll visit Te Papa, New Zealand's national museum, for a look at the base isolation system that protects this large public building.



### **Day 9: Wellington**

We have a free day to choose our own activities. Relax at a cafe, catch up on your work, or take some time to explore the arts and culture of this friendly capital city.

### **Day 10: Wellington to Christchurch**

We head further south today with our flight to Christchurch, the largest city on the South Island and our base for the remainder of the program. The afternoon is at your leisure.

### **Day 11: Christchurch**

The Canterbury earthquakes of 2010 and 2011 have dramatically changed Christchurch. For the next two weeks, we'll explore many facets of this disaster and the role of engineering and urban planning in rebuilding the city. This morning we'll start with presentations on a number of topics from the University of Canterbury's Earthquake Centre.

### **Day 12: Christchurch**

Today we'll focus on the city's bridges, exploring the specifics of their damage and construction with lectures and field visits to many of the important spans in the city.

### **Day 13: Christchurch**

We're back on campus at the University of Canterbury as we hear more from the engineering department about low-damage construction techniques and other topics related to design and analysis.

### **Day 14: Christchurch**

Our earthquake engineering lectures continue today as we consider the case of important public buildings like hospitals. In the afternoon, we'll make a visit to Christchurch Women's Hospital to see the base-isolating mechanisms there.

### **Day 15: Christchurch**

New Zealand engineers have pioneered the use of timber for seismically resilient construction, and today we'll explore this avenue of structural engineering with a lecture and visit to the University's timber laboratory. The afternoon provides you with free time.

### **Day 16: Christchurch**

Today and tomorrow are at our leisure so we can work on assignments, check out the shops, or use the time to explore some of the tourist attractions outside of Christchurch. There are plenty of options to suit the sedate traveler or the adrenaline junkie.

### **Day 17: Christchurch**

Today is a free day to use as you wish.

### **Day 18: Christchurch**

Lyttelton is the port city for Christchurch and today we'll explore the port and hear about the impact the quakes had here, plus the engineering challenges ahead as efforts are made



to rebuild this busy commercial gateway. Engineering topics and business impacts will be discussed.

#### **Day 19: Christchurch**

Today we'll get our hands dirty by assisting with a local grassroots organisation that has been instrumental in the restoration of some of the residential neighborhoods damaged by the 2011 Canterbury earthquakes. We'll also have time to discuss this service learning project and get a tour of some of the worst-affected residential areas.

#### **Day 20: Christchurch**

Many of Christchurch's oldest buildings collapsed in the earthquakes, leaving the city with very few heritage buildings. Some of those that survived are the focus of delicate restoration and strengthening efforts. Today we'll have a tour of some of the most important of these buildings to see first-hand what special efforts are required.

#### **Day 21: Christchurch**

This morning we'll visit the headquarters of a structural engineering firm to get some insight into the many roles structural engineers play in the city rebuild. It's a chance to ask questions of experienced engineers with a wealth of direct experience in a massive-scale rebuilding project. In the afternoon, we'll have a group discussion.

#### **Day 22: Christchurch**

What goes up must come down, and demolitions are an integral part of the rebuild of Christchurch. We'll spend the morning learning about implosions and other techniques used to safely bring down buildings as the city clears space for new construction. The afternoon is at your leisure.

#### **Day 23: Christchurch**

Today and tomorrow are free days to use as we wish. There's time to explore out of town or prepare for the final exam.

#### **Day 24: Christchurch**

Today is a free day to use as you wish. There's time to explore out of town or prepare for the final exam.

#### **Day 25: Christchurch**

This morning we complete our final exam before an afternoon free for last-minute souvenir shopping. And tonight, we seal the program with a gala Farewell Dinner.

#### **Day 26: Christchurch to U.S.**

We depart for Christchurch International Airport, and then we're homeward-bound with the shared memories and new perspectives that can only be gained by studying abroad!