

Bachelor of Engineering (Honours) (Mechanical) - All Majors with Bachelor of Mathematical and Computer Sciences - Computer Science Major

Semester 2 Start

Bachelor of Engineering (Honours) (Mechanical) with Bachelor of Mathematical and Computer Sciences - Computer Science Major
Bachelor of Engineering (Honours) (Mechanical) - Aerospace Engineering Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major
Bachelor of Engineering (Honours) (Mechanical) - Defence Systems Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major
Bachelor of Engineering (Honours) (Mechanical) - Mechanical Engineering Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major
Bachelor of Engineering (Honours) (Mechanical) - Medical Technologies Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major
Bachelor of Engineering (Honours) (Mechanical) - Renewable Energy Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major
Bachelor of Engineering (Honours) (Mechanical) - Smart Technologies Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major
Bachelor of Engineering (Honours) (Mechanical) - Smart Technologies Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major
Bachelor of Engineering (Honours) (Mechanical) - Sports Engineering Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major



Bachelor of Engineering (Honours) (Mechanical) with Bachelor of Mathematical and Computer Sciences - Computer Science Major - Semester 2

	Year 1											
S 1												
S 2	# MATHS 1011 Mathematics IA		^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics					
	Year 2											
S 1	MATHS 1012 Mathematics IB		ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems					
S 2	MATHS 2107 Statistics & Numerical Methods II		MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM					
				Year	3							
S 1	MATHS 2106 Differential Equations for MECH ENG 2100 Design Practice MECH ENG 2021 Thermo-Fluids I											
S 2	MECH ENG 3038 Computer Aided Engineering		MECH ENG 3028 Dynamics & Control II		General Elective		COMP SCI 2103 Algorithm Design & Data Structures for Engineers					
			In	terns	ship							
	All Engineering students commencing	from	2019 are required to complete a minimum	m of 8	weeks of internship during the course of th	eir st	udies – see note below elective table.					
				Year	4							
S 1	ENG 3004 Interdisciplinary Professional Practice		MECH ENG 3102 Heat Transfer & Thermodynamics		COMP SCI 2000 Computer Systems		COMP SCI 2201 Algorithm & Data Structure Analysis					
S 2	ENG 3005 Research Method & Project Management		COMP SCI 3006 Software Engineering & Project		Mechanical Engineering Elective (see elective table)		General Elective					
				Year	5							
S 1	ENG 4001A Research Project Part A		General Elective		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					
S 2	ENG 4001B Research Project Part B		General Elective		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					
				Year	6							

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	S 1	Mechanical (see elective	Engineering Elective e table)	е	Mechanical I (see elective	Engineering Elective table)	Mechanical Engineering Elective (see elective table)	Level III COMP SCI Elective	
	Cor	re Courses	Major Courses	Double Degr	ee Courses				

Electives Table

		CHOOSE FROM THE FOLLOWING MI	ECHA	NICAL ENGINEERING ELECTIVES		
	MECH ENG 4102 Advanced PID Control	MECH ENG 4105 Advanced Vibrations		MECH ENG 4106 Aerospace Propulsion	MECH 4112 Combustion Technology & Emission Control	
	MECH ENG 4118 Finite Element Analysis of Structures	MECH ENG 4121 Materials Selection & Failure Analysis		MECH ENG 4124 Robotics M	MECH ENG 4104 Advanced Topics in Fluid Mechanics	
S1	ELEC ENG 3100 Systems Engineering	ENTREP 3006 Energy Management, Economics & Policy		MECH ENG 3026 Advanced Mechanics of Materials	MECH ENG 3106 Mechatronics II	
	COMP SCI 1102 Object Oriented Programming	MECH ENG 2020 Materials & Manufacturing		MECH ENG 2102 Sports Engineering I	MECH ENG 3100 Aeronautical Engineering	
	MECH ENG 3103 Advanced Manufacturing Systems					
	MECH ENG 4100 Advanced Topics in Aerospace Engineering	MECH ENG 4101 Biomechanical Engineering		MECH ENG 4107 Air Conditioning	MECH ENG 4108 Aircraft Design	
S2	MECH ENG 4125 Stresses in Plates & Shells	COMP SCI 1102 Object Oriented Programming		ENTREP 3006 Energy Management, Economics & Policy	MECH ENG 3032 Micro-Controller Programming	
	MECH ENG 3101 Applied Aerodynamics	MECH ENG 4145 Sustainable Thermal Technologies				
Summer	MECH ENG 4126 Topics in Welded Structures	ENTREP 3006 Energy Management, Economics & Policy				
TBC	MECH ENG 4064 Renewable Power Technologies	CEME 3007 Integrated Environment Planning and Impact Assessment				

