

**Australian School of Petroleum and Energy Resources**

Semester 1 Start

[Bachelor of Engineering \(Honours\) \(Petroleum\)](#)

[Bachelor of Engineering \(Honours\) \(Petroleum & Mining\)](#)

[Bachelor of Engineering \(Honours\) \(Petroleum & Chemical\)](#)

[Bachelor of Engineering \(Honours\) \(Petroleum, Civil & Structural\)](#)

[Bachelor of Engineering \(Honours\) \(Petroleum & Mechanical\)](#)

[Bachelor of Engineering \(Honours\) \(Petroleum\) and Bachelor of Science](#)

Semester 2 Start

[Bachelor of Engineering \(Honours\) \(Petroleum\)](#)

*Bachelor of Engineering (Honours) (Petroleum & Mining) – semester 2 start not available*

*Bachelor of Engineering (Honours) (Petroleum & Chemical) – semester 2 start not available*

*Bachelor of Engineering (Honours) (Petroleum, Civil & Structural) – semester 2 start not available*

*Bachelor of Engineering (Honours) (Petroleum & Mechanical) – semester 2 start not available*

*Bachelor of Engineering (Honours) (Petroleum) and Bachelor of Science – semester 2 start not available*

International students in the Australian School of Petroleum present ENG 3003 Engineering Communication in lieu of other courses. Please refer to notes on the individual study plans for course replacement details.



**BACHELOR OF ENGINEERING (HONOURS) (PETROLEUM)**

YEAR 1	S1	C&ENVENG 1010 Engineering Mechanics – Statics <b>CEME 1004 Engineering Mechanics – Statics</b> <input type="checkbox"/>	PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry <input type="checkbox"/>	#MATHS 1011 Mathematics IA <input type="checkbox"/>	*PHYSICS 1100 Physics IA <input type="checkbox"/>
	S2	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	COMP-SCI 1201 Introduction to Programming for Engineers <b>ENG 1003 Programming (Matlab &amp; Excel)</b> <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/>
YEAR 2	S1	CHEM ENG 1007 Introduction to Process Engineering <input type="checkbox"/>	MATHS 2201 Engineering Mathematics IIA <b>MATHS 2106 Differential Equations for Engineers II</b> <input type="checkbox"/>	MECH ENG 2021 Thermo-fluids I <input type="checkbox"/>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>
	S2	MATHS 2104 Numerical Methods II <b>MATHS 2107 Statistics &amp; Numerical Methods II</b> <input type="checkbox"/>	PETROENG 2001 Reservoir Thermodynamics & Fluid Properties <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers – <b>now only avail S1 - contact Ask ECMS</b> <input type="checkbox"/>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>
YEAR 3	S1	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	PETROENG 3007 Well Testing & Pressure Transient Analysis <b>PETROENG 4012 Well Testing &amp; Pressure Transient Analysis</b> <input type="checkbox"/>	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>
	S2	PETROENG 3001 Reservoir Simulation <input type="checkbox"/>	PETROENG 3019 Structural Geology & Seismic Methods <b>PETROENG 2019 Structural Geology &amp; Seismic Methods</b> <input type="checkbox"/>	PETROENG 3023 Well Completion & Simulation <input type="checkbox"/>	PETROENG 3020 Production Engineering <input type="checkbox"/>
YEAR 4	S1	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>	PETROENG 4035 Reservoirs, Resources & Reserves <input type="checkbox"/>	PETROENG 4033 Integrated Reservoir & Project Management <b>PETROENG 4037 Unconventional Resources &amp; Recovery</b> <input type="checkbox"/>	PETROENG 4004A Petroleum Engineering Honours Project Part 1 <input type="checkbox"/>
	S2	PETROENG 4037 Unconventional Resources & Recovery <b>PETROENG 4064 Data Analytics in Oil and Gas Industry</b> <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>	PETROENG 4004B Petroleum Engineering Honours Project Part 2 <input type="checkbox"/>

#Students who have not passed SACE Stage 2 Specialist Maths are required to enrol in MATHS 1013 Mathematics IM as a prerequisite to enrolling in MATHS 1011 Mathematics IA. The satisfactory completion of MATHS 1013 Mathematics IM is in addition to the normal requirements of this program. Students may manage their enrolment by enrolling in MATHS 1013 Mathematics IM in semester I, followed by MATHS 1011 Mathematics IA in semester 2, and MATHS 1012 Mathematics IB in summer school.

