

# **Bachelor of Engineering (Honours)**

# Specialisation in Civil Engineering

# **ENTRY REQUIREMENTS**

**Assumed Knowledge** 

HSC Mathematics Advanced (Band 4) or equivalent. If you don't have the assumed knowledge, you're advised to undertake a bridging course in mathematics.

**Recommended Studies** 

HSC Mathematics Extension 1 or HSC Mathematics Extension 2 plus HSC Physics, or equivalent. HSC Software Design and Development or equivalent.

## **COURSE STRUCTURE**

Bachelor of Engineering= 280 credit points	
Core Zone	70 credit points
Specialisation in Civil Engineering	210 credit points
Qualification = 280 credit points	

#### **CORE ZONE**

Essential units - 60 credit points	
ENGG1000 Introduction to Engineering	10
ENGG1050 Engineering Design	10
ENGG2000 Engineering Practice	10
ENGG2050 Engineering Systems and Design Thinking	10
ENGG3000 Engineering Project Practice	10
ENGG3050 Engineering Leadership and Entrepreneurship 10	
ENGG4099 PACE: Industry Experience	10
Capstone unit - 10 credit points	
Complete the capstone unit below.	
ENGG4001 Professional Practice	10

# **FLEXIBLE ZONE**

# Flexible Zone = 80 credit points

This zone allows you to either gain more depth in your chosen area of study or learn about other areas that interest you. You can use your flexible zone to enrol in any Undergraduate unit for which you meet the requisites. You may also use your flexible zone to complete a minor.

## **SPECIALISATION**

Civil Speciali	sation = 210 credit points
Complete the	e following units.
CIVL1001	Introduction to Civil Engineering
MATH1010	Calculus and Linear Algebra I
MATH1020	Calculus and Linear Algebra II
COMP1000	Introduction to Computer Programming
PHYS1510	Engineering Physics
CIVL2101	Water and Wastewater Engineering
CIVL2201	Soil Mechanics
CIVL2205	Geotechnical Engineering
CIVL2301	Structural Analysis
MATH2055	Engineering Mathematics II
MECH2002	Fluid Mechanics
CIVL3101	Hydraulics and Hydrology
CIVL3201	Transport Engineering
CIVL3301	Design of Concrete Structures
CIVL3305	Design of Steel & Timber Structures
CIVL3401	Construction Management
CIVL4090	Civil Engineering Research Thesis A
CIVL4091	Civil Engineering Research Thesis B
CIVL4201	Geotechnical and Transportation Project
CIVL4301	Integrated Structural Design and Construction
CIVL4401	Health and Safety in Construction