FACULTY OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES
2017 STUDY PLAN

THE UNIVERSITY of ADELAIDE

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BACHELOR OF ENGINEERING (HONOURS) (MECHANICAL & AEROSPACE) WITH BACHELOR OF MATHEMATICAL & COMPUTER SCIENCES (Maths Major)				
YEAR 1 S1	MECH ENG 1102 Introduction to Aerospace Engineering (3 units) ☐	C&ENVENG 1010 Engineering Mechanics - Statics (3 units) ☐	ELEC ENG 1101 Electronic Systems (3 units) ☐	MATHS 1011 Mathematics IA (3 units)# ☐
YEAR 1 S2	CHEM ENG 1009 Materials I (3 units) ☐	MECH ENG 1006 Design Graphics & Professional Practice (3 units) ☐	MECH ENG 1007 Engineering Mechanics - Dynamics (3 units) ☐	MATHS 1012 Mathematics IB (3 units) ☐
YEAR 2 S1	MECH ENG 2020 Materials & Manufacturing (3 units) ☐	MECH ENG 2021 Thermo-Fluids I (3 units) ☐	MECH ENG 2100 Design Practice (3 units) ☐	MATHS 2201 Engineering Mathematics IIA (3 units) ☐
YEAR 2 S2	MECH ENG 2101 Mechatronics IM (3 units) ☐	MECH ENG 2002 Stress Analysis & Design (3 units) ☐	MECH ENG 2019 Dynamics & Control I (3 units) ☐	MATHS 2202 Engineering Mathematics IIB (3 units) ☐
YEAR 3 S1	MECH ENG 3026 Aerospace Materials & Structures (3 units) ☐	MECH ENG 3100 Aeronautical Engineering (3 units) ☐	MECH ENG 3102 Heat Transfer & Thermodynamics (3 units) ☐	MECH ENG 3105 Sustainability & the Environment (3 units) ☐
YEAR 3 S2	MECH ENG 3027 Engineering Systems Design & Professional Practice (3 units) ☐	MECH ENG 3028 Dynamics & Control II (3 units) ☐	MECH ENG 3101 Applied Aerodynamics (3 units) ☐	MECH ENG 3104 Space Vehicle Design (3 units) ☐
YEAR 4 S1	Level III Mathematics Elective (3 units) ☐	Level III Mathematics Elective (3 units) ☐	Level II or III Mathematics Elective (3 units) ☐	Level II or III Mathematics Elective (3 units) ☐

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	S2	Level III Mathematics Elective (3 units)	☐	Level III Mathematics Elective (3 units)	☐	Level II or III Mathematics Elective (3 units)	☐	Level II or III Mathematics Elective (3 units) ☐
YEAR 5	S1	MECH ENG 4143A Honours Project Part A (3 units)	☐	MECH ENG Level IV Elective (3 units)	☐	MECH ENG 4106 Aerospace Propulsion (3 units)	☐	MECH ENG Level IV Elective (3 units) ☐
	S2	MECH ENG 4143B Honours Project Part B (6 units)			☐	MECH ENG 4100 Advanced Topics in Aerospace Engineering (3 units)	☐	MECH ENG 4108 Aircraft Design (3 units) ☐

CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES							
SEMESTER 1	MECH ENG 4102 Advanced PID Control (3 units)	☐	MECH ENG 4121 Materials Selection & Failure Analysis (3 units)	☐	MECH ENG 4105 Advanced Vibrations (3 units)	☐	MECH ENG 4111 CFD for Engineering Applications (3 units) ☐
	MECH ENG 4112 Combustion Technology & Emission Control (3 units)	☐		☐	MECH ENG 4118 Finite Element Analysis of Structures (3 units)	☐	MECH ENG 4124 Robotics M (3 units) ☐
	MECH ENG 4104 Advanced Topics in Fluid Mechanics (3 units)	☐	MECH ENG 4144 Renewable Fluid Power Technology (3 units)	☐		☐	☐
SEMESTER 2	CHEM ENG 4032 Composites & Multiphase Polymers (3 units) ^NOT OFFERED 2017	☐	MECH ENG 4107 Airconditioning (3 units)	☐	MECH ENG 4101 Biomechanical Engineering (3 units)	☐	MECH ENG 4114 Corrosion: Principles & Prevention (3 units)- ☐
	MECH ENG 4115 Engineering Acoustics (3 units)	☐	MECH ENG 4120 Fracture Mechanics (3 units)	☐	MECH ENG 4125 Stresses in Plates & Shells (3 units)^	☐	☐
	MECH ENG 4145 Sustainable Thermal Technologies (3 units)	☐	ENTREP 3900 Entrepreneurs Challenge (3 units)	☐		☐	☐
SUMMER		☐	MECH ENG 4115 Engineering Acoustics (3 units)	☐	MECH ENG 4120 Fracture Mechanics (3 units)	☐	☐

