

FACULTY OF ENGINEERING, COMPUTER AND MATHEMATICAL SCIENCES

2017 STUDY PLAN



FOR ADVANCED STANDING - OFFICE USE ONLY								
<input checked="" type="checkbox"/> Please mark the box to indicate advanced standing granted (use CONDITIONAL to denote conditional advanced standing)								
Unspecified Elective Credit:	Level 1:	units	Level 2:	units	Level 3:	units	Level 4:	units
Student ID Number:			Student Name:			Date:		
Assessor Name:			Advanced Standing Granted: units			Remaining Program Duration: 5 years		
Applicant's Previous Institution:			Applicant's Previous Qualification:					
Assessor's Comments:								

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) WITH BACHELOR OF MATHEMATICAL AND COMPUTER SCIENCES (Computer Science Major)					
YEAR 1	S1	MATHS 1011 Mathematics IA (3 units)# <input type="checkbox"/>	CHEM 1100 Chemistry IA or CHEM 1101 Foundations of Chemistry IA (3 units)* <input type="checkbox"/>	CHEM ENG 1007 Introduction to Process Engineering (3 units) <input type="checkbox"/>	COMP SCI 1201 Introduction to Programming for Engineers (3 units) <input type="checkbox"/>
	S2	MATHS 1012 Mathematics IB (3 units) <input type="checkbox"/>	CHEM 1200 Chemistry IB or CHEM 1201 Foundations of Chemistry IB (3 units)* <input type="checkbox"/>	CHEM ENG 1010 Professional Practice I (3 units) <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming (3 units) <input type="checkbox"/>
YEAR 2	S1	CHEM ENG 2010 Principles of Process Engineering (3 units) <input type="checkbox"/>	CHEM ENG 2018 Process Fluid Mechanics (3 units) <input type="checkbox"/>	MATHS 2201 Engineering Maths IIA (3 units) <input type="checkbox"/>	COMP SCI 2103 Algorithm Design & Data Structures for Engineers (3 units) <input type="checkbox"/>
	S2	CHEM ENG 2011 Process Engineering Thermodynamics (3 units) <input type="checkbox"/>	CHEM ENG 2016 Professional Practice II (3 units) <input type="checkbox"/>	CHEM ENG 2014 Heat & Mass Transfer (3 units) <input type="checkbox"/>	COMP SCI 2201 Algorithm & Data Structure Analysis (3 units) <input type="checkbox"/>
YEAR 3	S1	CHEM ENG 3024 Professional Practice III (3 units) <input type="checkbox"/>	CHEM ENG 3035 Multi-Phase Fluid & Particle Mechanics (3 units) <input type="checkbox"/>	CHEM ENG 3034 Kinetics & Reactor Design (3 units) <input type="checkbox"/>	CHEM 2530 Environmental & Analytical Chemistry II (3 units) <input type="checkbox"/>
	S2	CHEM ENG 3036 Unit Operations Laboratory (3 units) <input type="checkbox"/>	CHEM ENG 3030 Simulation & Concept Design (3 units) <input type="checkbox"/>	CHEM ENG 3031 Process Control & Instrumentation (3 units) <input type="checkbox"/>	CHEM ENG 2013 Advanced Process Modelling (3 units) <input type="checkbox"/>

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YEAR 4	S1	CHEM ENG 3029 Materials Science & Engineering (3 units) <input type="checkbox"/>	Level II or III Computer Science Elective (3 units)+ <input type="checkbox"/>	Level III Computer Science Elective (3 units)+ <input type="checkbox"/>	COMP SCI 2000 Computer Systems (3 units) <input type="checkbox"/>
	S2	CHEM ENG 3033 Separation Processes (3 units) <input type="checkbox"/>	COMP SCI 3006 Software Engineering & Project (3 units) <input type="checkbox"/>	Level III Computer Science Elective (3 units)+ <input type="checkbox"/>	Level III Computer Science Elective (3 units)+ <input type="checkbox"/>
YEAR 5	S1	CHEM ENG 4034 Professional Practice IV (3 units) <input type="checkbox"/>	CHEM ENG 4056 Research Practice (3 units) <input type="checkbox"/>	CHEM ENG 4050 Advanced Chemical Engineering (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>
	S2	CHEM ENG 4014 Plant Design Project (6 units) <input type="checkbox"/>		CHEM ENG 4054 Research Project (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>

CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES

SEMESTER 1	CHEM ENG 4059 Pyrometallurgy(3 units) <input type="checkbox"/>	CHEM ENG 4046 Combustion Processes (3 units) <input type="checkbox"/>	CHEM ENG 4053 Pinch analysis & Process Synthesis (3 units) <input type="checkbox"/>	CHEM ENG 4051 Water & Waste Water Engineering (3 units) <input type="checkbox"/>
SEMESTER 2	CHEM ENG 4048 Bio-Fuels, Biomass & Wastes (3 units) <input type="checkbox"/>	CHEM ENG 4058 Hydrometallurgy & Electrometallurgy (3 units) <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

+Level III Computer Science Elective may be chosen from those listed in the Program Rules for the degree of Bachelor of Mathematical and Computer Sciences

*Students with a subject achievement grade of at least C+ in SACE Stage 2 Chemistry (or equivalent) must enrol in CHEM 1100 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 IB.

