

PROGRAM PLAN

BACHELOR OF COMPUTER SYSTEMS ENGINEERING (HONOURS) / BACHELOR OF SCIENCE

PROGRAM OPTION:
Commencing in Semester 2

START DATE:
2019 to 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.:

YEAR	SEMESTER	COURSE	DESCRIPTION	STATUS
YEAR 1	SEMESTER 1	ELEC1710	Digital and Computer Electronics 1	CORE
	SEMESTER 2	ELEC1310	Introduction to Electrical Engineering	CORE
YEAR 2	SEMESTER 1	ENGG1500	Introduction to Professional Engineering	CORE
	SEMESTER 2	ELEC2430	Circuits and Signals	CORE
YEAR 3	SEMESTER 1	ENGG1003	Introduction to Procedural Programming	CORE
	SEMESTER 2	ENGG2500	Sustainable Engineering Practice <i>In 2021 changed from Sem 1 to Sem 2</i>	CORE
YEAR 4	SEMESTER 1	MATH1120	Maths for Engineering, Science & Technology 2 <i>(Replaces option of MATH1120 OR MATH1220)</i>	CORE
	SEMESTER 2	SENG2250	System and Network Security	CORE
YEAR 5	SEMESTER 1	SENG1110	Object Oriented Programming	CORE
	SEMESTER 2	ELEC3240	Analog Electronics	CORE
YEAR 6	SEMESTER 1	ELEC3730	Digital and Computer Electronics 2	CORE
	SEMESTER 2	ELEC4840A	Final Year Engineering Project Part A	CORE
YEAR 6	SEMESTER 1	ENGG3500	Managing Engineering Projects	CORE
	SEMESTER 1	PHYS1210	Advanced Physics I	CORE
YEAR 6	SEMESTER 1	COMP3500	Security Attacks: Analysis and Mitigation Strategies <i>(will count in place of SENG2050)</i>	CORE
	SEMESTER 1	PHYS1220	Advanced Physics II	CORE
YEAR 6	SEMESTER 1	DIRECTED	Computer Systems	DIRECTED
	SEMESTER 1	PHYS2112	Classical Physics 2	COMPULSORY
YEAR 6	SEMESTER 1	PHYS2211	Modern Physics 1	COMPULSORY
	SEMESTER 1	PHYS3112	Photonics	COMPULSORY
YEAR 6	SEMESTER 1	PHYS3111	Biophysics	COMPULSORY
	SEMESTER 1	PHYS3211	Quantum Information Science	COMPULSORY

COMPULSORY PROFESSIONAL PRACTICE: INDUSTRIAL EXPERIENCE 12 WEEKS

PROGRAM PLAN

BACHELOR OF COMPUTER SYSTEMS ENGINEERING (HONOURS) / BACHELOR OF SCIENCE

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 and Compulsory courses – 370 units
- Directed courses – 30 units including 20 units of Computer Systems Engineering courses and 10 units of MATH courses.
- Math courses - 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](#).

Prior to 2021, students could choose to complete either MATH1110 and MATH1120, **OR** MATH1210 and MATH1220.

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.

- 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](#).

PROGRAM PLAN

BACHELOR OF COMPUTER SYSTEMS ENGINEERING (HONOURS) / BACHELOR OF SCIENCE

Computer Systems Engineering Directed Courses

Subject to change - Please refer to the program handbook for up to date information.

Choose **20 units** of Computer
Systems Engineering Directed
Courses

ELEC4740 Internet of Things (*replaced ELEC4700*)

ELEC3400 Signal Processing

ELEC4210 Electronics Design

COMP3260 Data Security

COMP3330 Machine Intelligence

COMP3340 Data Intelligence

COMP3600 Security Standards and Practices in Industry

SENG2200 Programming Languages and Paradigms

Removed from the program in 2021

If you have not already completed this course prior to 2021, then you will complete a different course from the above Directed course list:

ELEC4550 Wireless Communication

If you have completed ELEC3850, this will count as 10 units of directed courses