Administrative note only:

\*International students present ENG 3003 Engineering Communication EAL in lieu of PHYSICS 1100 Physics IA.

**BACHELOR OF ENGINEERING (HONOURS) (PETROLEUM) – Semester 2 Start**

YEAR 1	S1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	S2	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	COMP SCI 1201 Introduction to Programming for Engineers <input type="checkbox"/> <b>ENG 1003 Programming (Matlab &amp; Excel)</b>	#MATHS 1011 Mathematics IA <input type="checkbox"/>	MECH ENG 1007 Engineering Mechanics - Dynamics <input type="checkbox"/>
YEAR 1	S1	<del>C&amp;ENVENG 1010 Engineering Mechanics – Statics</del> <input type="checkbox"/> <b>CEME 1004 Engineering Mechanics – Statics</b>	PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	*PHYSICS 1100 Physics IA <input type="checkbox"/>
	S2	<del>MATHS 2104 Numerical Methods II</del> <input type="checkbox"/> <b>MATHS 2107 Statistics &amp; Numerical Methods II</b>	PETROENG 2001 Reservoir Thermodynamics & Fluid Properties <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers – <b>now only avail S1 - contact Ask ECMS</b>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>
YEAR 2	S1	CHEM ENG 1007 Introduction to Process Engineering <input type="checkbox"/>	<del>MATHS 2201 Engineering Mathematics IIA</del> <input type="checkbox"/> <b>MATHS 2106 Differential Equations for Engineers II</b>	MECH ENG 2021 Thermo-fluids I <input type="checkbox"/>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>
	S2	PETROENG 3001 Reservoir Simulation <input type="checkbox"/>	<del>PETROENG 3019 Structural Geology &amp; Seismic Methods</del> <input type="checkbox"/> <b>PETROENG 2019 Structural Geology &amp; Seismic Methods</b>	PETROENG 3023 Well Completion & Simulation <input type="checkbox"/>	PETROENG 3020 Production Engineering <input type="checkbox"/>
YEAR 3	S1	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	<del>PETROENG 3007 Well Testing &amp; Pressure Transient Analysis</del> <input type="checkbox"/> <b>PETROENG 4012 Well Testing &amp; Pressure Transient Analysis</b>	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	PETROENG 4004A Petroleum Engineering Honours Project Part 1 <input type="checkbox"/>
	S2	<del>PETROENG 4037 Unconventional Resources &amp; Recovery</del> <input type="checkbox"/> <b>PETROENG 4064 Data Analytics in Oil and Gas Industry</b>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>	PETROENG 4004B Petroleum Engineering Honours Project Part 2 <input type="checkbox"/>



YEAR 4	S1	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>	PETROENG 4035 Reservoirs, Resources & Reserves <input type="checkbox"/>	<del>PETROENG 4033 Integrated Reservoir &amp; Project Management</del> <b>PETROENG 4037 Unconventional Resources &amp; Recovery</b> <input type="checkbox"/>	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>
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Administrative note only:

