

DOUBLE PROGRAM

B.E.(Automotive)/B.Ma.&Comp.Sc with Comp.Sc Focus. Academic Plan 2009

Level I - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	COMP SCI	1008	Computer Science 1A	3.0
Sem 1	MATHS	1011	Mathematics 1A <i>or</i>	3.0
Sem 1	MATHS	1013	Mathematics IMA	
Sem 1	C&ENVENG	1010	Engineering Mechanics - Statics	3.0
Sem 1	MECH ENG	1101	Intro to Automotive Engineering	3.0
				12.0
Sem 2	MECH ENG	1006	Design Graphics and Communication	3.0
Sem 2	COMP SCI	1009	Computer Science 1B	3.0
Sem 2	MECH ENG	1007	Engineering Mechanics - Dynamics	3.0
Sem 2	MATHS	1012	Mathematics 1B <i>or</i>	
Sem 2	MATHS	1011	Mathematics 1A	3.0
				12.0

* Students who have undertaken SACE Stage 2 Specialist Maths will be required to enrol in Mathematics 1A followed by Mathematics 1B.

* Students who have not taken SACE Stage 2 Specialist Maths will be required to enrol in Mathematics IMA followed by Mathematics 1A and Mathematics 1B. It is strongly recommended that students should enrol in Mathematics 1B in the following summer semester to complete the requirements at Level 1. The satisfactory completion of Mathematics IMA is in addition to the normal requirements of the B.E. Plan but a requirement for students who do not have SACE Stage 2 Specialist Maths. Enrolment in summer will enable students to complete the program in the minimum amount of time.

Level II - 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	2021	Thermo-fluids I	3.0
Sem 1	ELEC ENG	1009	Electrical and Electronic Engineering 1A	3.0
Sem 1	MECH ENG	2501	Mech Eng Level 2 Prac	
				12.0
Sem 2	MECH ENG	2019	Dynamics and Control I	3.0
Sem 2	CHEM ENG	1009	Materials 1	3.0
Sem 2	MATHS	2202	Engineering Maths II	3.0
Sem 2	MECH ENG	2002	Stress Analysis and Design	3.0
Sem 2	MECH ENG	2502	Mech Eng Level 2 Prac	
				12.0

Level III - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	MECH ENG	3033	Automotive Materials and Structures	3.0
Sem 1	COMP SCI	2000	Computer Systems	3.0
Sem 1	COMP SCI	2004	Data Structures and Algorithms	3.0
Sem 1	MECH ENG	2020	Materials & Manufacturing	3.0
Sem 1	MECH ENG	3501	Mech Eng Level 3 Prac	
				12.0
Sem 2	ELEC ENG	3025	Power Electronics & Drive Systems M	3.0
Sem 2	MECH ENG	3027	Engineering Systems Design and Communication	3.0
Sem 2	MECH ENG	3028	Dynamics and Control II	3.0
Sem 2	MECH ENG	2101	Mechatronics IM includes Workshop Practice	3.0
Sem 2	MECH ENG	3502	Mech Eng Level 3 Prac	
				12.0

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Level IV – 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	MECH ENG	3102	Heat Transfer & Thermodynamics	3.0
Sem 2	MECH ENG	3101	Applied Aerodynamics	3.0
			Level III Maths & Computer Science courses (this is a focus not a major sequence but with a slight overload a major may be undertaken. See the Program Rules for the B.Maths & Computer Science program for a major sequence in Computer Science or Faculty Office Program Advisers (see link below) See Advisory Notes below..	18.0

Level V - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	MECH ENG	4130A	Automotive Design Project Level IV Part 1 <i>or</i>	
Sem 1	MECH ENG	4131A	Automotive Honours Project Level IV Part 1	3.0
Sem 1	MECH ENG	4103	Advanced Computer Aided Engineering	3.0
Sem 1	MECH ENG	4118	Finite Element Analysis of Structures	3.0
Sem 1	MECH ENG	3105	Sustainability & the Environment	3.0
Sem 1	MECH ENG	4501	Mech Eng Level 4 Prac	
				12.0
Sem 2	MECH ENG	4130B	Automotive Design Project Level IV Part 2 <i>or</i>	
Sem 2	MECH ENG	4131B	Automotive Honours Project Level IV4 Part 2	3.0
Sem 2	MECH ENG	4110	Automotive Vehicle Dynamics & Safety	3.0
Sem 2	MECH ENG	4117	Finance for Engineers	3.0
Sem 2	MECH ENG	4116	Engineering Management & Quality Systems	3.0
Sem 2	MECH ENG	4502	Mech Eng Level 4 Prac	
				12.0

Students accepted into the Honours stream will take Automotive Honours Project Level IV and other students will take Automotive Design Project Level IV

Check pre-requisites, co-requisites or restrictions placed on courses (refer to On-line Course Planner)

Continuing students should check the rules for the single program at <http://www.adelaide.edu.au/calendar/ug/eng/>. The double program of B.E.(Automotive) and B. Mathematical and Computer Sciences requires students to pass all coursework (96 units) relating to the single program of B.E.(Auto) and a further 24 new Level 3 units or 18 units at Level 3 and 6 units at Level 2, of Mathematics and Computer Science coursework. A Computer Science focus requires students to present Computer Systems and Data Structures and Algorithms at Level 2 and a further 18 units of Level 3 Maths and Computer Science coursework that may contain Computer Science coursework. To major in Computer Science students must present another Level 2 Computer Science course which is 3 units surplus to the requirements of this program and 12 of the 18 units at Level 3 must contain Computer Science courses, which includes COMPSCI 3006 Software Engineering and Project. A major is not a requirement of the Maths and Computer Science program but students may wish to undertake a major.

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)