

Course progression map for commencing students

This progression map provides advice on the suitable sequencing of units and guidance on how to plan unit enrolment for each semester of study. It does not substitute for the list of required units as described in the course 'Requirements' section of the [Handbook](#).

E3007 Bachelor of Engineering (Honours) and Bachelor of Science

Specialisation – Aerospace Engineering; Major – Astrophysics

	Bachelor of Aerospace Engineering (Honours)		Bachelor of Science		
YEAR 1 Sem 1	Common First Year		PHS1011 Classical physics and relativity	Science elective	
YEAR 1 Sem 2			PHS1022 Fields and quantum physics	MTH2010 Multivariable calculus	
YEAR 2 Sem 1			ASP2011 Astronomy	SCI1000 Science communication to influence change	If two foundation units are required then overload is required for ENG1013 Engineering smart systems
YEAR 2 Sem 2	ENG2005 Advanced engineering mathematics	MAE2402 Thermodynamics and gas dynamics	ASP2062 Introduction to astrophysics	MTH2032 Differential equations with modelling	
YEAR 3 Sem 1	MEC2403 Mechanics of materials	MEC2402 Design methods	ASP3231 Observational astronomy	Science elective level 2 or 3	
YEAR 3 Sem 2	MAE2404 Aerodynamics 1	MAE2505 Aerospace dynamics	ASP3162 Computational astrophysics and the extreme universe	Science elective level 2 or 3	
YEAR 4 Sem 1	MAE3401 Aerodynamics 2	MAE3404 Flight vehicle dynamics	ASP3051 Relativity and cosmology	Science elective level 2 or 3	
YEAR 4 Sem 2	MAE3411 Aerospace structural mechanics	MAE3405 Aerospace propulsion	PHS2350 Physics and astronomy introductory research project	Science elective level 2 or 3	
YEAR 5 Sem 1	ENG4701 Final year project A	Complete one Professional Practice domain unit	MAE4416 Orbital mechanics and spaceflight dynamics	MAE3456 Aerospace computational mechanics	ENG0001 Continuous Professional Development (0 credit points)
YEAR 5 Sem 2	ENG4702 Final year project B	MAE4410 Flight vehicle design	MAE4426 Finite element analysis and composite structures	MAE3408 Aerospace control	

NOTE: - **MAE2505** - If you have completed MAE2505 as a First Year technical elective, you must replace the core with another unit from the aerospace engineering technical electives list or from one of the [engineering minors](#). The replacement unit must be of the same level as the core unit or higher. · Engineering minors are not available in the Engineering double degree courses. · You are required to complete at least 420 hours of Continuous Professional Development (CPD) in order to graduate. For further information refer to the [CPD webpage](#). · Each unit requires 12 hours of work per week. A full-time study week totals 48 hours. If you are unable to commit 48 hours of study due to external commitments, please speak with a course advisor about options to study less units per semester or take some units in the summer semester. · For enrolment advice, please refer to the [Course advisers webpage](#).