Bachelor of Engineering (Honours) (Environmental)

GEOTECHNICAL ENGINEERING MINOR

Commenced in 2015 and 2016 **Studying at Callaghan**

See the last page for some helpful hints & tips!

This Program Plan is an enrolment guide to ensure you are on track to graduate. The courses in coloured boxes have changed for your program. Further details on the teach-out arrangements can be found in your Program Handbook. If at any time you wish to vary from this program plan seek prior advice from your Academic Program Advisor to ensure you remain on track.

	Semester 1				Semester 2			
Year 1	CHEM1010 * Introductory Chemistry I	ENGG1500 Introduction to Professional Engineering Replaces GENG1803	SURV1200 Introduction to Surveying Replaces SURV1110	MATH1110 Mathematics for Engineering, Science and Technology 1 ***Replaces** option of MATH1110 **OR** MATH1210*	CHEM1020 * Introductory Chemistry II	CIVL1100 Fundamentals of Engineering Mechanics Replaces GENG1001	ENGG1003 Introduction to Procedural Programming *Replaces* GENG1002 pre-2017, ENGG1002 pre-2021 *In 2021 changed from Sem 2 to Sem 1*	MATH1120 Mathematics for Engineering, Science and Technology 2 ***Replaces** option of MATH1210 **OR** MATH1220*
Year 2	CHEM2110 Applied Analytical Chemistry **Replaces CHEM2610**	CIVL2050 Engineering Computations and Probability	MATH2310 Calculus of Science and Engineering	ELECTIVE	ENGG2300 Engineering Fluid Mechanics **Replaces CIVL2310**	CIVL2280 Geomechanics 1	SURV3650 GIS and Remote Sensing Replaces SURV2650	BIOL1002 Organisms to Ecosystems
Year 3	ENVS2002 Environmental Legislation & Planning	CHEE3690 Environ. Process Technology	CIVL3330 Hydrology **Replaces CIVL4330**	CIVL3280 Geomechanics 2	CIVL3410 Hydrobiological Modelling	CIVL3431 Land Surface Process and Management	CIVL3470 Contaminant Hydrogeology	CIVL4450 Water Engineering
Year 4	ENGG3500 Managing Engineering Projects **Replaces GENG3830**	CIVL4591 Environmental Engineering Project 1	CIVL4201 Geotechnical and Geoenvironmental Engineering	ELECTIVE	CIVL4601 Environmental Engineering Project 2	CIVL4660 # Project S2	CIVL3840 Advanced Analysis for Design **Replaces CIVL4830**	ENGG4500 Engineering Complexity **Replaces PHIL3910**

Program Plan Key: = Core = Minor = Elective = Changes from 2017 onwards = Changes from 2019 onwards

To be eligible to graduate make sure you have completed 320 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- ✓ Core courses – 250 units.

  Prior to 2021, students could choose to complete either MATH1110 and MATH1120, *OR* MATH1210 and MATH1220. Choice of maths courses is based on your assumed knowledge. To find out which MATH course you should enrol in please see the Enrolling in Maths information. More information is in your Program Handbook.

  After 2021, the option to do MATH1210 and MATH1220 has been removed from the program. *From 2021 onwards*: 1) if you have not yet completed MATH1210 you must complete MATH1110; and 2) if you haven't completed MATH1220 then you must complete MATH1120.

  * CHEM courses – 20 units. Select both CHEM1010 and CHEM1020 (Callaghan) OR CHEM1110 and CHEM1120 (Ourimbah).

  # Students may choose to complete either CIVL4640 Project S1 (Semester 1) or CIVL4660 Project S2 (Semester 2), whichever best fits their program. Course content and assessment are identical.

- ✓ Minor – 50 units (10 units in Year 2, 10 in Year 3 and 30 units in Year 4).
- ✓ Electives – 20 units. Visit the Course Handbook to see a list of available Electives.
- ✓ *Refer to the transition document in the* Program Handbook *for further information*
- ✓ It is also a requirement that students complete a total of 12 weeks of industrial experience.
- ✓ The duration of this program is 4 years full time (40 units per semester) or part time equivalent.
- ✓ The maximum time to complete this program is 10 years.

Some courses have assumed knowledge and/or requisites, please refer to the individual Course Handbook.

The Program Handbook has valuable information on program structure and requirements, if you are intending on studying part time or varying from this program plan please seek prior advice from your Academic Program Advisor.