BACHELOR OF MECHATRONICS ENGINEERING (HONOURS)/BACHELOR OF BUSINESS Program Code: 40074 CRICOS Code: 093509A

Teach-out Arrangements

Last Updated October 2020



The following description outlines the approved teach-out arrangements for students who commenced in the Bachelor of Mechatronics Engineering (Honours)/Bachelor of Business program prior to 2021. If you need further advice, then please contact your Academic Program Advisor on programadvice@newcastle.edu.au.

Course Code and Title	New Course Code and Title
(Not yet completed)	(Course to be completed from 2021 onwards as offered)
'Completed' means successfully passed a co	urse or received approved credit for a course
CORE COURSES	
Mathematics Core Option	MATH1110 Mathematics for Engineering, Science
Option 1	and Technology 1
MATH1110 Mathematics for Engineering, Science and Technology 1 AND	AND
MATH1120 Mathematics for Engineering, Science	MATH1120 Mathematics for Engineering. Science
and Technology 2	and Technology 2
OR	
	Please note:
Option 2	MATH1220 has been removed from the program.
MATH1210 Mathematical Discovery 1 AND	From 2021 onwards:
MATH1220 Mathematical Discovery 2	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.
*PHYS1210 Advanced Physics 1	If you have not completed PHYS1210 (or PHYS1205)
	prior to 2021, then you will complete:
(Or with Program Convenor approval, PHYS1205	
Fundamentals of Engineering Physics)	MECH1750 Engineering Materials 1*
	(MECH1750 will count in place of PHYS1210)
MECH2710 Fluid Mechanics 1	ENGG2300 Engineering Fluid Mechanics
	If you have not completed MECH3695 prior to 2021,
MECH260E Host Transfor	then you will complete:
MECH3095 Heat Iransfer	ENGG2100 Engineering Risk and Uncertainty**

	(ENGG2100 will count in place of MECH3695)
ELEC3730 Digital and Computer Electronics 2	MCHA3400 Embedded Systems Engineering
	(Added to the program in 2020)
ENGG3440 Linear Control and Estimation	AERO3600 Embedded Control Systems
	(Added to the program in 2020)
MCHA4000 Mechatronics Design 2	MCHA4100 Mechatronics Systems (20 units) ***
	This is not a direct replacement. Please refer to the
	table below for further information.
MECH4841A Mechanical Engineering Project A or	ENGG4801A Engineering Final Year Project A (10
ELEC4840A Final Year Engineering Project Part	units) ***
A (10 units)	This is not a direct replacement. Please refer to the
	table below for further information.
MECH4841B Mechanical Engineering Project B or ELEC4840B Final Year Engineering Project Part B (20 units)	ENGG4801B Engineering Final Year Project B (10 units) ***
	This is not a direct replacement. Please refer to the
	table below for further information.

*PHYS1210 Advanced Physics 1 and MECH1750 Engineering Materials 1

From 2021 onwards PHYS1210 Advanced Physics 1 (10 units) (or with Program Convenor approval, PHYS1205 Fundamentals of Engineering Physics (10 units)) was removed from the program and MECH1750 Engineering Materials 1 (10 units) was added as a new core course. If you completed PHYS1210 prior to 2021, it still counts towards your program. You do not have to complete MECH1750 Engineering Materials 1. Students in this situation who **also** have an available 10-unit Elective course are permitted to choose MECH1750 as one 10-unit Elective course.

If you did not complete PHYS1210 (or PHYS1205) prior to 2021 then you must complete MECH1750.

**MECH3695 Heat Transfer and ENGG2100 Engineering Risk and Uncertainty

From 2021 onwards MECH3695 Heat Transfer (10 units) was removed from the program and ENGG2100 Engineering Risk and Uncertainty (10 units) was added as a new core course. If you completed MECH3695 prior to 2021, it still counts towards your program. You do not have to complete ENGG2100 Engineering Risk and Uncertainty. Students in this situation who **also** have an available 10-unit Elective course are permitted to choose ENGG2100 as one 10-unit Elective course.

