2022 Study Plan
Bachelor of Engineering (Honours) (Environmental & Climate Solutions)
Semester 1 Start

THE UNIVERSITY of ADELAIDE

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Semester 1 Start

No Major

Year 1				
S 1	MATHS 1011 Mathematics IA ☐	ENG 1003 Programming (Matlab and Excel) ☐	^ENG 1001 Introduction to Engineering ☐	CEME 1001 Introduction to Environmental Engineering ☐
S 2	MATHS 1012 Mathematics IB ☐	ENV BIOL 1002 Ecological Issues I ☐	CEME 1002 Introduction to Infrastructure ☐	CEME 1003 Resources and Energy in a Circular Economy ☐
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II ☐	CEME 2003 Civil Engineering Hydraulics ☐	CEME 2004 Introduction to Geo-Engineering ☐	CHEM ENG 2017 Transport Processes in the Environment ☐
S 2	MATHS 2107 Statistics & Numerical Methods II ☐	CEME 2006 Climate & Environmental Change Impact Modelling ☐	CEME 2005 Transportation Engineering and Survey ☐	Environmental & Climate Solutions Elective – Set 1 (see elective table) ☐
Year 3				
S 1	ENG 3004 Systems Engineering and Industry Practice ☐	CEME 3004 Hydrology for Engineers ☐	GEOG 2129 Introductory Geographic Information Systems ☐	Environmental & Climate Solutions Elective – Set 1 (see elective table) ☐
S 2	ENG 3005 Research Method & Project Management ☐	CEME 3005 Advanced Civil Engineering Hydraulics ☐	CEME 3007 Integrated Environment Planning & Impact Assessment ☐	Environmental & Climate Solutions Elective – Set 1 (see elective table) ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see the note section below.				
Year 4				
S 1	ENG 4001A Research Project Part A ☐	CEME 4008 Soil and Ground Water Remediation ☐	Environmental & Climate Solutions Elective – Set 2 (see elective table) ☐	Environmental & Climate Solutions Elective – Set 2 (see elective table) ☐
S 2	ENG 4001B Research Project Part B ☐	CEME 4009 Decision Making for Sustainable Solutions ☐	CEME 4010 Designing Water Resource Systems for Urban Environments ☐	Environmental & Climate Solutions Elective – Set 2 (see elective table) ☐

Core Courses	Elective

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

CHOOSE FROM THE FOLLOWING ENVIRONMENTAL AND CLIMATE SOLUTIONS ELECTIVES – SET 1					
S1	GEOG 2139	Environmental Management	**S2**	ENTREP 3000 GEOG 2135 GEOG 2142 GEOLOGY 3502	Innovation and Creativity Urban Futures Climate Change Mineral and Energy Resources III
SUMMER	ENTREP 3000	Innovation and Creativity			
CHOOSE FROM THE FOLLOWING ENVIRONMENTAL AND CLIMATE SOLUTIONS ELECTIVES – SET 2					
S1	ECON 3500 ENTREP 3006 MINING 4117	Resource and Environmental Economics III Energy Management, Economics and Policy Mining and Environment	**S2**	CEME 4006	Climate Risk and Resilience
SUMMER	CEME 4005	Integrated Natural Hazard Risk Management	**WINTER**	ENTREP 3006	Energy Management, Economics and Policy

NOTES

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Climate Solutions Major

Year 1				
S 1	MATHS 1011 Mathematics IA ☐	ENG 1003 Programming (Matlab and Excel) ☐	^ENG 1001 Introduction to Engineering ☐	CEME 1001 Introduction to Environmental Engineering ☐
S 2	MATHS 1012 Mathematics IB ☐	ENV BIOL 1002 Ecological Issues I ☐	CEME 1002 Introduction to Infrastructure ☐	CEME 1003 Resources and Energy in a Circular Economy ☐
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II ☐	CEME 2003 Civil Engineering Hydraulics ☐	CEME 2004 Introduction to Geo-Engineering ☐	CHEM ENG 2017 Transport Processes in the Environment ☐
S 2	MATHS 2107 Statistics & Numerical Methods II ☐	CEME 2005 Transportation Engineering and Survey ☐	CEME 2006 Climate & Environmental Change Impact Modelling ☐	GEOG 2142 Climate Change ☐
Year 3				
S 1	ENG 3004 Systems Engineering and Industry Practice ☐	CEME 3004 Hydrology for Engineers ☐	GEOG 2129 Introductory Geographic Information Systems ☐	Environmental & Climate Solutions Elective – Set 1 (see elective table) ☐
S 2	ENG 3005 Research Method & Project Management ☐	CEME 3005 Advanced Civil Engineering Hydraulics ☐	CEME 3007 Integrated Environment Planning & Impact Assessment ☐	CEME 4009 Decision Making for Sustainable Solutions ☐
Internship				
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Year 4				
S U M	CEME 4005 Integrated Natural Hazard Risk Management ☐			
S 1	ENG 4001A Research Project Part A ☐	Environmental & Climate Solutions Elective – Set 2 (see elective table) ☐	CEME 4008 Soil and Ground Water Remediation ☐	
S 2	ENG 4001B Research Project Part B ☐	Environmental & Climate Solutions Elective – Set 1 (see elective table) ☐	CEME 4006 Climate Risk and Resilience ☐	CEME 4010 Designing Water Resource Systems for Urban Environments ☐