NOTES

^ EAL: Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in

into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through <u>Careers Service</u>. Register with CareerHub to access a database where opportunities are posted.

Program Rules: For academic program rules please refer to the following website: https://calendar.adelaide.edu.au/faculty/ecms



semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment

Information and Enrolment Advice:

Ask ECMS

Email: askecms@adelaide.edu.au



Bachelor of Engineering (Honours) (Mechanical) - Aerospace Engineering Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Semester 2

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				Year	1						
S 1	[
S 2	# MATHS 1011 Mathematics IA		^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics				
	Year 2										
S 1	MATHS 1012 Mathematics IB		ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems				
S 2	MATHS 2107 Statistics & Numerical Methods II		MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM				
				Year	3						
S 1	MATHS 2106 Differential Equations for Engineers II		MECH ENG 2100 Design Practice		MECH ENG 2021 Thermo-Fluids I		COMP SCI 1102 Object Oriented Programming				
S 2	MECH ENG 3038 Computer Aided Engineering		MECH ENG 3028 Dynamics & Control II		COMP SCI 2000 Computer Systems		COMP SCI 2103 Algorithm Design & Data Structures for Engineers				
			<u>Ir</u>	nterns	ship						
	All Engineering students commencing fr	om	2019 are required to complete a minimu	ım of 8	weeks of internship during the course of the	heir st	tudies – see note below elective table.				
				Year	4						
S 1	ENG 3004 Interdisciplinary Professional Practice		MECH ENG 3102 Heat Transfer & Thermodynamics		MECH ENG 2020 Materials & Manufacturing		COMP SCI 2201 Algorithm & Data Structure Analysis				
S 2	ENG 3005 Research Method & Project Management		COMP SCI 3006 Software Engineering & Project		MECH ENG 3101 Applied Aerodynamics		Mechanical Engineering Elective (see elective table)				
				Year	5						
S 1	ENG 4001A Research Project Part A		MECH ENG 3100 Aeronautical Engineering		MECH ENG 3026 Advanced Mechanics of Materials		Level III COMP SCI Elective				
S 2	ENG 4001B Research Project Part B		Level III COMP SCI Elective		MECH ENG 4108 Aircraft Design		Mechanical Engineering Elective (see elective table)				
				Year	6						
S 1	MECH ENG 4106 Aerospace Propulsion		Mechanical Engineering Elective (see elective table)		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective				



Electives Table

	CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES										
S1	MECH ENG 2020 Materials & Manufacturing	MECH ENG 3103 Advanced Manufacturing Systems		MECH ENG 3106 Mechatronics II		ELEC ENG 3100 Systems Engineering					
	MECH ENG 4102 Advanced PID Control	MECH ENG 4105 Advanced Vibrations		MECH ENG 4118 - Finite Element Analysis of Structures		MECH ENG 4121 Materials Selection & Failure Analysis					
S 2	MECH ENG 3032 Micro-Controller Processing	MECH ENG 4101 Biomechanical Engineering		MECH ENG 4123 Advanced Digital Control		MECH ENG 4107 Air Conditioning					

NOTES

^ EAL: Unless exempted, International students are required to take ENG 1011 Introduction to Engineering - EAL in lieu of ENG 1001 Introduction to Engineering

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through <u>Careers Service</u>. Register with CareerHub to access a database where opportunities are posted.

