

Table 4b.

NEW B.S. Degree in Applied Chemical Engineering

COURSE			TITLE			LT LB CR			COURSE			TITLE			LT LB CR		
First Year (Preparatory)																	
ENGL	001	Preparatory English I	15	5	8	ENGL	002	Preparatory English II	15	5	8						
MATH	001	Preparatory Mathematics I	3	1	4	MATH	002	Preparatory Math II	3	1	4						
PYP	001	Prep. Physical Sciences	2	0	2	PYP	002	Prep. Computer Sciences	0	2	1						
PYP	003	University Study Skills	0	2	1	ME	003	Prep. Eng. Technology	0	2	1						
PE	001	Preparatory Physical Educ I	0	2	1	PE	002	Preparatory Phys Educ II	0	2	1						
			20	10	16				18	12	15						
Total credits required in Preparatory Program: 31																	
Second Year (Freshman)																	
MATH	101	Calculus I	4	0	4	MATH	102	Calculus II	4	0	4						
CHEM	101	General Chemistry I	3	4	4	CHEM	102	General Chemistry II	3	4	4						
PHYS	101	General Physics I	3	3	4	PHYS	102	General Physics II	3	3	4						
ENGL	101	An Intro to Academic Disc	3	0	3	ENGL	102	Introduction to Report Wr	3	0	3						
ICS	103	Computer Programming in C	2	3	3	IAS	101	Practical Grammar	2	0	2						
PE	101	Physical Education I	0	2	1	PE	102	Physical Education II	0	2	1						
			15	12	19				15	9	18						
Third Year (Sophomore)																	
CHE	201	Principles of Chem. Engg. I	3	2	3	CHE	202	Principles of Chem. Engg. II	2	2	2						
CHEM	201	Organic Chemistry I	3	4	4	CHE	204	Transport Phenomena I	3	0	3						
MATH	201	Calculus III	3	0	3	BIOL	233	Principles of Biology	2	3	3						
ENGL	214	Academic & Professional C	3	0	3	MATH	202	Elementary Diff. Eq.	3	0	3						
IAS	111	Belief and its Consequences	2	0	2	ME	205	Materials Science	2	3	3						
			14	6	15	IAS	201	Writing For Prof. Needs	2	0	2						
									14	8	16						
Fourth Year (Junior)																	
CHE	300	Transport Phenomena II	3	0	3	CHE	306	Stagewise Separations	3	0	3						
CHE	303	Chem. Engg. Thermo.	3	0	3	CHE	309	Chem. Engg Lab I	0	6	2						
CHE	304	Transport Phenomena III	3	0	3	CHEM	323	Analytical Chemistry	2	4	3						
CHEM	311	Physical Chemistry I	3	4	4	STAT	319	Probability & Stats. for Engrs.	2	3	3						
CISE	301	Numerical Methods	3	0	3	IAS	301	Oral Communication Skills	2	0	2						
IAS	212	Professional Ethics	2	0	2	GS	XXX	General Studies Elective	3	0	3						
			17	4	18	CHE	401	Process Dynamics and Cont.	3	0	3						
									15	13	19						
Summer Session																	
			CHE 350 Cooperative Work			0	0	0									
Fifth Year (Senior)																	
CHE	352	Cont. of Cooperative Work	0	0	9	CHE	402	Kinetics & Reactor Design	3	0	3						
			0	0	9	CHE	409	Chem. Engg. Lab II	0	6	2						
						CHE	425	Process Design and Econ.	3	0	3						
						CHE	495	Integrated Design Course	1	6	3						
						CHE	4XX	Chem Engg Elective	3	0	3						
						XE	XXX	Technical Elective	3	0	3						
						IAS	322	Human Rights in Islam	2	0	2						
									15	12	19						