

DOUBLE PROGRAM

B.E.(Aerospace)/B.Sc. Academic Plan 2009

***Please note that this enrolment guide is for students who commenced the B.E.(Aerospace)/B.Sc. program in 2008 onwards. Students commencing pre-2008 are encouraged to seek program advice from the Engineering, Computer and Mathematical Sciences Faculty Office (ecms_office@adelaide.edu.au)**

Year 1 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1			Level 1 Science course#	3.0
Sem 1	MECH ENG	1102	Intro to Aerospace Engineering	3.0
Sem 1	MATHS	1011	Mathematics IA * <i>or</i>	
Sem 1	MATHS	1013	Mathematics IMA *	3.0
Sem 1	C&ENVENG	1010	Engineering Mechanics - Statics	3.0
				12.0
Sem 2	MECH ENG	1006	Design Graphics & Communication	3.0
Sem 2	MECH ENG	1007	Engineering Mechanics - Dynamics	3.0
Sem 2	CHEM ENG	1009	Materials I	3.0
Sem 2	MATHS	1012	Mathematics IB * <i>or</i>	
Sem 2	MATHS	1011	Mathematics IA *	3.0
				12.0

*Level I Mathematics requirements

Students who have undertaken SACE Stage 2 Specialist Mathematics (or equivalent) will be required to enrol in Mathematics IA followed by Mathematics IB. Students who have not undertaken SACE Stage 2 Specialist Mathematics will be required to enrol in Mathematics IMA, followed by Mathematics IA with Mathematics IB taken in the Summer Semester to complete the Mathematics requirements at Level I. The satisfactory completion of Mathematics IMA is in addition to the normal requirements of the Bachelor of Engineering.

Refer to notes at bottom of the document

Year 2 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	MECH ENG	2100	Design Practice	3.0
Sem 1	MATHS	2201	Engineering Maths I	3.0
Sem 1	MECH ENG	2020	Materials and Manufacturing	3.0
Sem 1	MECH ENG	2021	Thermo-Fluids I	3.0
Sem 1	MECH ENG	2501	Mech Eng Level 2 Prac	
				12.0
Sem 2	MECH ENG	2101	Mechatronics IM includes Workshop Practice	3.0
Sem 2	MATHS	2202	Engineering Maths II	3.0
Sem 2	MECH ENG	2002	Stress Analysis and Design	3.0
Sem 2			Level I Science course#	3.0
Sem 2	MECH ENG	2502	Mech Eng Level 2 Prac	
				12.0

Year 3 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	MECH ENG	3026	Aerospace Materials and Structures	3.0
Sem 1	MECH ENG	3105	Sustainability & the Environment	3.0
Sem 1	MECH ENG	3100	Aeronautical Engineering	3.0
Sem 1	MECH ENG	3102	Heat Transfer & Thermodynamics	3.0
Sem 1	MECH ENG	3501	Mech Eng Level 3 Prac	
				12.0
Sem 2	MECH ENG	2019	Dynamics and Control I	3.0
Sem 2	MECH ENG	3027	Engineering Systems Design & Communication	3.0
Sem 2	APP MTH	3017	Waves III	3.0
Sem 2	MECH ENG	3104	Space Vehicle Design	3.0
Sem 2	MECH ENG	3502	Mech Eng Level 3 Prac	
				12.0

Year 4 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	MECH ENG	4108	Aircraft Design	3.0
Sem 1	MECH ENG	4106	Aerospace Propulsion	3.0
Sem 1			Level 2 science courses	6.0
Sem 1	MECH ENG	4501	Mech Eng Level 4 Prac	
				12.0
Sem 2	MECH ENG	3028	Dynamics and Control II	3.0
Sem 2	MECH ENG	3101	Applied Aerodynamics	3.0
Sem 2			Level 2 science courses	6.0
Sem 2	MECH ENG	4502	Mech Eng Level 4 Prac	
				12.0

Year 5 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
			Level III Science courses	24.0

Year 6 – 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	MECH ENG	4129A	Aerospace Honours Project Level IV Part 1 <i>or</i> *	
Sem 1	MECH ENG	4128A	Aerospace Design Project Level IV Part 1 *	3.0
Sem 1	MECH ENG	4111	CFD for Eng Applications	3.0
Sem 1	MECH ENG	4118	Finite Element Analysis of Structures	3.0
Sem 1	MECH ENG	4105	Advanced Vibration OR	
Sem 1	MECH ENG	4115	Engineering Acoustics OR	
Sem 1	MECH ENG	4102	Advanced PID Control OR	
Sem 1	MECH ENG	4126	Topics in Welded Structures	3.0
				12.0
Sem 2	MECH ENG	4129B	Aerospace Honours Project Level IV Part 2 <i>or</i> *	
Sem 2	MECH ENG	4128B	Aerospace Design Project Level IV Part 2 *	3.0
Sem 2	MECH ENG	4100	Advanced Topics in Aerospace Engineering	3.0
Sem 2	MECH ENG	4116	Engineering Management & Quality Systems	3.0
Sem 2	MECH ENG	4120	Fracture Mechanics OR	
Sem 2	MECH ENG	4104	Advanced Topics in Fluid Mechanics OR	
Sem 2	MECH ENG	4114	Corrosion: Principles & Prevention OR	
Sem 2	MECH ENG	4122	Mechanical Signature Analysis OR	
Sem 2	MECH ENG	4107	Airconditioning OR	
Sem 2	MECH ENG	4121	Materials Selection & Failure Analysis	3.0
				12.0

* Students accepted into the Honours stream will take Aerospace Honours Project Level IV and other students will take Aerospace Design Project Level IV.

Note pre-requisites, co-requisites or restrictions may be placed on these courses (refer to On-line Course Planner)

This program is undergoing changes and students are advised that the requirements for the Science degree are: Level One 6 unit Science course, 12 units at Level 2, and 24 units at Level 3. The rules for the B.Science in regards to presentation of conceded passes must also be followed. Students are advised that they must complete a major in a science discipline (a major is a specialization in either, Geology, Physics, Chemistry, etc). Students should see the Calendar <http://www.adelaide.edu.au/calendar> for a list of Science major requirements or consult course advisers in the Faculty of Sciences for further advice on this matter.

Students with questions relating to the requirements listed above are encouraged to seek program advice from the Engineering, Computer and Mathematical Sciences Faculty Office (ecms_office@adelaide.edu.au)