FACULTY OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

2018 STUDY PLAN

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).

BACHELOR OF ENGINEERING (HONOURS) (CHEMICAL)

YEAR 1	S1	MATHS 1011 Mathematics IA (3 units)# ☐	CHEM 1100 Chemistry IA ☐ **or** CHEM 1101 Foundations of Chemistry IA (3 units)* ☐	CHEM ENG 1007 Introduction to Process Engineering (3 units) ☐	BIOLOGY 1101 Biology I: Molecules, Genes & Cells ☐ **or** GEOLOGY 1103 Earth Systems I **or** ☐ GEOLOGY 1104 Geology for Engineers I (3 units) ☐
	S2	MATHS 1012 Mathematics IB (3 units) ☐	CHEM 1200 Chemistry IB ☐ **or** CHEM 1201 Foundations of Chemistry IB (3 units)* ☐	CHEM ENG 1010 Professional Practice I (3 units) ☐	CHEM ENG 1011 Introduction to Process Modelling (3 units) ☐
YEAR 2	S1	CHEM ENG 2010 Principles of Process Engineering (3 units) ☐	CHEM ENG 2018 Process Fluid Mechanics (3 units) ☐	MATHS 2201 Engineering Mathematics IIA (3 units) ☐	CHEM 2530 Environmental & Analytical Chemistry II (3 units) ☐
	S2	CHEM ENG 2011 Process Engineering Thermodynamics (3 units) ☐	CHEM ENG 2016 Professional Practice II (3 units) ☐	CHEM ENG 2014 Heat & Mass Transfer (3 units) ☐	CHEM ENG 2013 Advanced Process Modelling **or** CHEM ENG 2019 Introduction to Minerals Processing (3 units) ☐
YEAR 3	S1	CHEM ENG 3024 Professional Practice III (3 units) ☐	CHEM ENG 3035 Multi-Phase Fluid & Particle Mechanics (3 units) ☐	CHEM ENG 3034 Kinetics & Reactor Design (3 units) ☐	CHEM ENG 3029 Materials Science & Engineering (3 units) ☐
	S2	CHEM ENG 3036 Unit Operations Laboratory (3 units) ☐	CHEM ENG 3030 Simulation & Concept Design (3 units) ☐	CHEM ENG 3031 Process Control & Instrumentation (3 units) ☐	CHEM ENG 3033 Separation Processes (3 units) ☐
YEAR 4	S1	CHEM ENG 4034 Professional Practice IV (3 units) ☐	CHEM ENG 4056 Research Practice (3 units) ☐	CHEM ENG 4050 Advanced Chemical Engineering (3 units) ☐	Elective (3 units) ☐
	S2	CHEM ENG 4014 Plant Design Project (6 units) ☐		CHEM ENG 4054 Research Project (3 units) ☐	Elective (3 units) ☐

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CHOOSE FROM THE FOLLOWING ELECTIVES				
SEMESTER 1	CHEM ENG 4059 Pyrometallurgy (3 units) ☐	CHEM ENG 4046 Combustion Processes (3 units) ☐	CHEM ENG 4053 Pinch Analysis & Process Synthesis (3 units) ☐	CHEM ENG 4051 Water & Wastewater Engineering (3 units) ☐
SEMESTER 2	CHEM ENG 4048 Bio-Fuels, Biomass & Waste (3 units) ☐	CHEM ENG 4058 Hydrometallurgy & Electrometallurgy (3 units) ☐	☐	☐

#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 with a subject achievement grade of at least C+ in SACE Stage 2 Chemistry (or equivalent) must enrol in CHEM1100 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.

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BACHELOR OF ENGINEERING (HONOURS) (CHEMICAL) – Semester 2 Start

YEAR 1	S 2	MATHS 1011 Mathematics IA (3 units)# ☐	CHEM 1200 Chemistry IB ☐ **or** CHEM 1201 Foundations of Chemistry IB (3 units)* ☐	CHEM ENG 1010 Professional Practice I (3 units) ☐	CHEM ENG 1011 Introduction to Process Modelling (3 units) ☐
YEAR 2	S 1	MATHS 1012 Mathematics IB (3 units) ☐	CHEM 1100 Chemistry IA ☐ **or** CHEM 1101 Foundations of Chemistry IA (3 units)* ☐	CHEM ENG 1007 Introduction to Process Engineering (3 units) ☐	BIOLOGY 1101 Biology I: Molecules, Genes & Cells **or** GEOLOGY 1103 Earth Systems I **or** GEOLOGY 1104 Geology for Engineers I (3 units) ☐
	S 2	CHEM ENG 2011 Process Engineering Thermodynamics (3 units) ☐	CHEM ENG 2016 Professional Practice II (3 units) ☐	CHEM ENG 2014 Heat & Mass Transfer (3 units) ☐	CHEM ENG 2013 Advanced Process Modelling **or** CHEM ENG 2019 Introduction to Minerals Processing (3 units) ☐
YEAR 3	S 1	CHEM ENG 2010 Principles of Process Engineering (3 units) ☐	CHEM ENG 2018 Process Fluid Mechanics (3 units) ☐	MATHS 2201 Engineering Mathematics IIA (3 units) ☐	CHEM 2530 Environmental & Analytical Chemistry II (3 units) ☐
	S 2	CHEM ENG 3036 Unit Operations Laboratory (3 units) ☐	CHEM ENG 3030 Simulation & Concept Design (3 units) ☐	CHEM ENG 3031 Process Control & Instrumentation (3 units) ☐	CHEM ENG 3033 Separation Processes (3 units) ☐
YEAR 4	S 1	CHEM ENG 4034 Professional Practice IV (3 units) ☐	CHEM ENG 4056 Research Practice (3 units) ☐	CHEM ENG 3034 Kinetics & Reactor Design (3 units) ☐	CHEM ENG 3024 Professional Practice III (3 units) ☐
	S 2	CHEM ENG 4014 Plant Design Project (6 units)		CHEM ENG 4054 Research Project (3 units) ☐	Elective (3 units) ☐
YEAR 5	S 1	CHEM ENG 3035 Multi-Phase Fluid & Particle Mechanics (3 units) ☐	CHEM ENG 4050 Advanced Chemical Engineering (3 units) ☐	Elective (3 units) ☐	CHEM ENG 3029 Materials Science & Engineering (3 units) ☐

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