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**BACHELOR OF ENGINEERING (HONOURS) (PETROLEUM AND MINING)**

YEAR 1	S1	#MATHS 1011 Mathematics IA <input type="checkbox"/>	C&ENVENG 1010 Engineering Mechanics – Statics <input type="checkbox"/> <b>CEME 1004 Engineering Mechanics – Statics</b>	CHEM ENG 1007 Introduction to Process Engineering <input type="checkbox"/>	PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry <input type="checkbox"/>
	S2	MATHS 1012 Mathematics IB <input type="checkbox"/>	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	COMP SCI 1201 Introduction to Programming for Engineers <input type="checkbox"/> <b>ENG 1003 Programming (Matlab &amp; Excel)</b>	MINING 1011 Introduction to Mining Engineering I <input type="checkbox"/>
YEAR 2	S1	MATHS 2201 Engineering Mathematics IIA <input type="checkbox"/> <b>MATHS 2106 Differential Equations for Engineers II</b>	C&ENVENG 2025 Strength of Materials II <input type="checkbox"/> <b>CEME 2001 Strength of Materials</b>	C&ENVENG 2071 Water Engineering II <input type="checkbox"/> <b>CEME 2003 Civil Engineering Hydraulics</b>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>
	S2	PETROENG 2009 Formation Evaluation, Petrophysics and Rock Properties <input type="checkbox"/>	MATHS 2104 Numerical Methods II <input type="checkbox"/> <b>MATHS 2107 Statistics &amp; Numerical Methods II</b>	GEOLOGY 2504 Economic & Mine Geology II <input type="checkbox"/>	C&ENVENG 2069 Geotechnical Engineering <input type="checkbox"/> <b>CEME 2004 Intro to Geo-engineering</b>
YEAR 3	S1	MINING 3072 Mining Geomechanics <input type="checkbox"/>	MINING 3071 Mining Systems <input type="checkbox"/>	MINING 4102 Mine Geotechnical Engineering <input type="checkbox"/>	MINING 3070 Resource Estimation <input type="checkbox"/>
	S2	MINING 3068 Mine Ventilation <input type="checkbox"/>	MINING 3069 Rock Breakage <input type="checkbox"/>	MINING 4101 Mine Management <input type="checkbox"/>	MINING 3073 Mine Planning <input type="checkbox"/>
YEAR 4	S1	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	PETROENG 3007 Well Testing & Pressure Transient Analysis <input type="checkbox"/> <b>PETROENG 4012 Well Testing &amp; Pressure Transient Analysis</b>	MINING 4106 Hard Rock Mine Design & Feasibility <input type="checkbox"/>
	S2	PETROENG 3020 Production Engineering <input type="checkbox"/>	PETROENG 3001 Reservoir Simulation <input type="checkbox"/>	PETROENG 3019 Structural Geology & Seismic Methods <input type="checkbox"/> <b>PETROENG 2019 Structural Geology &amp; Seismic Methods</b>	MINING 4111 Coal Mine Design & Feasibility <input type="checkbox"/>
YEAR 5	S1	PETROENG 4004A Petroleum Engineering Honours Project Part 1 <input type="checkbox"/>	PETROENG 4033 Integrated Reservoir & Project Management <input type="checkbox"/> <b>PETROENG 4037 Unconventional Resources &amp; Recovery</b>	PETROENG 4027 Decision Making and Risk Analysis <input type="checkbox"/>	PETROENG 4035 Reservoirs, Resources & Reserves <input type="checkbox"/>



	S2	PETROENG 4004B Petroleum Engineering Honours Project Part 2 <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	<del>PETROENG 4037 Unconventional Resources &amp; Recovery</del> <b>PETROENG 4064 Data Analytics in Oil and Gas Industry</b> <input type="checkbox"/>
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**BACHELOR OF ENGINEERING (HONOURS) (PETROLEUM AND CHEMICAL)**

YEAR 1	S1	CHEM 1100 Chemistry IA <input type="checkbox"/>	PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry <input type="checkbox"/>	#MATHS 1011 Mathematics IA <input type="checkbox"/>	CHEM ENG 1007 Introduction to Process Engineering <input type="checkbox"/>
	S2	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	CHEM 1200 Chemistry IB <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	COMP SCI 1201 Introduction to Programming for Engineers <b>ENG 1003 Programming (Matlab &amp; Excel)</b> <input type="checkbox"/>
YEAR 2	S1	CHEM ENG 2018 Process Fluid Mechanics <input type="checkbox"/>	MATHS 2201 Engineering Mathematics IIA <b>MATHS 2201 Differential Equations for Engineers</b> <input type="checkbox"/>	CHEM ENG 2010 Principles of Process Engineering <input type="checkbox"/>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>
	S2	CHEM ENG 2011 Process Engineering Thermodynamics <input type="checkbox"/>	MATHS 2104 Numerical Methods II <b>MATHS 2107 Statistics &amp; Numerical Methods</b> <input type="checkbox"/>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>	CHEM ENG 2014 Heat & Mass Transfer <input type="checkbox"/>
YEAR 3	S1	CHEM ENG 3035 Fluid & Particle Mechanics <input type="checkbox"/>	CHEM ENG 3034 Chemical Reactor Engineering <input type="checkbox"/>	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>
	S2	PETROENG 3001 Reservoir Simulation <input type="checkbox"/>	PETROENG 3020 Production Engineering <input type="checkbox"/>	CHEM ENG 3030 Process Synthesis & Design <input type="checkbox"/>	CHEM ENG 3031 Process Control & Instrumentation <input type="checkbox"/>
YEAR 4	S1	CHEM ENG 3024 Professional Practice III <b>ENG 3004 Systems Engineering and Industry Practice</b> <input type="checkbox"/>	Chemical or Petroleum Elective <input type="checkbox"/>	*Chemical Elective <input type="checkbox"/>	CHEM ENG 4050 Advanced Chemical Engineering <input type="checkbox"/>
	S2	CHEM ENG 4014 Plant Design Project (6 units) <input type="checkbox"/>		*Chemical Elective <input type="checkbox"/>	CHEM ENG 3033 Separation Process Engineering <input type="checkbox"/>
YEAR 5	S1	PETROENG 4004A Petroleum Engineering Honours Project Part 1 <input type="checkbox"/>	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>	PETROENG 4035 Reservoirs Resources & Reserves <input type="checkbox"/>	Chemical or Petroleum Elective <input type="checkbox"/>
	S2	PETROENG 4004B Petroleum Engineering Honours Project Part 2 <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>	<del>PETROENG 4037 Unconventional Resources &amp; Recovery</del> <b>PETROENG 4064 Data Analytics in Oil and Gas Industry</b> <input type="checkbox"/>

