

# PROGRAM PLAN

## BACHELOR OF CIVIL ENGINEERING (HONOURS)/ BACHELOR OF SURVEYING (HONOURS)

**PROGRAM OPTION:**  
Full time or Part time

**START DATE:**  
Semester 1, 2021

**LOCATION:**  
Callaghan

This Program Plan is an enrolment guide to ensure you are on track to graduate. If at any time you wish to vary from this program plan seek advice from your Academic Program Advisor to ensure you remain on track.

 [PROGRAM HANDBOOK](#)  
 [COURSE HANDBOOK](#)

**NAME:**

**STUDENT NO.:**

### COURSE STATUS KEY

**C** = Completed

**En** = Enrolled

**NS** = Not Started

YEAR 1	SEMESTER 1	<b>ENGG1003</b> Introduction to Procedural Programming <b>CORE</b>	<b>ENGG1500</b> Introduction to Professional Engineering <b>CORE</b>	<b>MATH1110</b> Mathematics for Engineering, Science and Technology 1 <b>CORE</b>	<b>SURV1200</b> Introduction to Surveying <b>CORE</b>
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SEMESTER 2	<b>CIVL1100</b> Fundamentals of Engineering Mechanics <b>CORE</b>	<b>CIVL1200</b> Earth Systems <b>CORE</b>	<b>MATH1120</b> Mathematics for Engineering, Science and Technology 2 <b>CORE</b>	<b>PHYS1205*</b> Fundamentals of Engineering Physics <b>CORE</b>
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YEAR 2	SEMESTER 1	<b>CIVL2060</b> Numerical Methods <b>CORE</b>	<b>ENGG2100</b> Engineering Risk and Uncertainty <b>CORE</b>	<b>LEGL2009</b> Survey and Engineering Law <b>CORE</b>	<b>SURV2210</b> Engineering Surveying <b>CORE</b>
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SEMESTER 2	<b>CIVL2240</b> Civil Engineering Materials <b>CORE</b>	<b>ENGG2300</b> Engineering Fluid Mechanics <b>CORE</b>	<b>SURV2220</b> Surveying Methods and Equipment <b>CORE</b>	<b>SURV2230</b> Surveying Techniques and Computations <b>CORE</b>
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YEAR 3	SEMESTER 1	<b>CIVL2130</b> Theory of Structures 1 <b>CORE</b>	<b>CIVL2720</b> Transportation Engineering and Design <b>CORE</b>	<b>SURV3350</b> Analysis of Observations <b>CORE</b>	<b>SURV3510</b> Geodesy 1 <b>CORE</b>
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SEMESTER 2	<b>CIVL2282</b> Introduction to Geomechanics <b>CORE</b>	<b>ENGG2500</b> Sustainable Engineering Practice <b>CORE</b>	<b>SURV3610</b> Photogrammetry <b>CORE</b>	<b>SURV3650</b> GIS and Remote Sensing <b>CORE</b>
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YEAR 4	SEMESTER 1	<b>CIVL3170</b> Steel Design <b>CORE</b>	<b>CIVL3180</b> Theory of Structures 2 <b>CORE</b>	<b>CIVL3280</b> Geomechanics 2 <b>CORE</b>	<b>CIVL3330</b> Hydrology <b>CORE</b>
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SEMESTER 2	<b>CIVL3160</b> Reinforced Concrete Design <b>CORE</b>	<b>CIVL3840</b> Advanced Analysis for Design <b>CORE</b>	<b>CIVL4450</b> Water Engineering <b>CORE</b>	<b>SURV3930</b> Land Boundary Definition <b>CORE</b>
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YEAR 5	SEMESTER 1	<b>CIVL4201</b> Geotechnical and Geoenvironmental Engineering <b>CORE</b>	<b>SURV4110</b> Industrial Surveying <b>CORE</b>	<b>SURV4410</b> Astronomy and Satellite Positioning <b>CORE</b>	<b>ENGG3500</b> Managing Engineering Projects <b>CORE</b>
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SEMESTER 2	<b>Civil Engineering Design#</b> <b>CORE</b>	<b>Civil Engineering Design#</b> <b>CORE</b>	<b>CIVL4660<sup>A</sup></b> Project 2 <b>CORE</b>	<b>SURV4730</b> Town Planning <b>CORE</b>
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COMPULSORY PROFESSIONAL PRACTICE: INDUSTRIAL EXPERIENCE 12 WEEKS

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# BACHELOR OF CIVIL ENGINEERING (HONOURS)/ BACHELOR OF SURVEYING (HONOURS)

To be eligible to graduate make sure you have completed 400 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- Core courses – 370 units

Enrolment in MATH courses is based on your assumed knowledge. To find out which MATH courses you should enrol in please see the [Enrolling in Maths information](#). More information in your [Program Handbook](#).

\* PHYS courses. Students may count PHYS1210 Advanced Physics 1 in lieu of PHYS1205 with Program Convenor approval.

^ Project Core Course – 10 units. Students may choose either CIVL4640 Project S1 **OR** CIVL4660 Project S2, whichever best fits their program. Course content and assessment are identical.

# Civil Engineering Design Core Course – 20 units. More information in your [Program Handbook](#).

- Students must not exceed 120 units at 1000 level in this program.
- It is also a requirement that students complete a total of 12 weeks of [industrial experience](#).
- The duration of this program is 5 years full time (40 units per semester) or part time equivalent.
- The maximum time to complete this program is 12 years.



Some courses have assumed knowledge and/or requisites, please refer to the individual [Course Handbook](#). Please refer to the [Program Handbook](#) for specific information on program structure. If you are intending varying from this program plan please seek advice from your [Academic Program Advisor](#).

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### CIVIL ENGINEERING DESIGN CORE COURSES

Complete 20 units from the following Civil Engineering Design Core Courses:

**CIVL4521** Structural Engineering Project

**CIVL4541** Water Engineering Project

**CIVL4571** Geotechnical Engineering Project