### BACHELOR OF ENGINEERING (HONOURS) (PETROLEUM AND CHEMICAL)

| Level 1 | S1 | CHEM 1100 Chemistry IA (3 units) | PETROENG 1005 Introduction to Petroleum Geosciences & the Oil Industry (3 units) | MATHS 1011 Mathematics IA (3 units)# | CHEM ENG 1007 Introduction to Process Engineering (3 units) |   |
| Level 2 | S1 | CHEM ENG 2018 Process Fluid Mechanics (3 units) | MATHS 2201 Engineering Mathematics IIA (3 units) | CHEM ENG 2010 Principles of Process Engineering (3 units) | PETROENG 2010 Drilling Engineering (3 units) |   |
| Level 2 | S2 | PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties (3 units) | MATHS 2104 Numerical Methods II (3 units) | PETROENG 2009 Formation Evaluation, Petrophysics & Rock Properties (3 units) |   |
| Level 3 | S1 | CHEM ENG 3035 Multi-Phase Fluid & Particle Mechanics (3 units) | PETROENG 3005 Reservoir Characterisation & Modelling (3 units) | PETROENG 3025 Reservoir Engineering (3 units) |   |
| Level 3 | S2 | PETROENG 3001 Reservoir Simulation (3 units) | PETROENG 3020 Production Engineering (3 units) | PETROENG 3020 Production Engineering (3 units) |   |
| Level 4 | S1 | CHEM ENG 3024 Professional Practice III (3 units) | Chemical or Petroleum Elective (3 units) | Chemical Elective (3 units)* | CHEM ENG 4050 Advanced Chemical Engineering (3 units) |   |

*This study plan should be used to guide enrolment for the current academic year. Some students may need to modify their enrolment based on previous study (e.g. students granted advanced standing/credit, students repeating previously failed courses).*
**FACULTY OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES**

**2017 STUDY PLAN**

<table>
<thead>
<tr>
<th>LEVEL 5</th>
<th>S1</th>
<th>PETROENG 4004A Petroleum Engineering Honours Project Part 1 (3 units)</th>
<th>PETROENG 4027 Decision Making &amp; Risk Analysis (3 units)</th>
<th>PETROENG 4035 Reservoirs Resources &amp; Reserves (3 units)</th>
<th>Chemical or Petroleum Elective (3 units)</th>
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<tr>
<td>S2</td>
<td>PETROENG 4004B Petroleum Engineering Honours Project Part 2 (3 units)</td>
<td>PETROENG 4022 Integrated Field Development &amp; Economics Project (3 units)</td>
<td>PETROENG 4034 Petroleum Business &amp; Project Economics (3 units)</td>
<td>PETROENG 4037 Unconventional Resources &amp; Recovery (3 units)</td>
<td>Chemical or Petroleum Elective (3 units)</td>
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### LEVEL 5

**SEMMESTER 1**

- PETROENG 4033 Integrated Reservoir & Project Management IV (3 units)
- PETROENG 3026 Formation Damage & Productivity Enhancement (3 units)
- PETROENG 3007 Well Testing & Pressure Transient Analysis (3 units)

**SEMMESTER 2**

- PETROENG 3023 Well Completion & Stimulation (3 units)
- PETROENG 3019 Structural Geology & Seismic Methods (3 units)

### CHEMICAL ENGINEERING ELECTIVES

**SEMMESTER 1**

- CHEM ENG 4053 Pinch Analysis & Process Synthesis (3 units)
- CHEM ENG 4052 Food Process Engineering (3 units)
- CHEM ENG 4056 Research Practice (3 units)

**SEMMESTER 2**

- CHEM ENG 3036 Unit Operations Laboratory (3 units)
- CHEM ENG 4032 Composite & Multiphase Polymers (3 units)
- CHEM ENG 4054 Research Project (3 units)

### PETROLEUM ENGINEERING ELECTIVES

**SEMMESTER 1**

- PETROENG 4033 Integrated Reservoir & Project Management IV (3 units)
- PETROENG 4032 Food Process Engineering (3 units)
- CHEM ENG 4056 Research Practice (3 units)

**SEMMESTER 2**

- CHEM ENG 3036 Unit Operations Laboratory (3 units)
- CHEM ENG 4032 Composite & Multiphase Polymers (3 units)
- CHEM ENG 4054 Research Project (3 units)

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# 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 1, followed by MATHS 1011 Mathematics IA in semester 2, and MATHS 1012 Mathematics IB in summer school.

* 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.