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Information and Enrolment Advice:

Ask ECMS

Email: askecms@adelaide.edu.au



Bachelor of Engineering (Honours) (Mechanical) - Defence Systems Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Semester 2

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			Year	1							
S 1	С										
S 2	# MATHS 1011 Mathematics IA	^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics					
	Year 2										
S 1	MATHS 1012 Mathematics IB	ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems					
S 2	MATHS 2107 Statistics & Numerical Methods II	MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM					
			Year	3							
S 1	MATHS 2106 Differential Equations for Engineers II	MECH ENG 2100 Design Practice		MECH ENG 2021 Thermo-Fluids I		COMP SCI 1102 Object Oriented Programming					
S 2	MECH ENG 3038 Computer Aided Engineering	MECH ENG 3028 Dynamics & Control II		COMP SCI 2000 Computer Systems		COMP SCI 2103 Algorithm Design & Data Structures for Engineers					
		li de la companya de	ntern	ship							
	All Engineering students commencing fro	m 2019 are required to complete a minimu	um of 8	3 weeks of internship during the course of t	heir st	cudies – see note below elective table.					
			Year	4							
S 1	ENG 3004 Interdisciplinary Professional Practice	MECH ENG 3102 Heat Transfer & Thermodynamics		MECH ENG 2020 Materials & Manufacturing		COMP SCI 2201 Algorithm & Data Structure Analysis					
S 2	ENG 3005 Research Method & Project Management	COMP SCI 3006 Software Engineering & Project		ENG 3305 Human Factors for Decision Making		Mechanical Engineering Elective (see elective table)					
			Year	5							
S 1	ENG 4001A Research Project Part A	MECH ENG 3026 Advanced Mechanics of Materials		POLIS 1104 Introduction to Comparative Politics		Mechanical Engineering Elective (see elective table)					
S 2	ENG 4001B Research Project Part B	Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective		Level III COMP SCI Elective					
			Year	· 6							
S 1	ENG 4020 Complex Systems	ENG 4010 Defence Leadership		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					



Core Courses Major Courses Double Degree Courses

Electives Table

		CHOOSE FROM THE FOLLOWING ME	CHAI	NICAL ENGINEERING ELECTIVES		
	MECH ENG 4105 Advanced Vibrations	ENTREP 3006 Energy Management, Economics & Policy		MECH ENG 3103 Advanced Manufacturing Systems	MECH ENG 3106 Mechatronics II	
S1	MECH ENG 4118 Finite Element Analysis of Structures	MECH ENG 4121 Materials Selection & Failure Analysis		MECH ENG 2102 Sports Engineering I	MECH ENG 3100 Aeronautical Engineering	
21	MECH ENG 4102 Advanced PID Control	MECH ENG 4104 Advanced Topics in Fluid Mechanics		MECH ENG 4106 Aerospace Propulsion	MECH ENG 4112 Combustion Technology & Emission Control	
	MECH ENG 4124 Robotics M	MECH ENG 4111 CFD for Engineering Applications		GEOG 2129 Introductory GIS		
	MECH ENG 3032 Micro-Controller Programming	MECH ENG 4107 Air Conditioning		MECH ENG 3101 Applied Aerodynamics	MECH ENG 4100 Advanced Topics in Aerospace Engineering	
S2	MECH ENG 4125 Stresses in Plates & Shells	MECH ENG 4145 Sustainable Thermal Technologies		MECH ENG 4101 Biomechanical Engineering	MECH ENG 4108 Aircraft Design	
	MECH ENG 4123 Advanced Digital Control	MECH ENG 3104 Space Vehicle Design		MECH ENG 3107 Sports Engineering II	MECH ENG 4140 Sports Engineering III	
Summer	MECH ENG 4126 Topics in Welded Structures	ENTREP 3006 Energy Management, Economics & Policy		MECH ENG 4115 Engineering Acoustics		
ТВС	MECH ENG 4064 Renewable Power Technologies					

NOTES

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Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

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Information and Enrolment Advice:

Ask ECMS

Email: askecms@adelaide.edu.au

Website: https://ecms.adelaide.edu.au/study-with-us/student-support



Internships: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through <u>Careers Service</u>. Register with CareerHub to access a database where opportunities are posted.