#Students who have not passed SACE Stage 2 Specialist Maths (or equivalent) 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.

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Applicant's Previous Institution:			Applicant's Previous Qualification:					
Assessor's Comments:								

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BACHELOR OF ENGINEERING (HONOURS) (CHEMICAL) WITH BACHELOR OF MATHEMATICAL AND COMPUTER SCIENCES (Computer Science Major) – Semester 2 Start					
YEAR 1	S	MATHS 1011 Mathematics IA (3 units)# <input type="checkbox"/>	CHEM 1200 Chemistry IB or CHEM 1201 Foundations of Chemistry IB (3 units)* <input type="checkbox"/>	CHEM ENG 1010 Professional Practice I (3 units) <input type="checkbox"/>	COMP SCI 1201 Introduction to Programming for Engineers (3 units) <input type="checkbox"/>
	2				
YEAR 2	S	MATHS 1012 Mathematics IB (3 units) <input type="checkbox"/>	CHEM 1100 Chemistry IA or CHEM 1101 Foundations of Chemistry IA (3 units)* <input type="checkbox"/>	CHEM ENG 1007 Introduction to Process Engineering (3 units) <input type="checkbox"/>	COMP SCI 1102 Object Oriented Programming (3 units) <input type="checkbox"/>
	S	CHEM ENG 2011 Process Engineering Thermodynamics (3 units) <input type="checkbox"/>	CHEM ENG 2016 Professional Practice II (3 units) <input type="checkbox"/>	CHEM ENG 2014 Heat & Mass Transfer (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>
YEAR 3	S	CHEM ENG 2010 Principles of Process Engineering (3 units) <input type="checkbox"/>	CHEM ENG 2018 Process Fluid Mechanics (3 units) <input type="checkbox"/>	MATHS 2201 Engineering Maths IIA (3 units) <input type="checkbox"/>	COMP SCI 2103 Algorithm Design & Data Structures for Engineers (3 units) <input type="checkbox"/>
	S	CHEM ENG 2013 Advanced Process Modelling (3 units) <input type="checkbox"/>	CHEM ENG 3030 Simulation & Concept Design (3 units) <input type="checkbox"/>	CHEM ENG 3031 Process Control & Instrumentation (3 units) <input type="checkbox"/>	COMP SCI 2201 Algorithm & Data Structure Analysis (3 units) <input type="checkbox"/>
YEAR 4	S	CHEM ENG 3024 Professional Practice III (3 units) <input type="checkbox"/>	CHEM ENG 3035 Multi-Phase Fluid & Particle Mechanics (3 units) <input type="checkbox"/>	CHEM ENG 3034 Kinetics & Reactor Design (3 units) <input type="checkbox"/>	COMP SCI 2000 Computer Systems (3 units) <input type="checkbox"/>

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	S 2	CHEM ENG 3036 Unit Operations Laboratory (3 units) <input type="checkbox"/>	CHEM ENG 3033 Separation Processes (3 units) <input type="checkbox"/>	COMP SCI 3006 Software Engineering & Project (3 units) <input type="checkbox"/>	Level III Computer Science Elective (3 units)+ <input type="checkbox"/>
YEAR 5	S 1	CHEM ENG 4034 Professional Practice IV (3 units) <input type="checkbox"/>	CHEM ENG 4056 Research Practice (3 units) <input type="checkbox"/>	CHEM ENG 4050 Advanced Chemical Engineering (3 units) <input type="checkbox"/>	CHEM ENG 3029 Materials Science & Engineering (3 units) <input type="checkbox"/>
	S 2	CHEM ENG 4014 Plant Design Project (6 units) <input type="checkbox"/>		CHEM ENG 4054 Research Project (3 units) <input type="checkbox"/>	Engineering Elective (3 units) <input type="checkbox"/>
YEAR 6	S 1	Level II or III Computer Science Elective (3 units)+ <input type="checkbox"/>	Level III Computer Science Elective (3 units)+ <input type="checkbox"/>	Level III Computer Science Elective (3 units)+ <input type="checkbox"/>	CHEM 2530 Environmental & Analytical Chemistry II (3 units) <input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CHOOSE FROM THE FOLLOWING ENGINEERING ELECTIVES

SEMESTER 1	CHEM ENG 4059 Pyrometallurgy (3 units) <input type="checkbox"/>	CHEM ENG 4046 Combustion Processes (3 units) <input type="checkbox"/>	CHEM ENG 4053 Pinch analysis & Process Synthesis (3 units) <input type="checkbox"/>	CHEM ENG 4051 Water & Waste Water Engineering (3 units) <input type="checkbox"/>
SEMESTER 2	CHEM ENG 4048 Bio-Fuels, Biomass & Wastes (3 units) <input type="checkbox"/>	CHEM ENG 4058 Hydrometallurgy & Electrometallurgy (3 units) <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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