

Chemical Engineering, BSChE

To obtain a Bachelor of Science degree in Chemical Engineering, students are required to complete the general education requirements for engineering majors and the following courses:

Code	Title	Semester Hours
Charger Foundations		
College General Education Requirements		36
Additional Basic Sciences Semester Hours		
CH 123 & CH 126	GENERAL CHEMISTRY II and GENERAL CHEMISTRY LAB II	4
CH 331 & CH 335	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY LAB I	4
CH 332	ORGANIC CHEMISTRY II	3
CH 341	PHYSICAL CHEMISTRY I	3
BYS 311	INTRO MOLECULAR UNDSST BIO SYST	3
Engineering Core for Chemical Engineering		
CHE 244	INTRO TO CHEM ENGRG SYSTEMS	3
CHE 294	NATURE & PROPERTIES OF MATLS	3
EE 213	ELECTRICAL CIRCUIT ANALYSIS I	3
MAE 271	STATICS	3
Chemical Engineering Option		
CHE 201	INTRO CHEMICAL ENGR PROCESS	2
CHE 295	NATURE & PROPERTIES MATLS LAB	1
CHE 342	TRANSPORT PHENOMENA	3
CHE 344	CHEM ENGR THERMODYNAMICS	3
MAE 310	FLUID MECHANICS I	3
CHE 347	QUANTITATIVE MODELING FOR CHE	3
CHE 439	UNIT OPERATIONS I	2
CHE 440	UNIT OPERATIONS II	2
CHE 441	CHEM KINETICS & REACTOR DESIGN	3
CHE 443	MASS TRANSFER OPERATIONS	3
CHE 445	CHEMICAL PROCESS CONTROL	3
CHE 446	ANAL & DESIGN TRANSPORT EQUIP	3
CHE 448	CHEMICAL ENGINEERING DESIGN	3
CHE 485	PROCESS SAFETY & TOXICOLOGY	3
Total Semester Hours		102

Suggested Schedule for Full-Time Students

Year 1		Semester Hours
Fall		
MA 171	CALCULUS A	4
CH 121	GENERAL CHEMISTRY I	3
CH 125	GENERAL CHEMISTRY LAB I	1
FYE 101	CHARGER SUCCESS	1
EH 101	COLLEGE WRITING I	3
CHE 201	INTRO CHEMICAL ENGR PROCESS	2
HSBS/HFA		3
Term Semester Hours:		17
Spring		
MA 172	CALCULUS B	4

PH 111	GEN PHYSICS W/CALCULUS I	3
PH 114	GENERAL PHYSICS LAB I	1
EH 102	COLLEGE WRITING II	3
CH 123	GENERAL CHEMISTRY II	3
CH 126	GENERAL CHEMISTRY LAB II	1
Term Semester Hours:		15
Year 2		
Fall		
MA 201	CALCULUS C	4
PH 112	GEN PHYSICS W/CALC II	3-4
PH 115	GENERAL PHYSICS LAB II	1
CH 331	ORGANIC CHEMISTRY I	3
CH 335	ORGANIC CHEMISTRY LAB I	1
HSBS/HFA		3
Term Semester Hours:		15-16
Spring		
MA 238	APPL DIFFERENTIAL EQUATIONS	3
CH 332	ORGANIC CHEMISTRY II	3
MAE 271	STATICS	3
BYS 311	INTRO MOLECULAR UNDSST BIO SYST	3
CHE 244	INTRO TO CHEM ENGRG SYSTEMS	3
HSBS/HFA		3
Term Semester Hours:		18
Year 3		
Fall		
MAE 310	FLUID MECHANICS I	3
CHE 347	QUANTITATIVE MODELING FOR CHE	3
CH 341	PHYSICAL CHEMISTRY I	3
CHE 294	NATURE PROPERTIES OF MATLS	3
CHE 295	NATURE PROPERTIES MATLS LAB	1
CHE Con Class 1		3
Term Semester Hours:		16
Spring		
EE 213	ELECTRICAL CIRCUIT ANALYSIS I	3
CHE 342	TRANSPORT PHENOMENA	3
CHE 344	CHEM ENGR THERMODYNAMICS	3
HSBS/HFA		3
Term Semester Hours:		12
Year 4		
Fall		
CHE 443	MASS TRANSFER OPERATIONS	3
CHE 446	ANAL DESIGN TRANSPORT EQUIP	3
CHE 441	CHEM KINETICS REACTOR DESIGN	3
CHE 439	UNIT OPERATIONS I	2
CHE Con Class 2		3
Term Semester Hours:		14
Spring		
CHE 443	MASS TRANSFER OPERATIONS	3
CHE 448	CHEMICAL ENGINEERING DESIGN	3
CHE 445	CHEMICAL PROCESS CONTROL	3
CHE 440	UNIT OPERATIONS II	2
CHE Con Class 3		3

Technical Elective		3
	Term Semester Hours:	17
	Total Semester Hours:	124-125