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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

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 OR PETROENG 3023 Well Completion & Simulation OR 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				
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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 OR 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 OR <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 only avail S1. Course advice will be required <input type="checkbox"/>	CEME 3005 Advanced Civil Engineering Hydraulics <input type="checkbox"/>
Internship				
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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 OR 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 internship 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 OR <input type="checkbox"/> PETROENG 3023 Well Completion & Simulation	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 internship 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 & Feasibility</i> <input type="checkbox"/>
S 2	ENG 3005 Research Methods & Project Management <input type="checkbox"/>	PETROENG 3001 Reservoir Simulation OR 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					
S1	CEME 4007 GEOG 2129 GEOLOGY 2501 GEOLOGY 3500	Unsaturated Soils Introductory Geographic Information Systems (GIS) Structural Geology II Exploration Methods III	S2	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