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BACHELOR OF ENGINEERING (HONOURS) (MECHANICAL AND AEROSPACE) WITH BACHELOR OF MATHEMATICAL & COMPUTER SCIENCES (Maths Major) – Semester 2 Start							
YEAR 1	S2	CHEM ENG 1009 Materials I (3 units)	☐	MECH ENG 1006 Design Graphics & Professional Practice (3 units)	☐	MECH ENG 1007 Engineering Mechanics - Dynamics (3 units)	☐	MATHS 1011 Mathematics IA (3 units) ☐
YEAR 2	S1	C&ENVENG 1010 Engineering Mechanics - Statics (3 units)	☐	ELEC ENG 1101 Electronic Systems (3 units)	☐	MECH ENG 1102 Introduction to Aerospace Engineering (3 units)	☐	MATHS 1012 Mathematics IB (3 units) ☐
YEAR 2	S2	MATHS 2202 Engineering Mathematics IIB (3 units)	☐	MECH ENG 2002 Stress Analysis & Design (3 units)	☐	MECH ENG 2019 Dynamics & Control I (3 units)	☐	MECH ENG 2101 Mechatronics IM (3 units) ☐
YEAR 3	S1	MATHS 2201 Engineering Mathematics IIA (3 units)	☐	MECH ENG 2020 Materials & Manufacturing (3 units)	☐	MECH ENG 2021 Thermo-Fluids I (3 units)	☐	MECH ENG 2100 Design Practice (3 units) ☐
YEAR 3	S2	MECH ENG 3027 Engineering Systems Design & Professional Practice (3 units)	☐	MECH ENG 3028 Dynamics & Control II (3 units)	☐	MECH ENG 3101 Applied Aerodynamics (3 units)	☐	MECH ENG 3104 Space Vehicle Design (3 units) ☐
YEAR 4	S1	Level III Mathematics Elective (3 units)*	☐	Level III Mathematics Elective (3 units)*	☐	Level II or III Mathematics Elective (3 units)*	☐	Level II or III Mathematics Elective (3 units)* ☐

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	S2	Level III Mathematics Elective (3 units)*	☐	Level III Mathematics Elective (3 units)*	☐	Level II or III Mathematics Elective (3 units)*	☐	Level II or III Mathematics Elective (3 units)* ☐
YEAR 5	S1	MECH ENG 3026 Aerospace Materials & Structures (3 units)	☐	MECH ENG 3100 Aeronautical Engineering (3 units)	☐	MECH ENG 3102 Heat Transfer & Thermodynamics (3 units)	☐	MECH ENG 4143A Honours Project Part A (3 units) ☐
	S2	MECH ENG 4108 Aircraft Design (3 units)	☐	MECH ENG 4100 Advanced Topics in Aerospace Engineering (3 units)	☐	MECH ENG 4143B Honours Project Part B (6 units)		☐
YEAR 6	S1	MECH ENG 4106 Aerospace Propulsion (3 units)	☐	Elective (3 units)	☐	MECH ENG 3105 Sustainability & the Environment (3 units)	☐	Elective (3 units) ☐

CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES							
SEMESTER 1	MECH ENG 4102 Advanced PID Control (3 units)	☐	MECH ENG 4121 Materials Selection & Failure Analysis (3 units)	☐	MECH ENG 4105 Advanced Vibrations (3 units)	☐	MECH ENG 4111 CFD for Engineering Applications (3 units) ☐
	MECH ENG 4112 Combustion Technology & Emission Control (3 units)	☐		☐	MECH ENG 4118 Finite Element Analysis of Structures (3 units)	☐	MECH ENG 4124 Robotics M (3 units) ☐
	MECH ENG 4104 Advanced Topics in Fluid Mechanics (3 units)	☐	MECH ENG 4144 Renewable Fluid Power Technology (3 units)	☐		☐	☐
SEMESTER 2	CHEM ENG 4032 Composites & Multiphase Polymers (3 units) ^NOT OFFERED 2017	☐	MECH ENG 4107 Airconditioning (3 units)	☐	MECH ENG 4101 Biomechanical Engineering (3 units)	☐	MECH ENG 4114 Corrosion: Principles & Prevention (3 units) ☐
	MECH ENG 4115 Engineering Acoustics (3 units)	☐	MECH ENG 4120 Fracture Mechanics (3 units)	☐	MECH ENG 4125 Stresses in Plates & Shells (3 units)	☐	ENTREP 3900 Entrepreneurs Challenge (3 units) ☐
	MECH ENG 4145 Sustainable Thermal Technologies (3 units)	☐		☐		☐	☐
SUMMER		☐	MECH ENG 4115 Engineering Acoustics (3 units)	☐	MECH ENG 4120 Fracture Mechanics (3 units)	☐	☐

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