Bachelor of Engineering (Honours) (Electrical)
Program Code: 12295
CRICOS Code: 018787A
Callaghan Campus

Teach-out Arrangements for pre-2017 program – replacement courses for students remaining in their existing program

Teach-out Arrangements for pre-2017 program

Last Updated April 2022

The following description outlines the approved teach-out arrangements for students who commenced Engineering prior to 2017. Please note that students who commenced prior to 2017 will not transition to the new program. If you need further advice then please contact your Program Advisor on programadvice@newcastle.edu.au.

Pre-2017 Course Code and Title (Not yet completed)	**New Course Code and Title** (Course to be completed from 2022)	
'Completed' means successfully passed a course or received approved credit for a course		
CORE COURSES		
Mathematics Core Option **Option 1** MATH1110 Mathematics for Engineering, Science and Technology 1 **AND** MATH1120 Mathematics for Engineering, Science and Technology 2 **OR** **Option 2** MATH1210 Mathematical Discovery 1 **AND** MATH1220 Mathematical Discovery 2	**MATH1110 Mathematics for Engineering, Science and Technology 1** **AND** **MATH1120 Mathematics for Engineering, Science and Technology 2** ***Please note:*** ***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.*	
GENG1803 Introduction to Engineering Practice	**ENGG1500 Introduction to Professional Engineering**	
ELEC1700 Computer Engineering 1*	**ELEC1710 Digital and Computer Electronics 1***	
GENG1003 Introduction to Procedural Programming	**ENGG1003 Introduction to Procedural Programming**	
ELEC1300 Electrical Engineering 1	**ELEC1310 Introduction to Electrical Engineering**	
ELEC2700 Computer Engineering II	In 2018: ELEC3730 Digital and Computer Electronics 2 replaced ELEC2700.	**From 2019/2020/2021 onwards:** **ELEC2720 Introduction to Embedded Computing**

		**Please note: If you have completed ELEC2700 you cannot complete this course.
ELEC2400 Signals & Systems	**ELEC2430 Circuits & Signals**	
MATH2420 Engineering Mathematics	**STAT2110 Engineering Statistics**	
ELEC4400 Automatic Control	**ENGG2440 Modelling and Control**	
GENG3830 Engineering Project Management	**ENGG3500 Managing Engineering Projects**	
PHIL3910 Ethics, Technology and Engineering	**ENGG4500 Engineering Complexity**	
PHYS2170 Quantum Mechanics and Semiconductor Physics	**PHYS2211 Modern Physics 1**	
ELEC3850 Electrical Engineering Design and Practice	***Select 10 units of directed course Electrical Engineering Directed A or B list.**	

***ELEC1710 Digital and Computer Electronics 1**

To comply with the pre-2017 program structure, students who have not yet completed ELEC1700 and/or ELEC2700 should refer to the table below when enrolling in their courses.

****ELEC3730 Digital and Computer Electronics 2**

ELEC2720 Introduction to Embedded Computing is a new course. In the pre-2017 Bachelor of Engineering (Honours) (Electrical) [12295] program students were previously required to complete ELEC1700 and ELEC2700. In 2018 an arrangement was approved to allow students to take ELEC3730 in place of ELEC2700. From 2019 onwards if a student has not yet completed ELEC1700 and ELEC2700 they will be required to complete ELEC1710 and ELEC2720.

If a student has already completed either ELEC2700 or ELEC3730, then they do not need to complete the new course ELEC2720.

Has not yet completed	But passed	Must complete
ELEC1700 Computer Engineering 1 & ELEC2700 Computer Engineering II	-	**ELEC1710 Digital and Computer Electronics 1** **ELEC2720 Introduction to Embedded Computing**
ELEC2700 Computer Engineering II	ELEC1700 Computer Engineering 1	**ELEC2720 Introduction to Embedded Computing**
ELEC1700 Computer Engineering 1	ELEC2700 Computer Engineering II	**ELEC1710 Digital and Computer Electronics 1**

***ELEC3850 Electrical Engineering Design and Practice**

From 2021 onwards ELEC3850 Electrical Engineering Design and Practice has been removed on the

program and replaced by 10-units of Electrical and Electronic Engineering Directed courses. For students who have already completed ELEC3850, it will still count towards your program and you will not be required to complete and additional 10-units of Electrical and Electronic Engineering Directed courses.

Electrical Engineering Directed Courses – 70 units	
Directed Courses A – 30 units	
ELEC3160 Principles and Design of Off-Grid Power Systems	ELEC3160 Principles and Design of Off-Grid Power Systems
ELEC3251 Power Electronics and Renewable Energy Systems	ELEC3251 Power Electronics and Renewable Energy Systems
ELEC3400 Signal Processing	ELEC3400 Signal Processing
ELEC3540 Analog and Digital Communication	ELEC3540 Analog and Digital Communication
ELEC4550 Wireless Communication *(previously ELEC3550 Wireless Communication)*	**If you have not yet done this course, then choose another Directed course from the list.**
ELEC3720 Programmable Logic Design	**ELEC4720 Programmable Logic Design**
ELEC3730 Digital and Computer Electronics 2	ELEC3730 Digital and Computer Electronics 2
Directed Courses B – 20 units. Choose an additional 10 units from Directed A or Directed B courses	
ELEC3500 Telecommunication Networks	ELEC3500 Telecommunication Networks
PHYS3360 Advanced Electromagnetism	**If you have not yet done this course, then choose another Directed course from the list.**
ELEC4100 Electrical Systems	ELEC4100 Electrical Systems
ELEC4210 Electronics Design	**MENG4210 Medical and Industrial Electronic Product Design**
ENGG3440 Linear Control and Estimation *(previously ELEC4410 Advanced Control System Design)*	**ELEC3410 Control System Design**
ELEC4700 Advanced Computer Systems	**ELEC4740 Internet of Things**
ELEC4160 Advanced Drives and Power Electronics	ELEC4160 Advanced Drives and Power Electronics
ELEC4570 Advanced Digital Communications	**If you have not yet done this course, then choose another Directed course from the list.**
ENGG4440 Nonlinear Control and Estimation	ENGG4440 Nonlinear Control and Estimation