



BS CHEMICAL ENGINEERING

CURRICULUM TABLE

**Please refer to the KEY at the end of this document for abbreviations.*

Term 1

Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
FCH 150 Gen Chem. I	3	NS	3	3	X		
FCH 151 Gen Chem. Lab I	1	NS	1	1	X		
Gen Ed	3	NS	3	3	X		
APM 205 Calculus I	4	M	4	4	X		
EWP 190 Writing & Environment	3	BC	3	3	X		
ECH 132 Intro to Chem Eng. I	1			1			
Term Credit Totals	15	15	15	15	15		

Term 2

Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
FCH 152 Gen Chem. II	3	NS	3	3	X		Gen. Chem. I
FCH 153 Gen. Chem. Lab II	1	NS	1	1	X		Gen. Chem. Lab I
PHY 211 Gen. Physics I	3	NS	3	3	X		Gen. Phy. I
PHY Gen. Physics Lab I	1	NS	1	1	X		Gen. Phy. Lab I
APM 206 Calculus II	4	M	4	4	X		Calc. I



Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
GNE 160 Computing Methods	3		3	3	X		Calc. I and II
ECH 133 Intro to Chem Eng II	1			1			
Term Credit Totals	16	12	15	16	15		

Term 3

Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
FCH 221 Organic Chem. I	3	NS	3	3	X		
FCH 222 Organic Chem. Lab I	1	NS	1	1	X		
APM 307 Multivariable Calculus	4	M	4	4	X		Calculus II
ECH 202 Principles of Mass & Energy Balances	3			3	X		
ECH 212 Engineering Thermodynamics	3	3		3	X		
BIO121 General Biology I/Lab	4	4	4	4			
Term Credit Totals	18	15	12	18	14		

Term 4

Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
FCH 223 Organic Chemistry II	3		3	3	X		
FCH 224 Organic Chemistry II Lab	1		1	1	X		
EWP 290 Writ Humanities	3	H	3	3	X		
Gen Ed	3			3	X		
PHY 212/222 Physics II/Lab	4			4			ECH 212
APM 485 Differential Equations	3			3	X		



Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
Total Credit Totals	17	3	7	17	13		

Term 5

Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
APM 395 Probability and Statistics for Engineers	3			3			
FOR 207 Intro. To Economics	3	SS	3	3			
ECH 312 Chem Eng Thermo/Colliods	3			3			
ECH 324 Chem Eng Lab I	3			2			
				1			
ECH 322 Fluid Mechanics	3			3			
ECH 498/304/306 Professional Experience	2			2			
Term Credit Totals	17	0	3	17			

Term 6

Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
ECH 355 Engineering Design Economics	3			3			
ECH 341 Chemical Reaction Engineering Kinetics	3			3			
ECH 371 Process Control	3			3			
ECH 323 Transport Phenomena	3	3		3			
ESF 200/Information Lit	1						
EWP 444 Prof Writing	2						



Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
Term Credit Totals	15		0	15			

Term 7

Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
ECH 442 Chemical Reaction Engg & Process Safety	3			3			
Elective	3			3			
ECH 454 Chem Eng Product Design	3			3			
ECH 422 Unit Process Operations	3			3			
Elective	3			3			
Term Credit Totals	15	0	0	15			

Term 8

Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
ECH 457 Engineering Capstone Design	3			3			
ECH 455 Capstone Chemical Engineering Lab	3			3			
Elective	2			2			
Elective	3			3			



Course Number & Title	Credits	GER	LAS	MAJ	TPath	New	Co/Prerequisites
Elective	3			3			
Term Credit Totals	14	0	0	14			

Program	Total Credits
SUNY GER	44
LAS	51
Major	127
Elective & Other	20
Upper Division	59
Upper Division Major	59
Number of SUNY GER Categories	

KEY Cr: credits **GER:** [SUNY General Education Requirement](#) (Enter Category Abbreviation) **LAS:** [LAS](#) (Enter credits) **Maj:** Major requirement (Enter credits) **TPath:** [SUNY Transfer Path Courses](#) (Enter credits) **New:** new course (Enter X) **Co/Prerequisite(s):** list co/prerequisite(s) for the noted courses
Upper Division: Courses intended primarily for juniors and seniors **SUNY GER Category Abbreviations:** American History (AH), Basic Communication (BC), Foreign Language (FL), Humanities (H), Math (M), Natural Sciences (NS), Other World Civilizations (OW), Social Science (SS), The Arts (AR), Western Civilization (WC)