Bachelor of Engineering (Honours) (Mechanical) - Mechanical Engineering Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major - Semester 2

	Year 1											
S 2	# MATHS 1011 Mathematics IA		^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics					
	Year 2											
S 1	MATHS 1012 Mathematics IB		ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems					
S 2	MATHS 2107 Statistics & Numerical Methods II		MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM					
				Year	3							
S 1	MATHS 2106 Differential Equations for Engineers II		MECH ENG 2100 Design Practice		MECH ENG 2021 Thermo-Fluids I		COMP SCI 1102 Object Oriented Programming					
S 2	MECH ENG 3038 Computer Aided Engineering		MECH ENG 3028 Dynamics & Control II		COMP SCI 2000 Computer Systems		COMP SCI 2103 Algorithm Design & Data Structures for Engineers					
			In	iterns	ship							
	All Engineering students commencing f	from	2019 are required to complete a minimu	m of 8	weeks of internship during the course of th	eir st	udies – see note below elective table.					
				Year	4							
S 1	ENG 3004 Interdisciplinary Professional Practice		MECH ENG 3102 Heat Transfer & Thermodynamics		MECH ENG 3026 Advanced Mechanics of Materials		MECH ENG 2020 Materials & Manufacturing					
S 2	ENG 3005 Research Method & Project Management		COMP SCI 3006 Software Engineering & Project		COMP SCI 2201 Algorithm & Data Structure Analysis		Mechanical Engineering Elective (see elective table)					
				Year	5							
S 1	ENG 4001A Research Project Part A		MECH ENG 3103 Advanced Manufacturing Systems		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					
S 2	ENG 4001B Research Project Part B		MECH ENG 3101 Applied Aerodynamics		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					
				Year	6							
S 1	MECH ENG 4118 Finite Element Analysis of Structure e Courses Major Courses Double I	Dogr	MECH ENG 4111 CFD for Engineering Applications ee Courses		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					



Electives Table

CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES											
	MECH ENG 4124 Robotics M		ENTREP 3006 Energy Management, Economics & Policy		MECH ENG 3106 Mechatronics II		ELEC ENG 3100 Systems Engineering				
S1	MECH ENG 3100 Aeronautical Engineering		MECH ENG 4102 Advanced PID Control		MECH ENG 4104 Advanced Topics in Fluid Mechanics		MECH ENG 4105 Advanced Vibrations				
21	MECH ENG 4106 Aerospace Propulsion		MECH ENG 4112 Combustion Technology & Emission Control		MECH ENG 2102 Sports Engineering I		MECH ENG 4121 Materials Selection & Failure Analysis				
	GEOG 2129 Introductory GIS		DEVT 2100 - Poverty and Social Development								
	MECH ENG 3032 Micro-Controller Processing		MECH ENG 4100 Advanced Topics in Aerospace Engineering		MECH ENG 4101 Biomechanical Engineering		MECH ENG 4107 Air Conditioning				
S2	MECH ENG 4108 Aircraft Design		MECH ENG 4123 Advanced Digital Control		MECH ENG 4125 Stresses in Plates & Shells		MECH ENG 4145 Sustainable Thermal Technologies				
	MECH ENG 3104 Space Vehicle Design		MECH ENG 3107 Sports Engineering II		MECH ENG 4140 Sports Engineering III						
Summer	MECH ENG 4126 Topics in Welded Structures		ENTREP 3006 Energy Management, Economics & Policy		MECH ENG 4115 Engineering Acoustics						
TBC	CEME 3007 Integrated Environment Planning & Impact Assessment										

NOTES

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through Careers Service. Register with CareerHub to access a database where opportunities are posted.

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Bachelor of Engineering (Honours) (Mechanical) - Mechatronics and Robotics Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major - Semester 2