**CHOOSE FROM THE FOLLOWING PETROLEUM ENGINEERING ELECTIVES**

SEMESTER 1	PETROENG 4033 Integrated Reservoir & Project Management <input type="checkbox"/> <del>W</del> <b>PETROENG 4037 Unconventional Resources &amp; Recovery</b>	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>	<del>PETROENG 3007 Well Testing &amp; Pressure Transient Analysis</del> <b>PETROENG 4012 Well Testing &amp; Pressure Transient Analysis</b> <input type="checkbox"/>	PETROENG 4038EX Unconventional Resources & Recovery Study Tour <input type="checkbox"/>
SEMESTER 2	<del>PETROENG 3019 Structural Geology &amp; Seismic Methods</del> <b>PETROENG 2019 Structural Geology &amp; Seismic Methods</b> <input type="checkbox"/>	PETROENG 3023 Well Completion & Stimulation <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**CHOOSE FROM THE FOLLOWING CHEMICAL ENGINEERING ELECTIVES**

SEMESTER 1	CHEM ENG 4053 Pinch analysis & Process Synthesis <input type="checkbox"/> <b>(not offered in 2022)</b>	CHEM ENG 4052 Food Process Engineering <input type="checkbox"/> <b>(not offered in 2022)</b>	CHEM ENG 4056 Design Practice <input type="checkbox"/>	<input type="checkbox"/>
SEMESTER 2	CHEM ENG 3036 Unit Operations <input type="checkbox"/>	<del>CHEM ENG 4032 Composite &amp; Multiphase Polymers</del> <b>(not offered in 2022)</b> <input type="checkbox"/>	CHEM ENG 4054 Research Project <input type="checkbox"/>	<input type="checkbox"/>

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\*Students who choose to complete a Chemical Honours Project in addition to a Petroleum Honours project must undertake both CHEM ENG 4056 Research Practice and CHEM ENG 4054 Research Project in lieu of 6 units of electives.



BACHELOR OF ENGINEERING (HONOURS) (PETROLEUM, CIVIL AND STRUCTURAL)					
YEAR 1	S1	C&ENVENG 1008 Engineering Planning & Design IA <b>ENG 1001 Introduction to Engineering</b> <input type="checkbox"/>	PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry <input type="checkbox"/>	#MATHS 1011 Mathematics IA <input type="checkbox"/>	C&ENVENG 1010 Engineering Mechanics – Statics <b>CEME 1004 Engineering Mechanics – Statics</b> <input type="checkbox"/>
	S2	C&ENVENG 1009 Civil & Environmental Engineering IA <b>CEME 1002 Introduction to Infrastructure</b> <input type="checkbox"/>	COMP SCI 1201 Introduction to Programming for Engineers <b>ENG 1003 Programming (Matlab &amp; Excel)</b> <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>
YEAR 2	S1	MATHS 2201 Engineering Mathematics IIA <b>MATHS 2201 Differential Equations for Engineers</b> <input type="checkbox"/>	C&ENVENG 2071 Water Engineering II <b>CEME 2003 Civil Engineering Hydraulics</b> <input type="checkbox"/>	C&ENVENG 2025 Strength of Materials II <b>CEME 2001 Strength of Materials</b> <input type="checkbox"/>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>
	S2	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>	C&ENVENG 2069 Geotechnical Engineering <b>CEME 2004 Intro to Geo-engineering</b> <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers – <b>now only avail S1. Course advice will be required</b> <input type="checkbox"/>	C&ENVENG 2030 Structural Mechanics <b>CEME 2002 Structural Mechanics</b> <input type="checkbox"/>
YEAR 3	S1	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	C&ENVENG 3005 Reinforced Concrete Design <b>CEME 3002 Reinforced Concrete Design</b> <input type="checkbox"/>	C&ENVENG 3020 Computer Analysis of Structures and Structural Dynamics <b>CEME 3001 Computer Analysis of Structures and Structural Dynamics</b> <input type="checkbox"/>
	S2	C&ENVENG 3007 Structural Steel Design <b>CEME 3003 Structural Steel Design</b> <input type="checkbox"/>	C&ENVENG 3012 Geotechnical Engineering Design III <b>CEME 3006 Geotechnical Engineering</b> <input type="checkbox"/>	PETROENG 3020 Production Engineering <input type="checkbox"/>	PETROENG 3019 Structural Geology & Seismic Methods <b>PETROENG 2019 Structural Geology &amp; Seismic Methods</b> <input type="checkbox"/>
YEAR 4	S1	*Civil Engineering Elective <input type="checkbox"/>	C&ENVENG 3077 Engineering Hydrology <b>CEME 3004 – Hydrology for Engineers</b> <input type="checkbox"/>	C&ENVENG 4034 Engineering Management IV <b>ENG 3004 Systems Engineering and Industry Practice</b> <input type="checkbox"/>	Civil Engineering Elective <input type="checkbox"/>
	S2	*Civil Engineering Elective <input type="checkbox"/>	Civil Engineering Elective <input type="checkbox"/>	MATHS 2104 Numerical Methods II <b>MATHS 2107 Statistics &amp; Numerical Methods</b> <input type="checkbox"/>	C&ENVENG 3079 Water Engineering & Design III <b>CEME 3005 Advanced Civil Engineering Hydraulics</b> <input type="checkbox"/>



