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### Internships

All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of internship during the course of their studies. Internships are self-sourced and further information can be found on the Engineering Internships web page: <https://ecms.adelaide.edu.au/study-with-us/student-support/internships/engineering>.

### 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](mailto:askecms@adelaide.edu.au)

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

### Chemical Engineering Major

Year 1				
S 1	MATHS 1011 Mathematics IA <input type="checkbox"/>	ENG 1003 Programming (Matlab and Excel) <input type="checkbox"/>	PETROENG 1005 Introduction to Subsurface Geoscience & GeoEnergy <input type="checkbox"/>	CHEM 1100 Chemistry 1A OR CHEM 1101 Foundations of Chemistry 1A <input type="checkbox"/>
S 2	MATHS 1012 Mathematics IB <input type="checkbox"/>	ENG 1001 Introduction to Engineering <input type="checkbox"/>	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	CHEM 1200 Chemistry 1B OR CHEM 1201 Foundations of Chemistry 1B <input type="checkbox"/>
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers <input type="checkbox"/>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>	CHEM ENG 1007 Introduction to Process Engineering <input type="checkbox"/>
S 2	MATHS 2107 Statistics and Numerical Methods II <input type="checkbox"/>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>	CHEM ENG 2011 Process Engineering Thermodynamics <input type="checkbox"/>	CHEM ENG 2014 Heat and Mass Transfer <input type="checkbox"/>
Year 3				
S 1	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	CHEM ENG 2018 Process Fluid Mechanics <input type="checkbox"/>	CHEM ENG 2010 Process Design II <input type="checkbox"/>
S 2	PETROENG 3020 Production Engineering <input type="checkbox"/>	PETROENG 3001 Reservoir Simulation <b>OR</b> PETROENG 3023 Well Completion & Simulation <b>OR</b> PETROENG 2019 Structural Geology & Seismic Methods <input type="checkbox"/>	CHEM ENG 3030 Process Design III <input type="checkbox"/>	CHEM ENG 3033 Separation Process Engineering <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see the note page 2.				
Year 4				
S 1	CHEM ENG 4034 Chemical Engineering Practice <input type="checkbox"/>	CHEM ENG 3034 Chemical Reactor Engineering <input type="checkbox"/>	CHEM ENG 3035 Fluid & Particle Mechanics <b>OR</b> PETRO ENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>	CHEM ENG 4056 Process Design IV <input type="checkbox"/>
S 2	CHEM ENG 3036 Unit Operations Laboratory <input type="checkbox"/>	CHEM ENG 4014 Plant Design Project - 6 units <input type="checkbox"/>		CHEM ENG 3031 Process Control & Instrumentation <input type="checkbox"/>



Year 5				
S 1	ENG 4001A Research Project Part A <input type="checkbox"/>	PETROENG 3005 Reservoir Characterisation & Modelling <b>OR</b> <input type="checkbox"/> PETROENG 4012 Well Testing & Pressure Transient Analysis	PETROENG 4037 Unconventional Resources & Recovery <input type="checkbox"/>	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>
S 2	ENG 4001B Research Project Part B <input type="checkbox"/>	PETROENG 4064 Data Analytics in Oil & Gas Industry <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>
Core Course		Major course		