	Year 1											
S 2	# MATHS 1011 Mathematics IA		^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics					
	Year 2											
S 1	MATHS 1012 Mathematics IB		ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems					
S 2	MATHS 2107 Statistics & Numerical Methods II		MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM					
				Year	3							
S 1	MATHS 2106 Differential Equations for Engineers II		MECH ENG 2100 Design Practice		MECH ENG 2021 Thermo-Fluids I		COMP SCI 1102 Object Oriented Programming					
S 2	MECH ENG 3038 Computer Aided Engineering		MECH ENG 3028 Dynamics & Control II		COMP SCI 2000 Computer Systems		COMP SCI 2103 Algorithm Design & Data Structures for Engineers					
			In	iterns	ship							
	All Engineering students commencing	from	2019 are required to complete a minimu	m of 8	weeks of internship during the course of the	neir st	udies – see note below elective table.					
				Year	4							
S 1	ENG 3004 Interdisciplinary Professional Practice		MECH ENG 3102 Heat Transfer & Thermodynamics		ELEC ENG 2105 Electronic Circuits M		COMP SCI 2201 Algorithm & Data Structure Analysis					
S 2	ENG 3005 Research Method & Project Management		COMP SCI 3006 Software Engineering & Project		MECH ENG 3032 Micro-Controller Programming		Mechanical Engineering Elective (see elective table)					
				Year	5							
S 1	ENG 4001A Research Project Part A		MECH ENG 3103 Advanced Manufacturing Systems		MECH ENG 3106 Mechatronics II		Level III COMP SCI Elective					
S 2	ENG 4001B Research Project Part B		Mechanical Engineering Elective (see elective table)		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					
				Year	6							
S 1	MECH ENG 4102 Advanced PID Control		MECH ENG 4124 Robotics M		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					
Core	e Courses Major Courses Double I)egr	ee Courses									



Electives Table

		CHOOSE FROM THE FOLLOWING ME	CHAI	NICAL ENGINEERING ELECTIVES		
	ENTREP 3006 Energy Management, Economics & Policy	MECH ENG 2020 - Materials & Manufacturing		MECH ENG 3100 Aeronautical Engineering	MECH ENG 4104 Advanced Topics in Fluid Mechanics	
S1	MECH ENG 4105 Advanced Vibrations	MECH ENG 4118 Finite Element Analysis of Structures		MECH ENG 4121 Materials Selection & Failure Analysis	MECH ENG 2102 Sports Engineering I	
	MECH ENG 3026 Advanced Mechanics of Materials	MECH ENG 4106 Aerospace Propulsion		MECH ENG 4112 Combustion Technology & Emission Control	MECH ENG 4111 CFD for Engineering Applications	
	GEOG 2129 Introductory GIS	DEVT 2100 - Poverty and Social Development				
	MECH ENG 3101 Applied Aerodynamics	MECH ENG 4100 Advanced Topics in Aerospace Engineering		MECH ENG 4101 Biomechanical Engineering	MECH ENG 4107 Air conditioning	
S2	MECH ENG 4123 Advanced Digital Control	MECH ENG 4125 Stresses in Plates & Shells		MECH ENG 4145 Sustainable Thermal Technologies	MECH ENG 4108 Aircraft Design	
	MECH ENG 3104 Space Vehicle Design	MECH ENG 3107 Sports Engineering II		MECH ENG 4140 Sports Engineering III		
Summer	MECH ENG 4126 Topics in Welded Structures					
TBC	MECH ENG 4064 Renewable Power Technologies	MECH ENG 4115 Engineering Acoustics		ENTREP 3006 Energy Management, Economics & Policy		

NOTES

Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through Careers Service. Register with CareerHub to access a database where opportunities are posted.

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Bachelor of Engineering (Honours) (Mechanical) - Medical Technologies Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major - Semester 2

	Year 1										
S 2	# MATHS 1011 Mathematics IA	^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics					
			Year	2							
S 1	MATHS 1012 Mathematics IB	ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems					
S 2	MATHS 2107 Statistics & Numerical Methods II	MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM					
			Year	3							
S 1	MATHS 2106 Differential Equations for Engineers II	MECH ENG 2100 Design Practice		MECH ENG 2021 Thermo-Fluids I		COMP SCI 1102 Object Oriented Programming					
S 2	MECH ENG 3038 Computer Aided Engineering	MECH ENG 3028 Dynamics & Control I	' _□	COMP SCI 2000 Computer Systems		COMP SCI 2103 Algorithm Design & Data Structures for Engineers					
	Internship										
	All Engineering students commencing fro	m 2019 are required to complete a minim	um of 8	weeks of internship during the course of th	neir st	cudies – see note below elective table.					
			Year	4							
S 1	ENG 3004 Interdisciplinary Professional Practice	MECH ENG 3102 Heat Transfer & Thermodynamics		ANAT SC 1102 Human Biology 1A		COMP SCI 2201 Algorithm & Data Structure Analysis					
S 2	ENG 3005 Research Method & Project Management	COMP SCI 3006 Software Engineering & Project		ANAT SC 2009 Musculoskeletal Anatomy		Mechanical Engineering Elective (see elective table)					
			Year	5							
S 1	ENG 4001A Research Project Part A	ENG 3101 Introduction to Medical Technologies		Level III COMP SCI Elective		Level III COMP SCI Elective					
S 2	ENG 4001B Research Project Part B	ELEC ENG 4115 Biomedical Instrumentation		MECH ENG 4101 Biomechanical Engineering		Mechanical Engineering Elective (see elective table)					
			Year	· 6							
S 1	PHYSIOL 2510 Physiology IIA PAGE Courses Major Courses Double De	Mechanical Engineering Elective (see elective table)		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective					