YEAR 5	S1	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>	PETROENG 4035 Reservoirs, Resources & Reserves <input type="checkbox"/>	PETROENG 4004A Petroleum Engineering Honours Project Part 1 <input type="checkbox"/>	Petroleum Engineering Elective <input type="checkbox"/>
	S2	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>	PETROENG 4004B Petroleum Engineering Honours Project Part 2 <input type="checkbox"/>	Petroleum Engineering Elective <input type="checkbox"/>

**CHOOSE FROM THE FOLLOWING PETROLEUM ENGINEERING ELECTIVES**

SEMESTER 1	PETROENG 4033 Integrated Reservoir & Project Management <input type="checkbox"/> <b>PETROENG 4037 Unconventional Resources &amp; Recovery</b>	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	PETROENG 3007 Well Testing & Pressure Transient Analysis <input type="checkbox"/> <b>PETROENG 4012 Well Testing &amp; Pressure Transient Analysis</b>	PETROENG 4038EX Unconventional Resources & Recovery Study Tour <input type="checkbox"/>
SEMESTER 2	PETROENG 4037 Unconventional Resources & Recovery <input type="checkbox"/> <b>PETROENG 4064 Data Analytics in Oil and Gas Industry</b>	PETROENG 3001 Reservoir Simulation <input type="checkbox"/>	PETROENG 3023 Well Completion & Stimulation <input type="checkbox"/>	<input type="checkbox"/>

**CHOOSE FROM THE FOLLOWING CIVIL ENGINEERING ELECTIVES**

SEMESTER 1	C&ENVENG 4073 Water Distribution Systems & Design <input type="checkbox"/>	MINING 3072 Mining Geomechanics <input type="checkbox"/>	MINING 4102 Mine Geotechnical Engineering <input type="checkbox"/>	<input type="checkbox"/>
	CHEM ENG 4051 Water & Wastewater Engineering <input type="checkbox"/>	C&ENVENG 3029 Environmental Modelling & Management <input type="checkbox"/> <b>CEME 2006 Environmental Modelling and Simulation</b>	C&ENVENG 4108 Environmental Systems Dynamics <input type="checkbox"/>	<input type="checkbox"/>
	C&ENVENG 4112 Advanced Civil Geotechnical Engineering <input type="checkbox"/>	C&ENVENG 4056 Linear Geostatistics <input type="checkbox"/>	C&ENVENG 4222A Research Project A <input type="checkbox"/>	<input type="checkbox"/>
WINTER	C&ENVENG 4114 Advanced Hydrological Modelling & Water Resources Management <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SEMESTER 2	C&ENVENG 4115 Advanced Topics in Flood Hydrology <input type="checkbox"/>	C&ENVENG 4110 Soil & Groundwater Remediation <input type="checkbox"/>	C&ENVENG 4109 Designing Water Resource Systems for Urban Environments <input type="checkbox"/>	<input type="checkbox"/>