If you did not complete MECH3695 prior to 2021 then you must complete ENGG2100.

*** MCHA4000 Mechatronics Design 2, MCHA4100 Mechatronics Systems (20 units) and Final Year Project courses (MECH4841A Mechanical Engineering Project A or ELEC4840A Final Year Engineering Project Part A (10 units) and MECH4841B Mechanical Engineering Project B or ELEC4840B Final Year Engineering Project Part B (20 units))

- From 2021 onwards MCHA4000 Mechatronics Design 2 (10 units) has been removed from the program and MCHA4100 Mechatronics Systems (20 units) has been added as a new core course. To accommodate the additional 10 units in this new core course, the Final Year Project courses have been revised. MECH4841A Mechanical Engineering Project A or ELEC4840A Final Year Engineering Project Part A (10 units) and MECH4841B Mechanical Engineering Project B or ELEC4840B Final Year Engineering Project Part B (20 units) have been removed and ENGG4801A Engineering Final Year Project A (10 units) and ENGG4801B Engineering Final Year Project B (10 units) have been added.
- If you have completed MCHA4000 Mechatronics Design 2, it will still count towards your program. You cannot complete MCHA4100 Mechatronics Systems (20 units).
- If you have completed MCHA4000 Mechatronics Design 2 but have not yet completed the Final Year Project courses MECH4841A/MECH4841B or ELEC4841A/ELEC4841B prior to 2021, then you will still need to complete MECH4841A/MECH4841B (30 units) or ELEC4841A/ELEC4841B (30 units).
- If you have not completed MCHA4000 Mechatronics Design 2 prior to 2021 but have successfully completed the Final Year Project courses MECH4841A/MECH4841B or ELEC4841A/ELEC4841B then please refer to the table below for further advice.

Has not completed	Have already	Must complete 2021 onwards
	Completed	
MCHA4000 Mechatronics Design 2 <u>(10 units)</u> and MECH4841A/ELEC48040A + MECH4841B/ELEC4840B <u>(30</u> <u>units)</u>	-	MCHA4100 Mechatronics Systems (<u>20 units)</u> and ENGG4801A + ENGG4801B (<u>20 units)</u>
MECH4841A Mechanical Engineering Project A or ELEC4840A Final Year Engineering Project Part A (10 units) and MECH4841B Mechanical Engineering Project B or ELEC4840B Final Year Engineering Project Part B (20 units)	MCHA4000 Mechatronics Design 2 (10 units)	MECH4841A Mechanical Engineering Project A or ELEC4840A Final Year Engineering Project Part A <u>(10 units)</u> and MECH4841B Mechanical Engineering Project B or ELEC4840B Final Year Engineering Project Part B <u>(20 units)</u>
MCHA4000 Mechatronics Design 2 (10 units)	MECH4841A Mechanical Engineering Project A or ELEC4840A Final Year Engineering Project Part A (10 units) and MECH4841B Mechanical Engineering Project B or ELEC4840B Final Year Engineering Project Part B (20 units)	MCHA4000 Mechatronics Design 2 (10 units) Please note: This is a special offering of MCHA4000 and enrolment will be restricted. If you have one 10-unit Elective remaining in your program, then you may take MCHA4100 Mechatronics Systems (20 units).

		Students in this situation must contact Program Convenor and your Academic Program Advisor (programadvice@newcastle.edu.au) for further advice.
MECH4841B Mechanical Engineering Project B or ELEC4840B Final Year Engineering Project Part B (20 units)	MCHA4000 Mechatronics Design 2 (10 units) and MECH4841A Mechanical Engineering Project A or ELEC4840A Final Year Engineering Project Part A (10 units)	MECH4841B Mechanical Engineering Project B or ELEC4840B Final Year Engineering Project Part B <u>(20 units)</u>

^ENGG3300 Machine Learning for Engineers and MCHA4400 Vision Based Navigation

From 2021 onwards ENGG3300 Machine Learning for Engineers and MCHA4400 Vision Based Navigation have been added as new core courses to the program. For students commencing in 2021, their elective courses have been reduced by 20 units.

