

Chemical Engineering, B.S.

Accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org/>.

Course	Title	Semester Credit Hours
Freshman Year		
Semester 1		
CHEM 1311 & CHEM 1111	General Chemistry I and General Chemistry I Lab	4
Rhetoric & Composition		3
MATH 2413	Calculus I	4
Government/Political Science		3
GEEN 1201	Engineering as a Career	2
Semester Credit Hours		16
Semester 2		
CHEM 1312 & CHEM 1112	General Chemistry II and General Chemistry II Lab	4
Rhetoric & Composition		3
MATH 2414	Calculus II	4
PHYS 2325 & PHYS 2125	University Physics I and University Physics I Lab	4
Semester Credit Hours		15
Sophomore Year		
Semester 1		
CHEM 3323 & CHEM 3123	Organic Chemistry I and Organic Chemistry Lab I	4
CHEN 2371	Conservation Principles I	3
American History		3
MATH 3320	Differential Equations	3
Lang/Phil/Culture		3
Semester Credit Hours		16
Semester 2		
CHEM 3325 & CHEM 3125	Organic Chemistry II and Organic Chemistry Lab II	4
CHEN 2372	Conservation Principles II	3
MEEN 2355	Statics and Dynamics	3
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4
Social/Behavioral		3
Semester Credit Hours		17
Junior Year		
Semester 1		
CHEM 3331	Physical Chemistry I	3
CHEN 4311	Biochemical Engineering	3
IEEN 2310	Appl. Meth. in Engr. Stat. I	3
CHEN 3347	Chem Eng Thermodynamics I	3
CHEN 3392	Fluid Transport Phenomena	3
Communication		3
Semester Credit Hours		18
Semester 2		
CHEN 3310	Heat Transport Phenomena	3
CHEN 3315	Chem Process Design Economics	3

CHEN 3321	Process Simulation	3
CHEN 3371	Chemical Thermodynamics II	3
Select 1 of the following Electives: ¹		1
CHEN 4399	Internship in CHEN	
CHEN 4120	Seminar in CHEN	
CHEN 4130	Service Learning in CHEN	
Semester Credit Hours		13
Senior Year		
Semester 1		
CHEN 4278	Unit Operations Lab I	2
CHEN 4316	Chemical Process Design I	3
CHEN 4341	Chemical Process Safety	3
CHEN 4373	Chemical Reactor Engineering	3
CHEN 4389	Mass Transport Phenomena	3
Semester Credit Hours		14
Semester 2		
CHEN 4279	Unit Operations Lab II	2
CHEN 4317	Chem Process Design II (WI)	3
CHEN 4492	Process Dynamics and Control	4
American History		3
Government/Political Science		3
Creative Arts		3
Semester Credit Hours		18
Total Credit Hours Required:		127

¹ These courses may be repeated. However, only one hour may be used for the degree.