Bachelor of Mechatronics Engineering (Honours)

Commencing in Semester 1 2017 - 2019 **Studying at 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 prior advice from your Program Advisor to ensure you remain on track.

See the last page for some helpful hints & tips!

THE UNIVERSITY OF NEWCASTLE AUSTRALIA

	Semester 1				Semester 2			
Year 1	ENGG1003 Introduction to Procedural Programming	ENGG1500 Introduction to Professional Engineering	MATH1110* Mathematics for Engineering, Science and Technology 1	PHYS1210 Advanced Physics I *May count PHYS1205 in lieu, with convenor approval*	CIVL1100 Fundamentals of Engineering Mechanics	ELEC1310 Introduction to Electrical Engineering	MATH1120 Mathematics for Engineering, Science and Technology 2	MECH1110 Mechanical Drawing/CAD and Workshop Practice
Year 2	ELEC2320 Electrical and Electronic Circuits	ENGG2500 Sustainable Engineering Practice	MATH2310 Calculus of Science and Engineering	MECH2360 Dynamics of Machines	ELEC1710 Digital and Computer Electronics 1	ELEC2430 Circuits and Signals	ENGG2440 Modelling and Control	MECH2710 Fluid Mechanics 1
Year 3	MECH2110 Mechanical Engineering Design 1	ENGG3440 Linear Control and Estimation	ENGG3500 Managing Engineering Projects	MCHA3400 Embedded Systems Engineering *Replaces ELEC3730*	MCHA3500 Mechatronics Design 1	ENGG4440 Nonlinear Control and Estimation	ELECTIVE PATHWAY	ELECTIVE PATHWAY
Year 4	ELECTIVE PATHWAY	MCHA4000 Mechatronics Design 2	MECH3695 Heat Transfer	MECH4841A Mechanical Engineering Project A	MECH4841B Mechanical Engineering Project B (20 units) *This course **must** be taken in the semester immediately following MECH4841A*		ENGG4500 Engineering Complexity	ELECTIVE PATHWAY *At least 10 units of electives must be at 2000 level or higher*

Professional Practice: Industrial Experience 12 weeks

Program Plan Key: = Core = Elective Pathway = Compulsory Program Requirement

To be eligible to graduate make sure you have completed 320 units (10 units = 1 course unless otherwise specified) which meet the following criteria:

- ✓ Core courses – 280 units.
  - * MATH courses - 20 units. Choice of maths courses is based on your assumed knowledge. To find out which MATH courses you should enrol in please see the Enrolling in Maths information. More information is found in your Program Handbook.
- ✓ Elective pathway – 40 units. Visit the Program Handbook and Course Handbook to see a list of available electives.
- ✓ Please be aware of the 120 unit maximum for 1000 level courses ***when selecting your electives***.
- ✓ It is also a requirement that students complete a total of 12 weeks of industrial experience.
- ✓ The duration of this program is 4 years full time (40 units per semester) or part time equivalent.
- ✓ The maximum time to complete this program is 10 years.

Some courses have assumed knowledge and/or requisites, please refer to the individual Course Handbook.
The Program Handbook has valuable information on program structure and requirements, if you are intending on studying part time or varying from this program plan please seek prior advice from your Program Advisor.