

# University of Canterbury

Christchurch, New Zealand

Associate Professor David G. Wareham  
Associate Dean International  
College of Engineering



# The University of Canterbury

1. Introduce the University
2. The Structure of the Engineering Degree
3. Talk about the Various Degrees Offered within the College of Engineering
4. Some Points of Demarcation of Engineering at UC
5. Additional Factors Associated with UC

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# Christchurch, New Zealand



## Population:

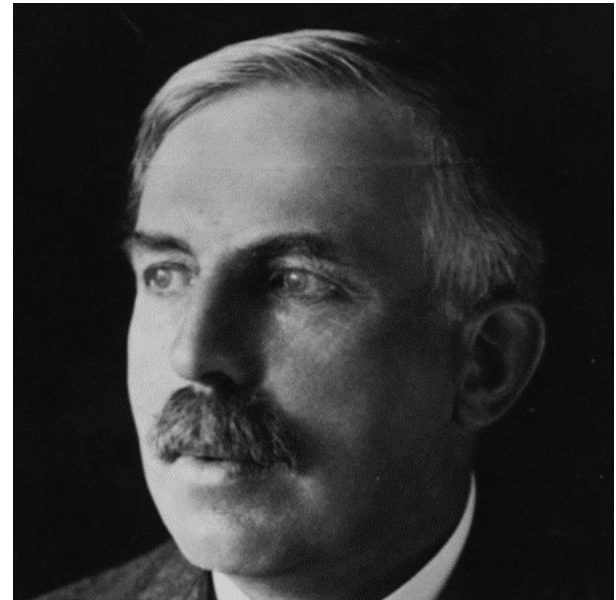
- New Zealand - 4 500 000
- Christchurch – 366 000
- Known as the ‘Garden City’
- Near the beach and five ski fields
- Lonely Planet has named Christchurch in sixth place in its Best in Travel 2013: Top 10 Cities.



# University of Canterbury



- Established in 1873, Canterbury College, as the University was originally known, was only the second university in New Zealand
- Ernest Rutherford, Canterbury's most distinguished graduated, studied at the University in the 1890s
- 2000 courses
- 14,700 students
- 726 academic staff





# University of Canterbury



- We are a residential campus!!
- 1800 international students
- Students from over 93 countries



# Structure of the UC Engineering Degree

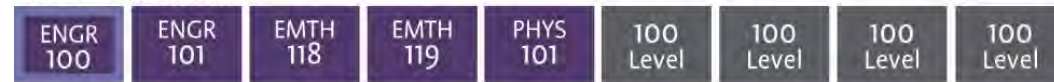
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# Bachelor of Engineering with Honours - BE(Hons)

## Bachelor of Engineering with Honours – typical degree structure

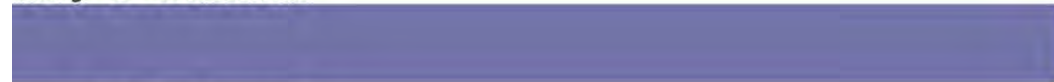
### Year 1 – Intermediate



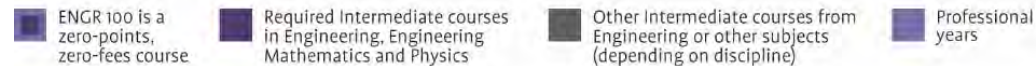
### Year 2 – 1<sup>st</sup> Professional



### Year 3 – 2<sup>nd</sup> Professional



### Year 4 – 3<sup>rd</sup> Professional



Each small block represents a 15-point course. However, some courses may be 30 points (or more).  
Correct at date of printing. Please check [www.engf.canterbury.ac.nz](http://www.engf.canterbury.ac.nz) for more information.

## Four-year honours degree

### Engineering Intermediate Year

- 5 common required courses
- 4 other approved courses  
(depends on intended discipline)
- Unique opportunity to keep options open in first year
- First year is a dual pathway to Engineering or Physical Sciences
- Years 2-4 called the Engineering Professional Years (1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> pro)



# Other Requirements: Practical Work

- UC Engineering students complete 800 hours (100 days) in industry as part of their degree
- Can work in NZ or overseas
- Workshop course or site-safe course
- 1<sup>st</sup> Aid Certificate
- Final year projects in the final year of all of our Engineering degrees
- Many sponsored by industry, with an academic and industry mentor



# UC Engineering Degrees



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# UC Engineering



- New Zealand's Premier College of Engineering *est. 1887*
- Civil Engineering ranked top 1% in the world (*QS World Rankings 2016*)
- Chemical & Process Engineering, Mechanical Engineering all ranked top in NZ for research
- Electrical Engineering: Internationally recognised for power engineering and nanotechnology
- Computer Engineering: 50 % of NZ's ICT industry is located in Christchurch
- Over 3000 students in the College



# International engineering qualification

- All of our undergraduate degrees are accredited by IPENZ, the Institution of Professional Engineers New Zealand.
- IPENZ is a signatory of the Washington Accord.