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

### Civil Engineering Major

Year 1				
S 1	MATHS 1011 Mathematics IA <input type="checkbox"/>	ENG 1003 Programming (Matlab and Excel) <input type="checkbox"/>	PETROENG 1005 Introduction to Subsurface Geoscience & GeoEnergy <input type="checkbox"/>	CEME 1004 Engineering Mechanics - Statics <input type="checkbox"/>
S 2	MATHS 1012 Mathematics IB <input type="checkbox"/>	ENG 1001 Introduction to Engineering <input type="checkbox"/>	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	CEME 1002 Introduction to Infrastructure <input type="checkbox"/>
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers <input type="checkbox"/>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>	CEME 2001 Strength of Materials <input type="checkbox"/>
S 2	MATHS 2107 Statistics and Numerical Methods II <input type="checkbox"/>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>	PETROENG 2001 Reservoir Thermodynamics & Fluid Properties <input type="checkbox"/>	CEME 2002 Structural Mechanics <input type="checkbox"/>
Year 3				
S 1	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>	CEME 2003 Civil Engineering Hydraulics <input type="checkbox"/>	CEME 3001 Computer Analysis of Structures & Structural Dynamics <input type="checkbox"/>
S 2	PETROENG 3020 Production Engineering <input type="checkbox"/>	PETROENG 2019 Structural Geology & Seismic Methods <input type="checkbox"/>	CEME 2004 Introduction to Geo-engineering <b>only avail S1. Course advice will be required</b> <input type="checkbox"/>	CEME 3005 Advanced Civil Engineering Hydraulics <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see the note page 2.				
Year 4				
S 1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	CEME 3002 Reinforced Concrete Design <input type="checkbox"/>	CEME 3004 Hydrology for Engineers <input type="checkbox"/>
S 2	ENG 3005 Research Methods & Project Management <input type="checkbox"/>	CEME 3003 Structural Steel Design <input type="checkbox"/>	CEME 3006 Geotechnical Engineering <input type="checkbox"/>	PETROENG 3001 Reservoir Simulation <b>OR</b> PETROENG 3023 Well Completion & Simulation <input type="checkbox"/>



Year 5				
S 1	ENG 4001A Research Project Part A <input type="checkbox"/>	PETROENG 4012 Well Testing & Pressure Transient Analysis <input type="checkbox"/>	PETROENG 4037 Unconventional Resources & Recovery <input type="checkbox"/>	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>
S 2	ENG 4001B Research Project Part B <input type="checkbox"/>	PETROENG 4064 Data Analytics in Oil & Gas Industry <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>
Core Course		Major course		

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### Mechanical Engineering Major

Year 1				
S 1	MATHS 1011 Mathematics IA <input type="checkbox"/>	ENG 1003 Programming (Matlab and Excel) <input type="checkbox"/>	PETROENG 1005 Introduction to Subsurface Geoscience & GeoEnergy <input type="checkbox"/>	CEME 1004 Engineering Mechanics - Statics <input type="checkbox"/>
S 2	MATHS 1012 Mathematics IB <input type="checkbox"/>	▲ENG 1001 Introduction to Engineering <input type="checkbox"/>	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	MECH ENG 1007 Engineering Mechanics - Dynamics <input type="checkbox"/>
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers <input type="checkbox"/>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>	MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/>
S 2	MATHS 2107 Statistics and Numerical Methods II <input type="checkbox"/>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>	PETROENG 2001 Reservoir Thermodynamics & Fluid Properties <input type="checkbox"/>	CHEM ENG 1009 Materials I <input type="checkbox"/>
Year 3				
S 1	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>	MECH ENG 2020 Materials & Manufacturing <input type="checkbox"/>	MECH ENG 2100 Design Practice <input type="checkbox"/>
S 2	PETROENG 3020 Production Engineering <input type="checkbox"/>	PETROENG 2019 Structural Geology & Seismic Methods <input type="checkbox"/>	MECH ENG 2019 Dynamics & Control I <input type="checkbox"/>	MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see the note page 2.				
Year 4				
S 1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	MECH ENG 3102 Heat & Transfer Thermodynamics <input type="checkbox"/>	MECH ENG 3026 Advanced Mechanics of Materials <input type="checkbox"/>
S 2	ENG 3005 Research Methods & Project Management <input type="checkbox"/>	PETROENG 3001 Reservoir Simulation <b>OR</b> PETROENG 3023 Well Completion & Simulation <input type="checkbox"/>	MECH ENG 3111 Acoustics and Vibrations <input type="checkbox"/>	MECH ENG 3101 Applied Aerodynamics <input type="checkbox"/>



