

# PROGRAM PLAN

## BACHELOR OF CHEMICAL ENGINEERING (HONOURS)/BACHELOR OF BUSINESS

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

**START DATE:**  
Semester 1 2017 - 2020

**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>CHEM1010</b> Introductory Chemistry I <b>CORE</b>	<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> <i>Replaces option of MATH1110 OR MATH1210</i>	SEMESTER 2	<b>CHEE1000</b> Process Engineering Principles <b>CORE</b>	<b>CHEM1020</b> Introductory Chemistry II <b>CORE</b>	<b>MATH1120</b> Mathematics for Engineering, Science and Technology 2 <b>CORE</b> <i>Replaces option of MATH1120 OR MATH1220</i>	<b>PHYS1210*</b> Advanced Physics I <b>CORE</b>
	SEMESTER 1	<b>CHEE2325</b> Thermodynamics of Chemical Processes <b>CORE</b>	<b>CHEE2695</b> Energy Transfer and Technologies <b>CORE</b> <i>In 2021 changed from Sem 2 to Sem 1</i>	<b>CHEE2945</b> Particle and Resources Engineering <b>CORE</b>	<b>MATH2310</b> Calculus of Science and Engineering <b>CORE</b>	SEMESTER 2	<b>ENGG2300</b> Engineering Fluid Mechanics <b>CORE</b> <i>Replaces CHEE2315</i>	<b>ENGG2500</b> Sustainable Engineering Practice <b>CORE</b> <i>In 2021 changed from Sem 1 to Sem 2</i>	<b>CHEE2825</b> Chemical & Renewables Engineering Laboratory <b>CORE</b>	<b>CHEE2935</b> Resource and Energy Optimisation
YEAR 3	SEMESTER 1	<b>CHEE3325</b> Chemical Reactor Design <b>CORE</b>	<b>CHEE3425</b> Chemical Process Safety <b>CORE</b>	<b>CHEE3735</b> Mass Transfer Processes <b>CORE</b>	<b>ENGG3500</b> Managing Engineering Projects <b>CORE</b>	SEMESTER 2	<b>ACF11001 ^</b> Accounting for Decision Makers <b>CORE</b>	<b>ECON1001 ^</b> Microeconomics for Business Development <b>CORE</b>	<b>CHEE3745</b> Process Modelling and Separation Processes <b>CORE</b>	<b>CHEE3825</b> Chemical Engineering Laboratory 2 <b>CORE</b>
	SEMESTER 1	<b>MAJOR ^</b>	<b>MAJOR ^</b>	<b>MKTG1001 ^</b> Foundations of Marketing <b>CORE</b>	<b>MNGT1001 ^</b> Introduction to Management <b>CORE</b>	SEMESTER 2	<b>ACFI1003 ^</b> Introduction to Finance <b>CORE</b>	<b>LEGL1001 ^</b> Foundations of Law <b>CORE</b>	<b>MAJOR ^</b>	<b>MAJOR ^</b>
YEAR 5	SEMESTER 1	<b>MAJOR ^</b>	<b>CHEE4475</b> Dynamic Process Simulations and Control <b>CORE</b>	<b>CHEE4945A</b> Design Project A <b>CORE</b>	<b>CHEE4975A</b> Chemical Engineering Research A <b>CORE</b>	SEMESTER 2	<b>CHEE4945B</b> Design Project B <b>CORE</b> <i>This must be completed in the semester immediately following CHEE4945A</i>	<b>CHEE4975B</b> Chemical Engineering Research B <b>CORE</b> <i>This must be completed in the semester immediately following CHEE4975A</i>	<b>ENGG4500</b> Engineering Complexity <b>CORE</b>	<b>MAJOR ^</b>

COMPULSORY PROFESSIONAL PRACTICE: INDUSTRIAL EXPERIENCE 12 WEEKS

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To be eligible to graduate make sure you have completed 410 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- Core courses – 340 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. To find out which MATH course you should enrol in please see the [Enrolling in Maths information](#). More information is in your [Program Handbook](#).
  - \* PHYS courses. Students may count PHYS1205 in lieu of PHYS1210 with Program Convenor approval.
  - ^ Please note you can choose to study these core and major Bachelor of Business courses in a different order than is listed here, depending on your preferences and the availability/timetable.
- Major – 70 units  
If you are undertaking the Leadership and Management major, you will complete the following:
  - 30 units of major compulsory courses; please see [Program Handbook](#) for compulsory course list
  - 40 units of directed courses (10 units at a 1000 level, 10 units at a 2000 level and 20 units at a 3000 level).If you are undertaking the Entrepreneurship and Innovation major, you will complete the following:
  - 40 units of major compulsory courses; please see [Program Handbook](#) for compulsory course list
  - 30 units of directed courses (10 units at a 2000 level and 20 units at a 3000 level).
- It is also a requirement that students complete a total of 12 weeks of [industrial experience](#).
- The duration of this program is 5 year full-time (40/50 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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### LEADERSHIP AND MANAGEMENT MAJOR

#### COMPULSORY COURSES

Complete 30 units from:

- MNGT2005** Leadership and Ethics
- MNGT3011** Leading Organisational Change
- MNGT3012** Strategic Business Management

#### DIRECTED COURSES

Complete 10 units from the following 1000 level Business directed courses:

*Note: MNGT1002 is Recommended*

- IBUS1000** Managing International Business Risk
- IRHR1002** Dynamics of People and Work in Organisations
- LEIS1000** Leisure Behaviour and Organisation
- MNGT1002** Introduction to Entrepreneurship and Innovation
- POLI1010** Australian Politics and Government

#### DIRECTED COURSES

Complete 10 units from the following 2000 level Business directed courses:

- MNGT2002** Business Venturing
- MNGT2006** Decision Making Under Uncertainty

#### DIRECTED COURSES

Complete 20 units from the following 3000 level Business directed courses:

- BUSN3001** Project in Business
- BUSN3002** Industry Placement
- MNGT3002** Knowledge Management
- MNGT3008** Advanced Innovation Management
- MNGT3009** Business Development and Growth

### ENTREPRENEURSHIP AND INNOVATION MAJOR

#### COMPULSORY COURSES

Complete 40 units from:

- MNGT1002** Introduction to Entrepreneurship and Innovation
- MNGT2002** Business Venturing
- MNGT2007** Ideation in Enterprise
- MNGT3016** Innovation and Entrepreneurial Strategy

#### DIRECTED COURSES

Complete 10 units from the following 2000 level Business directed courses:

- MNGT2004** Managing Innovations
- MNGT2006** Decision Making Under Uncertainty

#### DIRECTED COURSES

Complete 20 units from the following 3000 level Business directed courses:

- BUSN3002** Industry Placement
- MNGT3002** Knowledge Management
- MNGT3007** Social Entrepreneurship
- MNGT3008** Advanced Innovation Management
- MNGT3009** Business Development and Growth