Table 5-1. Curriculum.
Chemical Engineering: Bachelor of Science

Course (Department, Number, Title) List all courses in the program by term starting with the first term of the first year and ending with the last term of the final year.	Indicate whether course is Required, Elective or a Selected Elective by an R, an E or an SE.[1]	Subject Area (Credit Hours)			Last Two Terms the Course was Offered: Year and, Semester, or Quarter	Maximum Section Enrollment for the Last Two Terms the Course was Offered[2]
		Math & Basic Sciences	Engineering Topics; Check if Contains Significant Design (✓)	Other		
First-Year Fall:						
MATH 112: Calculus of Functions of One Variable I	R	4			F19, SP20	139
CHEM 161: General Chemistry I	R	4			F19, SP20	258
CHEM 134L: General Chemistry Laboratory I	R	2			F19, SP20	282
Two Humanities/Social Science/Writing/Language Electives	SE			8	F19, SP20	
First-Year Spring:						
MATH 115: Calculus of Functions of One Variable II	R	4			F19, SP20	267
CHEM 165: General Chemistry II	R	4			F19, SP20	196
CHEM 136L: General Chemistry Laboratory II	R	2			F19, SP20	226
CENG 150: Engineering Improv: An Introduction to Engineering Analysis	R		4		SP19, SP20	35
One Humanities/Social Science/Writing/Language Elective	SE			4	F19, SP20	
Sophomore Fall:						
ENAS 151: Multivariable Calculus for Engineers	R	4			F19, SP20	84
CHEM 220: Organic Chemistry	R	4			F19, SP20	224
CHEM 222L: Laboratory for Organic Chemistry I	R	1	1		F19, SP19	310
PHYS 180: University Physics I	R	4			F18, F19	277
One Humanities/Social Science/Writing/Language Elective	SE			4	F19, SP20	
Sophomore Spring:						
ENAS 194: Ordinary and Partial Differential Equations with Applications	R	4			F19, SP20	76
CHEM 221: The Organic Chemistry of Life Processes	R	4			SP19, SP20	169
CHEM 223L: Laboratory for Organic Chemistry II	R	1	1		SP19, SP20	220
PHYS 181: University Physics II	R	4			SP19, SP20	230

ENAS 130:	Introduction to Computing for Engineers and Scientists	R	2	2		F19, SP20	66
Junior Fall:							
CHEM 332:	Physical Chemistry with Applics. in the Physical Sciences I	R	2	2		F18, F19	66
CENG 300:	Chemical Engineering Thermodynamics	R		4		F18, F19	21
MENG 361:	Mechanical Engineering II: Fluid Mechanics	R		4		F18, F19	52
Two Humanities/Social Science/Writing/Language Electives		SE			8	F19, SP20	
Junior Spring:							
CHEM 333:	Physical Chemistry with Applics. in the Physical Sciences II	R	4			SP19, SP20	40
CENG 301:	Chemical Kinetics and Chemical Reactors	R		4		SP19, SP20	28
CENG 315:	Transport Phenomena	R		4		SP19, SP20	32
One Humanities/Social Science/Writing/Language Elective		SE			4	F19, SP20	
Senior Fall:							
CENG 411:	Separation and Purification Processes	R		4✓		F18, F19	17
CENG 480:	Chemical Engineering Process Control	R		4✓		F18, F19	10
Two CENG Electives		SE		8		F19, SP20	
One Humanities/Social Science/Writing/Language Elective		SE			4	F19, SP20	
Senior Spring:							
CENG 412L:	Chemical Engineering Laboratory and Design	R		4✓		SP19, SP20	12
CENG 416:	Chemical Engineering Process Design	R		4✓		SP19, SP20	13
One CENG Elective		SE		4		F19, SP20	
One Humanities/Social Science/Writing/Language Elective		SE			4	F19, SP20	
TOTALS (in terms of credit hours)			54	54	36		
Totals must satisfy minimum credit hours.	Minimum Semesters		36	54			

1. **Required** courses are required of all students in the program, **Elective** courses (often referred to as open or free electives) are optional for students, and **Selected Elective** courses are those for which students must take one or more courses from a specified group.
2. For courses that include multiple elements (lecture, laboratory, recitation, etc.), indicate the maximum enrollment in each element. For Selected Elective courses, indicate the maximum enrollment for each option.

Instructional materials and student work verifying compliance with ABET criteria for the categories indicated above will be required during the campus visit.