Electives Table

CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES									
S1	MECH ENG 3103 Advanced Manufacturing Systems		MECH ENG 3106 Mechatronics II		MECH ENG 4121 Materials Selection & Failure Analysis		MECH ENG 4124 Robotics M		
S2	MECH ENG 3032 Micro-Controller Programming		MECH ENG 4123 Advanced Digital Control						

NOTES

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Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through <u>Careers Service</u>. Register with CareerHub to access a database where opportunities are posted.

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Bachelor of Engineering (Honours) (Mechanical) - Renewable Energy Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major – Semester 2

	Year 1										
S 2	# MATHS 1011 Mathematics IA		^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics				
				Year	2						
S 1	MATHS 1012 Mathematics IB		ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems				
S 2	MATHS 2107 Statistics & Numerical Methods II		MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM				
				Year	3						
S 1	MATHS 2106 Differential Equations for Engineers II		MECH ENG 2100 Design Practice		MECH ENG 2021 Thermo-Fluids I		COMP SCI 1102 Object Oriented Programming				
S 2	MECH ENG 3038 Computer Aided Engineering		MECH ENG 3028 Dynamics & Control II		COMP SCI 2000 Computer System		COMP SCI 2103 Algorithm Design & Data Structures for Engineers				
	Internship										
	All Engineering students commencing f	rom	2019 are required to complete a minimum	m of 8	weeks of internship during the course of th	neir st	udies – see note below elective table.				
				Year	4						
S 1	ENG 3004 Interdisciplinary Professional Practice		MECH ENG 3102 Heat Transfer & Thermodynamics		Mechanical Engineering Elective (see elective table)		COMP SCI 2201 Algorithm & Data Structure Analysis				
S 2	ENG 3005 Research Method & Project Management		COMP SCI 3006 Software Engineering & Project		ELEC ENG 4111 Distributed Generation Technologies		Level III COMP SCI Elective				
				Year	5						
S 1	ENG 4001A Research Project Part A		MECH ENG 2020 Materials & Manufacturing		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective				
S 2	ENG 4001B Research Project Part B		CHEM ENG 4048 Biofuels, Biomass and Wastes		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective				
				Year	6						
S 1	Mechanical Engineering Elective (see elective table) Progress Major Courses Double F		Mechanical Engineering Elective (see elective table)		MECH ENG 4112 Combustion Technology & Emission Control		MECH ENG 4064 Renewable Power Technologies				