For students who commenced prior to 2021 you are not required to use your elective courses to take these courses. However, should you have remaining elective courses you are permitted **and encouraged** to take ENGG3300 Machine Learning for Engineers and/or MCHA4400 Vision Based Navigation.

Bachelor of Business Transition Arrangements

Leadership and Management Major

Course Code and Title (Not yet completed)	New Course Code and Title (Course to be completed from 2021 onwards as offered)
1000 Level Directed Courses	
ECON1002 Macroeconomics in the Global	Select a different directed course.
Economy	

Entrepreneurship and Innovation Major

Changes implemented from 2020

The Faculty of Business and Law made the following changes to the Bachelor of Business Entrepreneurship and Innovation Major:

- 1. MNGT2003 Entrepreneurial and Innovation Diversity has been **removed** from the Bachelor of Business Entrepreneurship and Innovation Major;
- **2.** MNGT2002 Business Venturing and MNGT2007 Ideation in Enterprise have been **added** to the Entrepreneurship and Innovation Major Core Course list;

- 3. MNGT2006 Decision Making Under Uncertainty has been **added** to the 2000 level Directed course list;
- 4. MNGT3007 Social Entrepreneurship has been **removed** from the Major Core Course and

added to the 3000 level Directed course list;

 MNGT3006 Entrepreneurial Strategy (20 units) has been removed and replaced with MNGT3016 Innovation and Entrepreneurial Strategy (10 units) in the Entrepreneurship and Innovation Major Core Course list.

MNGT2003 Entrepreneurial and Innovation Diversity

- If you <u>completed</u> MNGT2003 in 2019 or earlier there is no change. MNGT2003 will continue to count toward completion of your program.
- If you <u>did not complete</u> MNGT2003 in 2019 or earlier you must complete *MNGT2007 Ideation in Enterprise* instead.

MNGT3006 Entrepreneurial Strategy (20 unit course)

- If you <u>completed</u> MNGT3006 in 2019 or earlier there is no change. MNGT3006 will continue to count toward completion of your program.
- If you <u>did not complete</u> MNGT3006 (20 units) in 2019 or earlier you must complete *MNGT3016 Innovation and Entrepreneurial Strategy* (10 units) and *a 10-unit E&I Major 3000 level Directed course* instead.

Course Code and Title	New Course Code and Title
(Not yet completed)	(Course to be completed from 2021 onwards as offered)

'Completed' means successfully passed a course or received approved credit for a course

Compulsory Courses – 50 units	Compulsory Courses – 40 units
MNGT1002 Introduction to Entrepreneurship and	MNGT1002 Introduction to Entrepreneurship and
Innovation	Innovation
	* MNGT2002 Business Venturing
MNGT2003 Entrepreneurial and Innovation	
Diversity	
	MNGT2007 Ideation in Enterprise
MNGT3006 Entrepreneurial Strategy (20 units)	
MNGT3007 Social Entrepreneurship	
	# MNGT3016 Innovation and Entrepreneurial
	Strategy (10 units)
2000 Level Directed Courses – 10 units	2000 Level Directed Courses – 10 units
MNGT2002 Business Venturing	
	MNGT2006 Decision Making under Uncertainty
MNGT2004 Managing Innovation	MNGT2004 Managing Innovation
3000 Level Directed Courses – 10 units	3000 Level Directed Courses – 20 units
BUSN3002 Industry Placement	BUSN3002 Industry Placement
MNGT3002 Knowledge Management	MNGT3002 Knowledge Management

	MNGT3007 Social Entrepreneurship
MNGT3008 Advanced Innovation Management	MNGT3008 Advanced Innovation Management
MNGT3009 Business Development and Growth	MNGT3009 Business Development and Growth