Core Courses	Major Courses	Elective

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CHOOSE FROM THE FOLLOWING ENVIRONMENTAL AND CLIMATE SOLUTIONS ELECTIVES – SET 1					
S1	GEOG 2139	Environmental Management	**S2**	ENTREP 3000 GEOG 2135 GEOG 2142 GEOLOGY 3502	Innovation and Creativity Urban Futures Climate Change Mineral and Energy Resources III
SUMMER	ENTREP 3000	Innovation and Creativity			
CHOOSE FROM THE FOLLOWING ENVIRONMENTAL AND CLIMATE SOLUTIONS ELECTIVES – SET 2					
S1	ECON 3500 ENTREP 3006 MINING 4117	Resource and Environmental Economics III Energy Management, Economics and Policy Mining and Environment	**S2**		
SUMMER	CEME 4005	Integrated Natural Hazard Risk Management	**WINTER**	ENTREP 3006	Energy Management, Economics and Policy

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Semester 1 Start

Renewable Energy Major

Year 1				
S 1	MATHS 1011 Mathematics IA ☐	ENG 1003 Programming (Matlab and Excel) ☐	^ ENG 1001 Introduction to Engineering ☐	CEME 1001 Introduction to Environmental Engineering ☐
S 2	MATHS 1012 Mathematics IB ☐	ENV BIOL 1002 Ecological Issues I ☐	CEME 1002 Introduction to Infrastructure ☐	CEME 1003 Resources and Energy in a Circular Economy ☐
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II ☐	CEME 2003 Civil Engineering Hydraulics ☐	CEME 2004 Introduction to Geo-Engineering ☐	CHEM ENG 2017 Transport Processes in the Environment ☐
S 2	MATHS 2107 Statistics & Numerical Methods II ☐	CEME 2006 Climate & Environmental Change Impact Modelling ☐	CEME 2005 Transportation Engineering and Survey ☐	CEME 3005 Advanced Civil Engineering Hydraulics ☐
Year 3				
S 1	ENG 3004 Systems Engineering and Industry Practice ☐	CEME 3004 Hydrology for Engineers ☐	GEOG 2129 Introductory Geographic Information Systems ☐	ELEC ENG 1101 Electronic Systems ☐
S 2	ENG 3005 Research Method & Project Management ☐	CEME 4010 Designing Water Resource Systems for Urban Environments ☐	CEME 3007 Integrated Environment Planning & Impact Assessment ☐	CEME 4009 Decision Making for Sustainable Solutions ☐
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies – see the note section below.				
Year 4				
S 1	ENG 4001A Research Project Part A ☐	MECH ENG 4064 Renewable Power Technologies ☐	CEME 4008 Soil and Ground Water Remediation ☐	Environmental & Climate Solutions Elective – Set 1 or 2 (see elective table) ☐
S 2	ENG 4001B Research Project Part B ☐	ELEC ENG 4111 Distributed Generation Technologies ☐	CHEM ENG 4048 Biofuels, Biomass and Wastes ☐	Environmental & Climate Solutions Elective – Set 1 or 2 (see elective table) ☐