# UC Engineering

The College of Engineering is made up of 5 departments and 2 schools

- Chemical and Process Engineering
- Civil and Natural Resources Engineering
- Computer Science and Software Engineering
- Electrical and Computer Engineering
- Mechanical Engineering
- School of Forestry
- School of Mathematics and Statistics





# Bachelor of Engineering with Honours - BE(Hons)

UC Engineering offers nine engineering disciplines



- Civil
- Natural Resources
- Chemical and Process
  - Minor in Bioprocess Engineering
- Forest
- Mechanical
- Mechatronics
- Electrical and Electronic
- Computer
  - Minor in Networking and Communications
- Software

# UC Engineering: Some Points of Demarcation

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# Canterbury Engineering The Future



UC is spending \$142 million on new and modernised engineering buildings  
by 2017

# Canterbury Engineering The Future

- The project leads to state of the art labs and learning spaces
- Facilities are comparable to top engineering schools around the world





# Top facilities for teaching and learning





# Canterbury Engineering The Future

- Rebuilding a city, 20 year city plan - \$60 billion dollar project
- We are supplying engineers in all fields (civil, electrical, mechanical, etc) to help with the rebuild.
- Field site on our doorstep = hands on learning and practical work opportunities



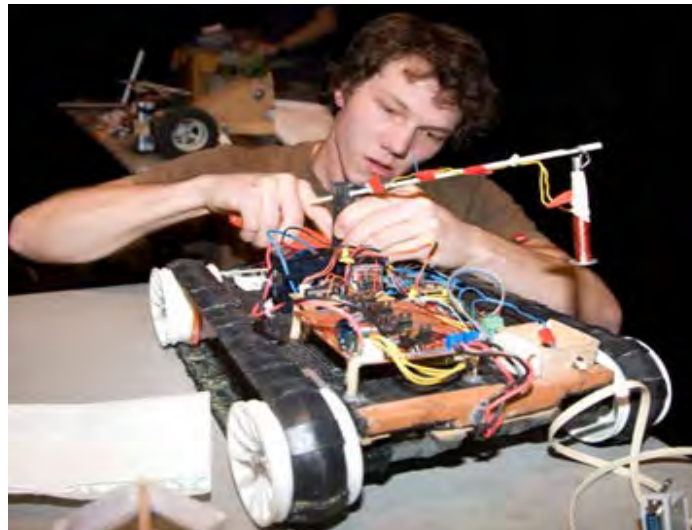
# UC Engineering Labs - Top Facilities



- Augmented Reality Lab
- Wind Tunnel



# UC Engineering Labs - Top Facilities





# UC Engineering Labs - Top Facilities



# Additional Factors

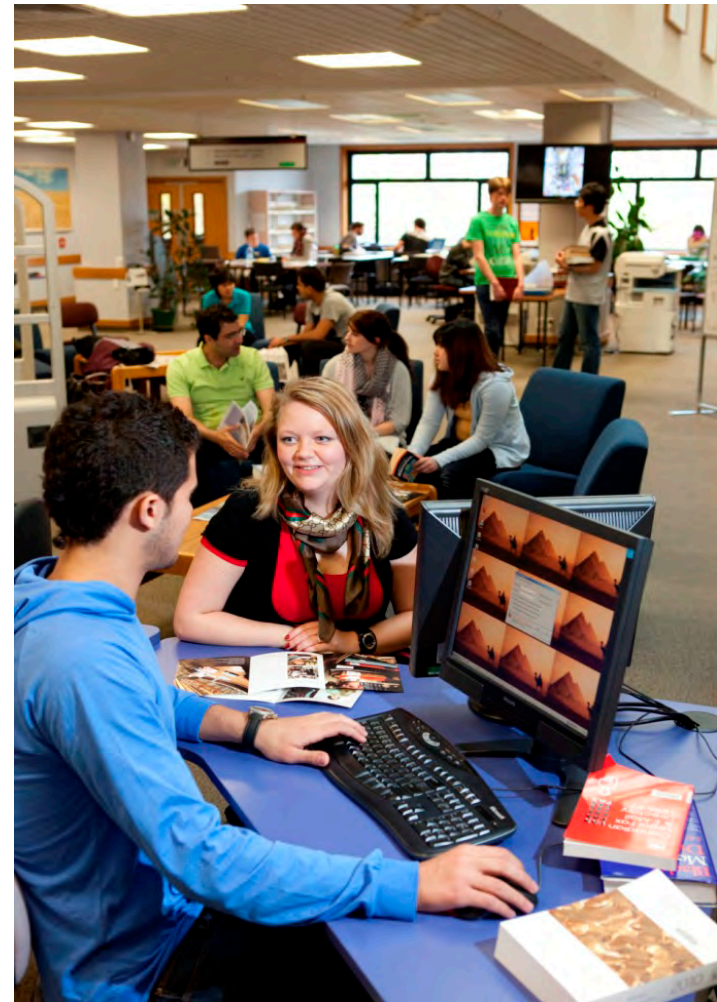
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# Other things to study at Canterbury

- Service Learning - [CHCH101 Rebuilding Christchurch](#)
  - 15 Canterbury credit
  - Projects on recovery and rebuilding of Christchurch after the earthquakes
  - Community engagement
- Biculturalism – Maori



# On-campus Accommodation

- [Study Abroad and Exchange accommodation package](#) at UC Accommodation Student Village  
Availability at UC Accommodation Student Village is guaranteed for Exchange students (students must apply for accommodation online by the deadline and return all subsequent contracts by the required deadlines).
- Accommodation deadlines are:  
Semester 1 (February start) – 1 December  
Semester 2 (July start) – 1 May



# Support & services

- Dedicated student support teams
- Mentoring programme
- International Welcome
- More than 130 clubs and societies to join, including tramping (hiking), snow sports, climbing , biking, etc.
- UC Rec Centre
- Free airport pick-up for exchange students



# Getting around

- Buses run to campus every few minutes from practically anywhere in the city
- Bicycle is the best because it is ..
  - A safe and easy way to get around
  - Environmentally friendly
  - Cheap and convenient
  - Christchurch is a temperate climate
  - Flat terrain
  - Many designated cycle paths and more coming all the time
  - On campus facilities

# UC Engineering Questions?

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