

DOUBLE PROGRAM

B.E.(Chemical)/B.Sc. Academic Plan 2008

Year 1 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	CHEM ENG	1008	Engineering Computing	3.0
Sem 1	CHEM ENG	1010	Professional Practice 1	3.0
Sem 1	MATHS	1011	Mathematics IA * <i>or</i>	
Sem 1	MATHS	1013	Mathematics IMA *	3.0
Sem 1	CHEM	1100	Chemistry IA	3.0
				12.0
Sem 2	CHEM ENG	1009	Materials 1	3.0
Sem 2	CHEM ENG	1007	Process Engineering 1	3.0
Sem 2	MATHS	1012	Mathematics IB * <i>or</i>	
Sem 2	MATHS	1011	Mathematics IA *	3.0
Sem 2	CHEM	1200	Chemistry IB	3.0
				12.0

* Students who have not taken SACE Stage 2 Specialist Maths will be required to enrol in Mathematics IMA followed by Mathematics IA and Mathematics IB. It is strongly recommended that students should enrol in Mathematics IB in summer semester 2009 to complete the requirements at Level 1. The satisfactory completion of Mathematics IMA is in addition to the normal requirements of the B.E. Plan but a requirement for students who do not have SACE Stage 2 Specialist Maths. Enrolment in summer will enable students to complete the program in the minimum amount of time.

Year 2 - 26 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	CHEM ENG	2001	Chemical Process Principles II	3.0
Sem 1	APP MTH	2000	Differential Equations and Fourier Series	2.0
Sem 1	CHEM ENG	2003	Introductory Process Fluid Mechanics	3.0
Sem 1	CHEM	2100	Chemistry IIA <i>or</i>	
Sem 1			Another Level II Science course to the value of 4 units	4.0
				12.0
Sem 2	CHEM ENG	2000	Chemical Engineering Thermodynamics **	2.0
Sem 2	CHEM ENG	3002	Essay and Seminar	2.0
Sem 2	STATS	2004	Laplace Transforms and Probability and Statistical Methods	2.0
Sem 2	APP MTH	2004	Numerical Methods in Engineering (Chemical)	2.0
Sem 2	CHEM ENG	2006	Plant and Process Engineering	2.0
Sem 2	CHEM	2200	Chemistry IIB <i>or</i>	
Sem 2			Another Level II Science course to the value of 4 units	4.0
				14.0

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Year 3 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	CHEM ENG	3003A	Chemical Engineering Projects III Part 1	2.0
Sem 1	CHEM ENG	4024	Environmental Engineering	2.0
Sem 1	CHEM ENG	3018	Fluid and Particle Mechanics	3.0
Sem 2	CHEM ENG	3010	Introduction to Biochemical Engineering	2.0
Sem 1	CHEM ENG	3017	Kinetics and Reactor Design	3.0
Sem 1	CHEM ENG	3001	Materials III (CH)	2.0
				14.0
Sem 2	CHEM ENG	3003B	Chemical Engineering Projects III Part 2	2.0
Sem 2	CHEM ENG	3015	Process Control and Instrumentation	2.0
Sem 2	CHEM ENG	3014	Process Design and Plant Engineering	2.0
Sem 2	CHEM ENG	3005	Separation Processes	2.0
Sem 2	CHEM ENG	3006	Transport Phenomena	2.0
				10.0

Year 4 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1			Level III Science courses (requires major sequ.)	12.0
Sem 2			Level III Science courses (requires major sequ.)	12.0

Year 5 - 24 units

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	CHEM ENG	4009	Advanced Chemical Engineering	2.0
Sem 1	CHEM ENG	4010	Advanced Separation Techniques and Thermal Processes	2.0
Sem 1	CHEM ENG	4025	Chemical Engineering Projects IV	2.0
Sem 1	CHEM ENG	4003	Process Dynamics and Control	2.0
				8.0
Sem 2	CHEM ENG	4027	Chemical Engineering Research Project (N)* or	
Sem 2	CHEM ENG	4026	Chemical Engineering Research Project (H)*	2.0
Sem 2	CHEM ENG	4018	Industrial Economics and Management	2.0
Sem 2	CHEM ENG	4014	Plant Design Project	6.0
				10.0
Elective courses to the value of at least 6 units				6.0

* Students accepted into the Honours stream will take Chemical Engineering Research Project (H) and other students will take Chemical Engineering Research Project (N).

ELECTIVES

<i>Term</i>	<i>Subject Area</i>	<i>Catalogue Number</i>	<i>Course Description</i>	<i>Units</i>
Sem 1	CHEM ENG	4008	Biochemical Engineering	2.0
Sem 1	CHEM ENG	4002A	Chemical Engineering Research Elective II Part 1 *	2.0
Sem 1	CHEM ENG	4020A	Chemical Engineering Research Elective Part 1	1.0
Sem 1	CHEM ENG	4021	Combustion Processes	2.0
Sem 1	APP MTH	4007	Computational Fluid Dynamics (Engineering)	2.0
Sem 1	CHEM ENG	4024	Environmental Engineering	2.0
Sem 1	CHEM ENG	4004	Minerals Processing	2.0
Sem 1	CHEM ENG	4001	Special Studies in Chemical Engineering	2.0
Sem 2	CHEM ENG	4002B	Chemical Engineering Research Elective II Part 2 *	2.0
Sem 2	CHEM ENG	4020B	Chemical Engineering Research Elective Part 2	1.0
Sem 2	CHEM ENG	4001	Special Studies in Chemical Engineering	2.0

* Approval is needed from the Head of the School of Chemical Engineering to enrol in this course

Note either pre-requisites, co-requisites or restrictions may be placed on courses (refer to 2008 Calendar or 2008 On-line Course Planner)