	C&ENVENG 4222B Research Project B <input type="checkbox"/>	C&ENVENG 4111 Structural Dynamics & Applications <input type="checkbox"/>	C&ENVENG 4085 Traffic Engineering <input type="checkbox"/>	C&ENVENG 3222 Research Methodologies and Project Management <input type="checkbox"/> <b>ENG 3005 Research Methods and Project Management</b>
SUMMER	C&ENVENG 4106 Introduction to Geostatistics <input type="checkbox"/>	SOIL&WAT 3007WT GIS for Environmental Management III <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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\*Students who choose to complete a Civil Honours Project in addition to a Petroleum Honours project must undertake the following 3 courses C&ENVENG 3222 Research Methodologies and Project Management, C&ENVENG 4222A Research Project A and C&ENVENG 4222B Research Project B. The courses must be taken in the order commencing in semester 2. C&ENVENG 3222 is taken in lieu of C&ENVENG 3007 Structural Steel Design and C&ENVENG 4222A and C&ENVENG 4222B are presented in lieu of 6 units of electives. Note completion of Part B is dependent on the completion of Part A in order for 6 units to count towards the program.

BACHELOR OF ENGINEERING (HONOURS) (PETROLEUM AND MECHANICAL)

YEAR 1	S1	PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry <input type="checkbox"/>	C&ENVENG 1010 Engineering Mechanics – Statics <input type="checkbox"/> <b>CEME 1004 Engineering Mechanics – Statics</b>	ELEC ENG 1101 Electronic systems <input type="checkbox"/>	#MATHS 1011 Mathematics IA <input type="checkbox"/>
	S2	MECH ENG 1007 Engineering Mechanics – Dynamics <input type="checkbox"/>	MECH ENG 1006 Design Graphics & Professional Practice <input type="checkbox"/> <b>ENG 1001 Introduction to Engineering</b>	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>
YEAR 2	S1	MECH ENG 2100 Design Practice <input type="checkbox"/>	MATHS 2201 Engineering Mathematics IIA <input type="checkbox"/> <b>MATHS 2201 Differential Equations for Engineers</b>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>	MECH ENG 2021 Thermo-Fluids I <input type="checkbox"/>
	S2	CHEM ENG 1009 Materials I <input type="checkbox"/>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>	COMP SCI 1201 Introduction to Programming for Engineers <input type="checkbox"/> <b>ENG 1003 Programming (Matlab &amp; Excel)</b>	MECH ENG 2002 Stress Analysis & Design <input type="checkbox"/>
YEAR 3	S1	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	MECH ENG 3102 Heat Transfer & Thermodynamics <input type="checkbox"/>	MECH ENG 3026 Aerospace Materials & Structures <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers – <b>now only avail S1. Course advice will be required</b> <input type="checkbox"/>
	S2	MECH ENG 3027 Engineering Systems Design & Professional Practice <input type="checkbox"/> <b>ENG 3004 Systems Engineering &amp; Industry Practice</b>	Mechanical Engineering Elective <input type="checkbox"/>	MECH ENG 2019 Dynamics & Control I <input type="checkbox"/>	PETROENG 3020 Production Engineering <input type="checkbox"/>
YEAR 4	S1	*Mechanical Engineering Elective <input type="checkbox"/>	MECH ENG 3105 Sustainability & the Environment <input type="checkbox"/> <b>ENG 3005 Research Methods &amp; Project Management</b>	MECH ENG 2020 Materials & Manufacturing <input type="checkbox"/>	Mechanical Engineering Elective <input type="checkbox"/>
	S2	*Mechanical Engineering Elective <input type="checkbox"/>	*Mechanical Engineering Elective <input type="checkbox"/>	Mechanical Engineering Elective <input type="checkbox"/>	MECH ENG 3028 Dynamics & Control II <input type="checkbox"/> <b>MECH ENG 3111 Acoustics and Vibrations</b>
YEAR 5	S1	PETROENG 4004A Petroleum Engineering Honours Project Part 1 <input type="checkbox"/>	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>	Petroleum Engineering Elective <input type="checkbox"/>	Petroleum Engineering Elective <input type="checkbox"/>



S2	PETROENG 4004B Petroleum Engineering Honours Project Part 2 <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economic Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>	Petroleum Engineering Elective <input type="checkbox"/>
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**CHOOSE FROM THE FOLLOWING MECHANICAL ENGINEERING ELECTIVES**

