

[Please refer to the Undergraduate Catalog for further program requirements and course descriptions.](#)

<b>First Year – 32-33 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
ENME 1030/1030L: <i>Basic Engineering Science/Lab</i>	4	ENCE 1040: <i>Vector Statics</i>	3
CHEM 1110/1110L: <i>General Chemistry I/Lab</i> (Natural Science)	4	CHEM 1120/1120L: <i>General Chemistry II/Lab</i>	4
MATH 1950: <i>Calculus w/ Analytic Geometry I</i> (Quantitative Reasoning)	4	MATH 1960: <i>Calculus w/ Analytic Geometry II</i>	4
Writing and Communication	3-4	ENCH 1000: <i>Introduction to Chemical Engineering</i>	3
		Writing and Communication	3
	15-16		17
<b>Second Year – 34 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
ENCH 2240: <i>Chemical Engineering Computations</i>	3	ENCE 2220: <i>Probability and Statistics for Engineering</i> (Quantitative Reasoning)	3
MATH 2200: <i>Elementary Linear Algebra</i>	3	ENCH/ENME 3030: <i>Thermodynamics</i>	3
MATH 2450: <i>Introduction to Differential/Difference Equations</i>	3	MATH 2560: <i>Calculus w/ Analytic Geometry III</i>	4
CHEM 3010/3010L: <i>Organic Chemistry I/Lab</i>	4	BIOL 2100/2100L: <i>Microbiology and Health/Lab</i>	4
PHYS 2310/2310L: <i>Principles of Physics - Electricity and Magnetism/Lab</i> (Natural Science)	4	Behavioral and Social Science	3
	17		17
<b>Third Year – 30-32 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
ENCE 3520: <i>Engineering Economy</i>	3	ENCH 3040: <i>Chemical Thermodynamics</i>	3
ENCH 3310: <i>Chemical Process Principles</i>	3	ENCH 3280/3280L: <i>Control Systems/Lab</i>	4
ENCH 3350: <i>Unit Operations Laboratory</i>	1	ENCH 3320: <i>Heat Transfer Process</i>	3
ENME 3400: <i>Engineering Materials Science</i>	3	ENME 3070/3070L: <i>Fluid Mechanics/Lab</i>	4
Humanities and Fine Arts	3-4	Humanities and Fine Arts	3-4
	13-14		17-18
<b>Fourth Year – 32-33 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
ENCH 4250: <i>Sustainability Engineering</i>	3	ENCE 4380: <i>Wastewater and Water Treatment **</i>	3
ENCH 4290: <i>Intro to Chemical Engineering Design</i>	3	ENCH 4300: <i>Chemical System Design **</i>	3
ENCH 4330: <i>Chemical Process Operations</i>	3	ENCH 4340: <i>Chemical Kinetics and Reactor Design **</i>	3
ENCH 4350: <i>Chemical Processes Lab **</i>	2	Behavioral and Social Science	3
ESC 4100: <i>Environmental Law and Agencies</i>	3	Individual and Global Citizenship	3-4
GEOL 4450: <i>Hydrology **</i>	3		
	17		15-16

\*\*Indicates course has a pre- or co-requisite that is not required for degree. Consult Catalog and advisor.

<b>Completed:</b>			
<b>Graduation Requirements:</b>	<b>Hrs</b>	<b>Degree Requirements:</b>	<b>Hrs</b>
128 Total Hours		21-25 General Education Hours	
39 Upper Division (3000-4000 Level) Hours		107 Program (Major) Hours	
32 Hours at UTC		Minor ( <i>Not Required</i> )	
45 Hours at 4-year Institution		Electives ( <i>Not Required</i> )	
		Foreign Language ( <i>Not Required</i> )	