



Bachelor of Engineering (Honours) (Chemical) and Bachelor of Science (Biotechnology)

Year 1				
S1	#MATHS 1012 Mathematics IA <input type="checkbox"/>	*CHEM 1100 Chemistry IA <u>or</u> CHEM 1101 Foundations of Chemistry IA <input type="checkbox"/>	CHEM ENG 1007 Introduction to Process Engineering <input type="checkbox"/>	BIOLOGY 1101 Biology I: Molecules, Genes and Cells (or) BIOLOGY 1401 Concepts in Biology <input type="checkbox"/>
S2	#MATHS 1012 Mathematics IB <input type="checkbox"/>	*CHEM 1200 Chemistry IB <u>or</u> CHEM 1201 Foundations of Chemistry IB <input type="checkbox"/>	▲ENG 1001 Introduction to Engineering <input type="checkbox"/>	BIOLOGY 1201 Biology I: Human Perspectives <input type="checkbox"/>
Year 2				
S1	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>	CHEM ENG 2018 Process Fluid Mechanics <input type="checkbox"/>	CHEM ENG 2010 Principles of Process Engineering <input type="checkbox"/>	ENG 1003 Programming (Matlab and Excel) <input type="checkbox"/>
S2	MATHS 2107 Statistics & Numerical Methods II <input type="checkbox"/>	CHEM ENG 2011 Process Engineering Thermodynamics <input type="checkbox"/>	CHEM ENG 2014 Heat and Mass Transfer <input type="checkbox"/>	CHEM ENG 2015 Principles of Biotechnology II <input type="checkbox"/>
Year 3				
S1	CHEM ENG 3034 Kinetics and Reactor Design <input type="checkbox"/>	CHEM ENG 3035 Multi-Phase Fluid and Particle Mechanics <input type="checkbox"/>	BIOCHEM 2502 Biochemistry II (Biotechnology): Molecular & Cell Biology <input type="checkbox"/>	MICRO 2504 Microbiology II (Biotechnology) <input type="checkbox"/>
S2	CHEM ENG 3036 Unit Operations Laboratory <input type="checkbox"/>	CHEM ENG 3030 Simulation & Concept Design <input type="checkbox"/>	CHEM ENG 3031 Process Control and Instrumentation <input type="checkbox"/>	BIOCHEM 2503 Biochemistry II (Biotechnology): Metabolism <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship (6 units) during the course of their studies – see note below elective table				
Year 4				
S1	ENG 3004 Interdisciplinary Professional Practice <input type="checkbox"/>	BIOCHEM 3000 Molecular & Structural Biology III (6 units) <input type="checkbox"/>		PHARM 3101 Biological & Psychosocial Factors in Addictions or PHARM 3103 Drug Action & Therapeutics <input type="checkbox"/>
S2	BIOCHEM 3001 Cancer, Stem Cells & Development (6 units) <input type="checkbox"/>		BIOTECH 3000 Biotechnology Practice III (6 units) <input type="checkbox"/>	
Year 5				
S1	ENG 4001A Research Project Part A <input type="checkbox"/>	CHEM ENG 4034 Chemical Engineering Professional Practice IV <input type="checkbox"/>	CHEM ENG 4050 Advanced Chemical Engineering <input type="checkbox"/>	CHEM ENG 3037 Particulate Processes <input type="checkbox"/>
S2	ENG 4001B Research Project Part B <input type="checkbox"/>	CHEM ENG 4014 Plant Design Project (6 units) <input type="checkbox"/>		CHEM ENG 3033 Separation Processes <input type="checkbox"/>

NOTES

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

***Chemistry:** Students with at least C+ in SACE Stage 2 Chemistry (or equivalent) must enrol in CHEM 1100 Chemistry IA and CHEM 1200 Chemistry IB. All other students must enrol into CHEM 1101 Foundations of Chemistry IA and CHEM 1201 Foundations of Chemistry IB.

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.

Internship: 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.

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

Information and Enrolment Advice:

Ask ECMS

Email: askecms@adelaide.edu.au

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