SEMESTER 1	MECH ENG 4102 Advanced PID Control <input type="checkbox"/>	MECH ENG 4121 Materials Selection & Failure Analysis <input type="checkbox"/>	MECH ENG 4105 Advanced Vibrations <input type="checkbox"/>	MECH ENG 4111 CFD for Engineering Applications <input type="checkbox"/>
	MECH ENG 4112 Combustion Technology & Emission Control <input type="checkbox"/>	MECH ENG 4143A Mechanical Honours Project Part A <input type="checkbox"/>	MECH ENG 4118 Finite Element Analysis of Structures <input type="checkbox"/>	MECH ENG 4124 Robotics M <input type="checkbox"/>
	MECH ENG 4144 Renewable Fluid Power Technology <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SEMESTER 2	MECH ENG 4101 Biomechanical Engineering <input type="checkbox"/>	MECH ENG 4107 Airconditioning <input type="checkbox"/>	MECH ENG 4143B Mechanical Honours Project Part B <input type="checkbox"/>	ENTREP 3900 Entrepreneurs Challenge <input type="checkbox"/>
	MECH ENG 4145 Sustainable Thermal Technologies <input type="checkbox"/>	MECH ENG 4120 Fracture Mechanics <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SUMMER	MECH ENG 4126 Topics in Welded Structures <input type="checkbox"/>	MECH ENG 4115 Engineering Acoustics <input type="checkbox"/>	MECH ENG 4120 Fracture Mechanics <input type="checkbox"/>	<input type="checkbox"/>

**CHOOSE FROM THE FOLLOWING PETROLEUM ENGINEERING ELECTIVES**

SEMESTER 1	PETROENG 4035 Reservoirs, Resources & Reserves <input type="checkbox"/>	PETROENG 3007 Well Testing & Pressure Transient Analysis <b>PETROENG 4012 Well Testing &amp; Pressure Transient Analysis</b> <input type="checkbox"/>	PETROENG 4033 Integrated Reservoir & Project Management IV <b>PETROENG 4037 Unconventional Resources &amp; Recovery</b> <input type="checkbox"/>	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>
	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>	PETROENG 4038EX Unconventional Resources & Recovery Study Tour <b>(not offered in 2022)</b> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SEMESTER 2	PETROENG 4037 Unconventional Resources & Recovery <b>PETROENG 4064 Data Analytics in Oil and Gas Industry</b> <input type="checkbox"/>	PETROENG 3001 Reservoir Simulation <input type="checkbox"/>	PETROENG 3019 Structural Geology & Seismic Methods <b>PETROENG 2019 Structural Geology &amp; Seismic Methods</b> <input type="checkbox"/>	MATHS 2104 Numerical Methods # <input type="checkbox"/> <b>MATHS 2107 Statistics &amp; Numerical Methods</b> <input type="checkbox"/>
	PETROENG 3023 Well Completion & Stimulation <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



#Students who have not passed SACE Stage 2 Specialist Maths are required to enrol in MATHS 1013 Mathematics IM as a prerequisite to enrolling in MATHS 1011 Mathematics IA. The satisfactory completion of MATHS 1013 Mathematics IM is in addition to the normal requirements of this program. Students may manage their enrolment by enrolling in MATHS 1013 Mathematics IM in semester I, followed by MATHS 1011 Mathematics IA in semester 2, and MATHS 1012 Mathematics IB in summer school.

\*Students who choose to complete a Mechanical Honours Project in addition to a Petroleum Honours project must undertake both MECH ENG 4143A Mechanical Honours Project Part A and MECH ENG 4143B Mechanical Honours Project Part B in lieu of 9 units of electives. Note completion of Part B is dependent on the completion of Part A in order for 9 units to count towards the program.