Core Courses	Major Courses	Elective

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CHOOSE FROM THE FOLLOWING ENVIRONMENTAL AND CLIMATE SOLUTIONS ELECTIVES – SET 1					
S1	GEOG 2139	Environmental Management	**S2**	ENTREP 3000 GEOG 2135 GEOG 2142 GEOLOGY 3502	Innovation and Creativity Urban Futures Climate Change Mineral and Energy Resources III
SUMMER	ENTREP 3000	Innovation and Creativity			
CHOOSE FROM THE FOLLOWING ENVIRONMENTAL AND CLIMATE SOLUTIONS ELECTIVES – SET 2					
S1	ECON 3500 ENTREP 3006 MINING 4117	Resource and Environmental Economics III Energy Management, Economics and Policy Mining and Environment	**S2**	CEME 4006	Climate Risk and Resilience
SUMMER	CEME 4005	Integrated Natural Hazard Risk Management	**WINTER**	ENTREP 3006	Energy Management, Economics and Policy

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Smart Technologies Major

Year 1				
S 1	MATHS 1011 Mathematics IA ☐	ENG 1002 Programming (Matlab and C) ☐	^ ENG 1001 Introduction to Engineering ☐	CEME 1001 Introduction to Environmental Engineering ☐
S 2	MATHS 1012 Mathematics IB ☐	ENV BIOL 1002 Ecological Issues I ☐	CEME 1002 Introduction to Infrastructure ☐	CEME 1003 Resources and Energy in a Circular Economy ☐
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II ☐	CEME 2003 Civil Engineering Hydraulics ☐	CEME 2004 Introduction to Geo-Engineering ☐	CHEM ENG 2017 Transport Processes in the Environment ☐
S 2	MATHS 2107 Statistics & Numerical Methods II ☐	CEME 2005 Transportation Engineering and Survey ☐	CEME 2006 Climate & Environmental Change Impact Modelling ☐	COMP SCI 1102 Object Oriented Programming ☐
Year 3				
S 1	ENG 3004 Systems Engineering and Industry Practice ☐	ENG 3005 Research Method & Project Management ☐	CEME 3004 Hydrology for Engineers	COMP SCI 2103 Algorithm Design & Data Structures ☐
S 2	Environmental & Climate Solutions Elective – Set 2 (see elective table) ☐	CEME 3005 Advanced Civil Engineering Hydraulics ☐	CEME 3007 Integrated Environment Planning & Impact Assessment ☐	CEME 4010 Designing Water Resource Systems for Urban Environments ☐
Internship				
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Year 4				
S 1	ENG 4001A Research Project Part A ☐	COMP SCI 3001 Computer Networks & Applications ☐	GEOG 2129 Introductory Geographic Information Systems ☐	CEME 4008 Soil and Ground Water Remediation ☐
S 2	ENG 4001B Research Project Part B ☐	MECH ENG 3032 Micro-Controller Programming ☐	COMP SCI 4412 Secure Software Engineering ☐	CEME 4009 Decision Making for Sustainable Solutions ☐

Core Courses	Major Courses	Elective

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CHOOSE FROM THE FOLLOWING ENVIRONMENTAL AND CLIMATE SOLUTIONS ELECTIVES – SET 2					
S1	ECON 3500 ENTREP 3006 MINING 4117	Resource and Environmental Economics III Energy Management, Economics and Policy Mining and Environment	**S2**	CEME 4006	Climate Risk and Resilience
SUMMER	CEME 4005	Integrated Natural Hazard Risk Management	**WINTER**	ENTREP 3006	Energy Management, Economics and Policy

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Minors

Minors are undertaken by taking 12 units of courses within one of the following streams to replace the electives offered listed on the previous page. If they are not listed on the previous page, the courses below cannot contribute as Environmental Engineering electives unless the full 12-unit Minor is awarded.

Humanitarian Engineering Minor

One course of each labelled **A**, **B**, **C**, **D** must be taken.

Summer			Winter		
A	SPATIAL 3007WT	GIS for Environmental Management III	**A** **B**	SPATIAL 3020WT PROJMGMT 3030	GIS for Agriculture & Natural Resource III Project Logistics and Supply Chains
Semester 1			**Semester 2**		
C	DEVT 2100	Poverty and Social Development	**C** **D**	DEVT 2101 ENG 3201	Empowerment & Development: Community & Gender Essentials of Humanitarian Practice (TBC)

Entrepreneurship Minor

One course of each labelled **A**, **B**, **C**, **D** must be taken.

			Summer		
			A	ENTREP 3000	Innovation and Creativity
Semester 1			**Semester 2**		
B **C**	ENTREP 3901 ENTREP 3015	Tech eChallenge Entrepreneurial Leadership	**A** **B** **D**	ENTREP 3000 ENTREP 3900 ENTREP 3011	Innovation and Creativity eChallenge Startup Methodologies