

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	Gen Inorganic Chemistry I and Gen Inorganic Chem Lab I	4
ENGL 1301	Rhetoric and Composition	3
MATH 2413	Calculus I	4
POLS 2301	Government and Politics of US	3
GEEN 1201	Engineering as a Career ¹	2
Semester Credit Hours		16
Semester 2		
CHEM 1312 & CHEM 1112	Gen Inorganic Chemistry II and Gen Inorganic Chem Lab II	4
ENGL 1302	Rhetoric and 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
HIST 1301	American History to 1877	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
IEEN 2310	Appl. Meth. in Engr. Stat. I	3
CHEN 3347	Chem Eng Thermodynamics I	3
CHEN 3392	Fluid Transport Phenomena	3
POLS 2302	Government and Politics of TX	3
Communications		3
Semester Credit Hours		18
Semester 2		
CHEM 3332	Physical Chemistry II	3
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: ²		1
CHEN 4399	Internship in CHEN	
CHEN 4120	Seminar in CHEN	
CHEN 4130	Service Learning in CHEN	
Semester Credit Hours		16
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 4311	Biochemical Engineering	3
CHEN 4317	Chem Process Design II (WI)	3
CHEN 4492	Process Dynamics and Control	4
HIST 1302	American History since 1877	3
Creative arts		3
Semester Credit Hours		18
Total Credit Hours Required:		130

¹ Pre-Engineering Students and Alternate Pre-Engineering Students are required to take UNIV 1201 instead of GEEN 1201.

² These courses may be repeated, however, only one hour may be used for the degree.

Electives

Electives are selected from the following:

Creative Arts Electives

Code	Title	Semester Credit Hours
ARTS 1303	Art History I	3
ARTS 1304	Art History II	3
MUSI 2308	History of Jazz	3
MUSI 2310	History of Rock and Roll	3

Communications Elective

Code	Title	Semester Credit Hours
ENGL 2374	Professional Communication	3
COMS 2374	Professional Communication	3

Lang/Phil/Culture Elective

Any 2000 level course satisfying the General Education Requirement.