Electives Table

	CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES										
	MECH ENG 4102 Advanced PID Control		MECH ENG 4105 Advanced Vibrations		ELEC ENG 3100 Systems Engineering		MECH ENG 3106 Mechatronics II				
S1	MECH ENG 4121 Materials Selection & Failure Analysis		MECH ENG 2102 Sports Engineering I		MECH ENG 3026 Advanced Mechanics of Materials		MECH ENG 3100 Aeronautical Engineering				
21	MECH ENG 3103 Advanced Manufacturing Systems		MECH ENG 4104 Advanced Topics in Fluid Mechanics		MECH ENG 4106 Aerospace Propulsion		MECH ENG 4118 Finite Element Analysis of Structures				
	MECH ENG 4124 Robotics M		MECH ENG 4111 CFD for Engineering Applications		GEOG 2129 Introductory GIS						
	MECH ENG 3032 Micro-Controller Programming		MECH ENG 4125 Stresses in Plates & Shells		MECH ENG 3101 Applied Aerodynamics		MECH ENG 4100 Advanced Topics in Aerospace Engineering				
S2	MECH ENG 4101 Biomechanical Engineering		MECH ENG 4107 Air conditioning		MECH ENG 4108 Aircraft Design		MECH ENG 4145 Sustainable Thermal Technologies				
	MECH ENG 4123 Advanced Digital Control		MECH ENG 3104 Space Vehicle Design		MECH ENG 3107 Sports Engineering II		MECH ENG 4140 Sports Engineering III				
Summer	MECH ENG 4126 Topics in Welded Structures		MECH ENG 4115 Engineering Acoustics								

NOTES

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Maths: Students who have not passed SACE Stage 2 Specialist Maths must enrol in MATHS 1013 Mathematics IM before enrolling in MATHS 1011 Mathematics IA. Manage your enrolment by completing MATHS 1013 Mathematics IM in semester 1 followed by MATHS 1011 Mathematics IA in semester 2 and MATHS 1012 Mathematics IB in summer school. MATHS 1013 Mathematics IM is in addition to the requirements of this program.

Internships: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through Careers Service. Register with CareerHub to access a database where opportunities are posted.

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Information and Enrolment Advice:

Ask ECMS

Email: askecms@adelaide.edu.au



Bachelor of Engineering (Honours) (Mechanical) - Smart Technology Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major - Semester 2

				Year	1				
S 1									
S 2	# MATHS 1011 Mathematics IA		^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics		
				Year	2				
S 1	MATHS 1012 Mathematics IB		ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems		
S 2	MATHS 2107 Statistics & Numerical Methods II		MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM		
	Year 3								
S 1	MATHS 2106 Differential Equations for Engineers II		MECH ENG 2100 Design Practice		MECH ENG 2021 Thermo-Fluids I		COMP SCI 1102 Object Oriented Programming		
S 2	MECH ENG 3038 Computer Aided Engineering		MECH ENG 3028 Dynamics & Control II		COMP SCI 2000 Computer System		COMP SCI 2103 Algorithm Design & Data Structures for Engineers		
			In	itern	ship				
	All Engineering students commencing f	from	2019 are required to complete a minimu	m of 8	3 weeks of internship during the course of t	heir st	tudies – see note below elective table.		
				Year	4				
S 1	ENG 3004 Interdisciplinary Professional Practice		MECH ENG 3102 Heat Transfer & Thermodynamics		Level II or III COMP SCI Elective		COMP SCI 2201 Algorithm & Data Structure Analysis		
S 2	ENG 3005 Research Method & Project Management		COMP SCI 3006 Software Engineering & Project		MECH ENG 3032 Micro-Controller Programming		Mechanical Engineering Elective (see elective table)		
				Year	5				
S 1	ENG 4001A Research Project Part A		Mechanical Engineering Elective (see elective table)		Level II or III COMP SCI Elective		Level III COMP SCI Elective		
S 2	ENG 4001B Research Project Part B		ELEC ENG 4107 Autonomous Systems		COMP SCI 3012 Distributed Systems		Level III COMP SCI Elective		



						Year	6		
S 1	Mechanical E (see elective	Engineering Elective table)		Mechanical (see elective	Engineering Elective table)		COMP SCI 3012 Distributed Systems	Level III COMP SCI Elective	
Co	re Courses	Maior Courses	Double Degre	ee Courses					