BACHELOR OF ENGINEERING (HONOURS) (PETROLEUM) AND BACHELOR OF SCIENCE					
YEAR 1	S1	GEOLOGY 1103 Building a Habitable Planet <input type="checkbox"/>	PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry <input type="checkbox"/>	#MATHS 1011 Mathematics IA <input type="checkbox"/>	PHYSICS 1100 Physics IA <input type="checkbox"/>
	S2	PETROENG 1006 Introduction to Petroleum Engineering <input type="checkbox"/>	GEOLOGY 1100 Earth's Interior I <input type="checkbox"/>	MATHS 1012 Mathematics IB <input type="checkbox"/>	COMP SCI 1201 Introduction to Programming for Engineers- <b>ENG 1003 Programming (Matlab &amp; Excel)</b> <input type="checkbox"/>
YEAR 2	S1	MATHS 2201 Engineering Mathematics IA <input type="checkbox"/> <b>MATHS 2201 Differential Equations for Engineers</b>	C&ENVENG 1010 Engineering Mechanics—Statics <input type="checkbox"/> <b>CEME 1004 Engineering Mechanics – Statics</b>	PETROENG 2010 Drilling Engineering <input type="checkbox"/>	CHEM ENG 1007 Introduction to Process Engineering <input type="checkbox"/>
	S2	MATHS 2202 Engineering Mathematics IB <input type="checkbox"/> <b>MATHS 2107 Statistics &amp; Num Methods II</b>	PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties <input type="checkbox"/>	PETROENG 2001 Reservoir Thermodynamics & Fluid Properties <input type="checkbox"/>	PETROENG 2005 Sedimentology & Stratigraphy for Petroleum Engineers – <b>now only avail S1. Course advice will be required</b> <input type="checkbox"/>
YEAR 3	S1	PETROENG 3026 Formation Damage & Productivity Enhancement <input type="checkbox"/>	PETROENG 3025 Reservoir Engineering <input type="checkbox"/>	PETROENG 3005 Reservoir Characterisation & Modelling <input type="checkbox"/>	GEOLOGY 2501 Structural Geology II <input type="checkbox"/>
	S2	GEOLOGY 2505 Geochemistry <input type="checkbox"/>	GEOLOGY 2502 Igneous and Metamorphic Geology II <input type="checkbox"/>	PETROENG 3020 Production Engineering <input type="checkbox"/>	PETROENG 3019 Structural Geology & Seismic Methods <input type="checkbox"/> <b>PETROENG 2019 Structural Geology &amp; Seismic Methods</b>
YEAR 4	S1	GEOLOGY 3016 Igneous and Metamorphic Geology III <input type="checkbox"/>	GEOLOGY 3500 Exploration Methods III <input type="checkbox"/>	GEOLOGY 3008 Geophysics III <input type="checkbox"/> <b>GEOLOGY 3022 Geophysics IIIA: Potential Fields &amp; Geothermics</b>	GEOLOGY 3013 Tectonics III <input type="checkbox"/>

YEAR 5	S2	GEOLOGY 3019 Field Geoscience Program III <input type="checkbox"/>	GEOLOGY 3505 Earth Systems History III <input type="checkbox"/>	SOIL&WAT 3010 Remote Sensing III <b>GEOLOGY 3023 Geophysics IIIB Electromagnetics &amp; Seismology or SPATIAL 3010 Earth Observation III</b> <input type="checkbox"/>	GEOLOGY 3502 Mineral and Energy Resources III <input type="checkbox"/>
	S1	PETROENG 4004A Petroleum Engineering Honours Project Part 1 <input type="checkbox"/>	PETROENG 4027 Decision Making & Risk Analysis <input type="checkbox"/>	PETROENG 4035 Reservoirs, Resources & Reserves <input type="checkbox"/>	Engineering Elective <input type="checkbox"/>
	S2	PETROENG 4004B Petroleum Engineering Honours Project Part 2 <input type="checkbox"/>	PETROENG 4022 Integrated Field Development & Economics Project <input type="checkbox"/>	PETROENG 4034 Petroleum Business & Project Economics <input type="checkbox"/>	Engineering Elective <input type="checkbox"/>
<b>CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES</b>					
SEMESTER 1		PETROENG 3007 Well Testing & Pressure Transient Analysis <b>PETROENG 4012 Well Testing &amp; Pressure Transient Analysis</b> <input type="checkbox"/>	PETROENG 4033 Integrated Reservoir & Project Management <b>PETROENG 4037 Unconventional Resources &amp; Recovery</b> <input type="checkbox"/>	PETROENG 4038EX Unconventional Resources & Recovery Study Tour <input type="checkbox"/>	<input type="checkbox"/>
SEMESTER 2		PETROENG 4037 Unconventional Resources & Recovery <b>PETROENG 4064 Data Analytics in Oil and Gas Industry</b> <input type="checkbox"/>	PETROENG 3001 Reservoir Simulation <input type="checkbox"/>	PETROENG 3023 Well Completion & Stimulation <input type="checkbox"/>	<input type="checkbox"/>

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22/10/15 Administrative note only: Students will achieve a double major in Geology and Geophysics and Applied Geology but will not be recognised on the parchment at this stage due to set up as a combined degree that requires only one sub plan – in this case the sub plan recognised will be Petroleum. LS