Redesigned Science Degrees

Comprehensive redesign of our science degrees to:

• Simplify decision making for prospective students.
• Give students more choice and flexibility.
• Enable graduates to promote themselves with unique and tailored qualifications.
• Ensure graduates have the skills that employers are looking for.
Key Updates

• Introduction of minors.

• Updated subject offerings.

• BSc(Tech) moves from 4 years to 3 years.

• New final year paper to bridge into a student’s next step.

• Build highly tailored and relevant degrees for individual interests and ambitions.
## Building a Degree – Step 1.

Choose your qualification:

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<tr>
<th>BSc</th>
<th>Major</th>
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Where the world is going
waikato.ac.nz

THE UNIVERSITY OF WAIKATO
To Where Things Grow

4
# Building a Degree – Step 2.

Choose your major:

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<td>Data Analytics*</td>
<td>Earth Sciences</td>
<td>Ecology and Biodiversity</td>
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<tr>
<td>Computer Science</td>
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<tr>
<td>Mathematics*</td>
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<td>Molecular and Cellular Biology</td>
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*BSc only
Building a Degree – Step 3.

Add a minor:

Animal Behaviour | Applied Computing | **Applied Physics** | Biochemistry | Chemistry | **Coastal Processes** | Computer Science | Ecology and Biodiversity | Environmental Sciences | **Geology** | Hydrology | Material Science | Mathematics | Molecular and Cellular Biology | Statistics | **Soil Science**

Or

Any other subject across the University.
Building a Degree – Step 4.

• Prepare for your next step

- **Project Based Route**
  Prepare for management careers in the science field. Teamwork, communication and critical thought skills.

- **Research Route**
  Skills for successful postgraduate study and research-oriented careers.

- **Entrepreneurial Route**
  Courses where mentors will help develop ideas and teach how to assess commercial viability.

- **Placement**
  10 weeks of work experience in a business relevant to major. Facilitated with the help of the co-operative education office.
Building a Degree – Step 5.

• Round out your degree with electives
  
  • Range of science papers in first year.

  • All students will require some level of numeracy – however this can take many forms.

  • Double majors can still easily be accommodated instead of a minor.
Your student is torn between science and maths, tempted by computer science, and they want to save the world....

- Molecular and Cellular Biology major
- Statistics minor.
- Computer Science & Mathematics electives.
- Research based step.

= Bioinformatician
Example

Your student is passionate about the environment and the health of Waikato rivers who wants to make a difference….

- Environmental Sciences major.
- Hydrology minor.
- Ecology and Biodiversity, Environmental Planning/ policy electives.
- Project step.

= Environmental Scientist for Waikato Regional Council
Your student is a rural lad who loves the farm, science and problem solving….

- *Computer Science major.*
- *Soil Science minor.*
- *Entrepreneurship step.*
- *Chemistry & Electronics electives*

= Mobile app developer
Admission / Prerequisites

BSc / BSc(Tech) → University Entrance

Chemistry → 16 credits of level 3 Chemistry

Mathematics → 16 credits of level 3 Calculus

Applied Physics → 16 credits of level 3 Calculus
A refined BE(Hons)

• Philosophy of problem based learning.

• Industry relevance - creativity, smart ideas and solving real world problems.

• Even more commonality in first year to allow change.

• Clear themes to consistently build on knowledge.
A refined BE(Hons)

- Chemical and Biological
- Civil
- Electronic
- Environmental
- Materials and Process
- Mechanical
- Software
Admission / Prerequisites

16 credits in NCEA Level 3 Calculus

14 credits in NCEA Level 3 Physics

16 credits in NCEA Level 3 Chemistry

Software

Mechanical

Civil

Electronic

Chemical and Biological

Materials and Process

Environmental
Admission / Prerequisites

However if short on these requirements there are multiple pathway options.

Maths, Mechanics and Chemistry prep papers

BSc

Students should still apply and seek advice from the Faculty.
Find out more

• Visit the Faculty of Science and Engineering to meet with the academic staff who designed our new programs.

• Ask for someone to come and visit your school to talk about our new programs.

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Questions?

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