Electives Table

	CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES									
	MECH ENG 2020 Materials & Manufacturing		MECH ENG 3103 Advanced Manufacturing Systems		MECH ENG 3106 Mechatronics II		MECH ENG 2102 Sports Engineering I			
C 1	MECH ENG 4102 Advanced PID Control		MECH ENG 4104 Advanced Topics in Fluid Mechanics		MECH ENG 4105 Advanced Vibrations		MECH ENG 4124 Robotics M			
S1	MECH ENG 3026 Advanced Mechanics of Materials		MECH ENG 3100 Aeronautical Engineering		MECH ENG 4106 Aerospace Propulsion		MECH ENG 4112 Combustion Technology & Emission Control			
	MECH ENG 4118 Finite Element Analysis of Structures									
	MECH ENG 4123 Advanced Digital Control		MECH ENG 4145 Sustainable Thermal Technologies		MECH ENG 2020 Materials & Manufacturing		MECH ENG 3101 Applied Aerodynamics			
S2	MECH ENG 4100 Advanced Topics in Aerospace Engineering		MECH ENG 4107 Air conditioning		MECH ENG 4108 Aircraft Design		MECH ENG 3104 Space Vehicle Design			
	MECH ENG 3107 Sports Engineering II		MECH ENG 4140 Sports Engineering III							
TBC	MECH ENG 4064 Renewable Power Technologies		MECH ENG 4126 Topics in Welded Structures		MECH ENG 4115 Engineering Acoustics					



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Internships: The 8 weeks of internship must be supervised by a qualified engineer and may be completed in one placement or a series of placements. The Faculty recommends students undertake internships upon commencement of third year engineering courses. Enrolment into 6 unit internship course opens from S1 2021. Internships are self-sourced and resources are available through <u>Careers Service</u>. Register with CareerHub to access a database where opportunities are posted.

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Bachelor of Engineering (Honours) (Mechanical) - Sports Engineering Major with Bachelor of Mathematical and Computer Sciences - Computer Science Major - Semester 2

			•	Year	1		V		
	-								
S 2	# MATHS 1011 Mathematics IA		^ ENG 1001 Introduction to Engineering		CHEM ENG 1009 Materials I		MECH ENG 1007 Engineering Mechanics – Dynamics		
				Year	2				
S 1	MATHS 1012 Mathematics IB		ENG 1002 Programming (Matlab and C)		CEME 1004 Engineering Mechanics- Statics		ELEC ENG 1101 Electronic Systems		
S 2	MATHS 2107 Statistics & Numerical Methods II		MECH ENG 2002 Stress Analysis & Design		MECH ENG 2019 Dynamics & Control I		MECH ENG 2101 Mechatronics IM		
				Year	3				
S 1	MATHS 2106 Differential Equations for Engineers II		MECH ENG 2100 Design Practice		MECH ENG 2021 Thermo-Fluids I		COMP SCI 1102 Object Oriented Programming		
S 2	MECH ENG 3038 Computer Aided Engineering		MECH ENG 3028 Dynamics & Control II		COMP SCI 2000 Computer Systems		COMP SCI 2103 Algorithm Design & Data Structures for Engineers		
	Internship								
	All Engineering students commencing f	rom	2019 are required to complete a minimu	m of 8	weeks of internship during the course of the	neir st	udies – see note below elective table.		
				Year	4				
S 1	ENG 3004 Interdisciplinary Professional Practice		MECH ENG 3102 Heat Transfer & Thermodynamics		MECH ENG 2102 Sports Engineering I		COMP SCI 2201 Algorithm & Data Structure Analysis		
S 2	ENG 3005 Research Method & Project Management		MECH ENG 3107 Sports Engineering II		MECH ENG 4101 Biomechanical Engineering		COMP SCI 3006 Software Engineering & Project		
				Year	5				
S 1	ENG 4001A Research Project Part A		MECH ENG 3103 Advanced Manufacturing Systems		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective		
S 2	ENG 4001B Research Project Part B		MECH ENG 4140 Sports Engineering III		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective		
				Year	6				
S 1	MECH ENG 3101 Applied Aerodynamics		Mechanical Engineering Elective (see elective table)		Mechanical Engineering Elective (see elective table)		Level III COMP SCI Elective		
Core	e Courses Major Courses Double D	egr	ee Courses						



Electives Table

	CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES									
S1	ENTREP 3006 Energy Management, Economics & Policy	MECH ENG 2020 - Materials & Manufacturing		MECH ENG 3106 Mechatronics II						
S2	ELEC ENG 4115 Biomedical Instrumentation	MECH ENG 3032 Micro-Controller Processing		MECH ENG 4121 Materials Selection & Failure Analysis						
Summer	ENTREP 3006 Energy Management, Economics & Policy									

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