Year 5				
S 1	ENG 4001A Research Project Part A <input type="checkbox"/>	PETROENG 4012 Well Testing & Pressure Transient Analysis <input type="checkbox"/>	PETROENG 4037 Unconventional Resources & Recovery <input type="checkbox"/>	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>
S 2	ENG 4001B Research Project Part B <input type="checkbox"/>	PETROENG 4064 Data Analytics in Oil & Gas Industry <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>
Core Course		Major course		

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### Mining Engineering Major

Year 1				
S 1	MATHS 1011 Mathematics IA <input type="checkbox"/>	ENG 1003 Programming (Matlab and Excel) <input type="checkbox"/>	PETROENG 1005 Introduction to Subsurface Geoscience & GeoEnergy <input type="checkbox"/>	CEME 1004 Engineering Mechanics - Statics <input type="checkbox"/>
S 2	MATHS 1012 Mathematics IB <input type="checkbox"/>	▲ENG 1001 Introduction to Engineering <input type="checkbox"/>	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	MINING 1011 Introduction to Mining Engineering I <input type="checkbox"/>
Year 2				
S 1	MATHS 2106 Differential Equations for Engineers II <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers <input type="checkbox"/>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>	MINING 3076 Geomechanics and Excavation Engineering <i>In lieu of MINING 3072 Mining Geomechanics</i> <input type="checkbox"/>
S 2	MATHS 2107 Statistics and Numerical Methods II <input type="checkbox"/>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>	PETROENG 2001 Reservoir Thermodynamics & Fluid Properties <input type="checkbox"/>	Mining Engineering Elective (see elective table) <input type="checkbox"/>
Year 3				
S 1	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	MINING 3078 Resource Estimation and Mine Planning <i>In lieu of MINING 3070 Resource Estimation</i> <input type="checkbox"/>	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>	MINING 3071 Mining Systems <input type="checkbox"/>
S 2	PETROENG 3020 Production Engineering <input type="checkbox"/>	PETROENG 2019 Structural Geology & Seismic Methods <input type="checkbox"/>	MINING 3077 Mine Safety Engineering <i>In lieu of MINING 3073 Mine Planning</i> <input type="checkbox"/>	Mining Engineering Elective (see elective table) <input type="checkbox"/>
Internship				
All Engineering students commencing from 2019 are required to complete a minimum of 8 weeks of <a href="#">internship</a> during the course of their studies – see the note page 2.				
Year 4				
S 1	ENG 3004 Systems Engineering & Industry Practice <input type="checkbox"/>	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	Mining Engineering Elective (see elective table) <input type="checkbox"/>	MINING 4116 Mine Design and Feasibility Study <i>In lieu of MINING 4106 Hard Rock Mine Design &amp; Feasibility</i> <input type="checkbox"/>
S 2	ENG 3005 Research Methods & Project Management <input type="checkbox"/>	PETROENG 3001 Reservoir Simulation <b>OR</b> PETRO ENG 3023 Well Completion & Simulation <input type="checkbox"/>	Mining Engineering Elective (see elective table) <input type="checkbox"/>	Mining Engineering Elective (see elective table) <input type="checkbox"/>

Year 5				
S 1	ENG 4001A Research Project Part A <input type="checkbox"/>	PETROENG 4012 Well Testing & Pressure Transient Analysis <input type="checkbox"/>	PETROENG 4037 Unconventional Resources and Recovery <input type="checkbox"/>	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>
S 2	ENG 4001B Research Project Part B <input type="checkbox"/>	PETROENG 4064 Data Analytics in Oil & Gas Industry <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>
Core Course		Major course		

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CHOOSE FROM THE FOLLOWING MINING ENGINEERING ELECTIVES					
<b>S1</b>	CEME 4007 GEOG 2129 GEOLOGY 2501 GEOLOGY 3500	Unsaturated Soils Introductory Geographic Information Systems (GIS) Structural Geology II Exploration Methods III	<b>S2</b>	CEME 3006 CEME 4008 CHEM ENG 2019 GEOLOGY 3502 MINING 4115	Geotechnical Engineering Soil and Ground Water Remediation Introduction to Minerals Processing Mineral and Energy Resources III Mine Automation