CLEAR PATH for ADVISING – *Chemical Engineering, B.S.Ch.E.* 2022-2023

Please refer to the Undergraduate Catalog for further program requirements and course descriptions.

First Year – 32-33 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
ENME 1030/1030L: *Basic Engineering Science/Lab*	4	ENCE 1040: *Vector Statics*	3
CHEM 1110/1110L: *General Chemistry I/Lab* (Nat. Science)	4	CHEM 1120/1120L: *General Chemistry II/Lab*	4
MATH 1950: *Calculus w Analytic Geometry I* (Math)	4	MATH 1960: *Calculus w Analytic Geometry II*	4
ENGL 1010 or 1011 (Rhetoric and Writing I)	3-4	ENCH 1000: *Intro to Chemical Engineering*	3
		ENGL 1020 or HIST 2100 (Rhetoric and Writing II)	3
	15-16		17
Second Year – 34 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
ENME 2240: *Intro to Engineering Computations*	3	ENCE 2220: *Probablity & Stats for Engineering* (Stats)	3
MATH 2200: *Elementary Linear Algebra*	3	MATH 2560: *Calculus w Analytic Geometry III*	4
MATH 2450: *Intro to Differential/Difference Equations*	3	Fine Arts and Humanities*	3
CHEM 3010/3010L: *Organic Chemistry I/Lab*	4	CHEM 3020/3020L: *Organic Chemistry II/Lab*	4
PHYS 2310/2310L: *Principles of Physics - Electricity & Magnetism/Lab* (Natural Science)	4	Behavioral and Social Science (ECON 1010)	3
	17		17
Third Year – 34 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
ENCH 3310: *Chemical Process Principles*	3	ENME 3070/3070L: *Fluid Mechanics/Lab*	4
ENCH 3350: *Unit Operations Laboratory*	1	ENCH 3040: *Chemical Thermodynamics*	3
ENCE 3520: *Engineering Economy*	3	ENCH 3280/3280L: *Control Systems* /Lab	4
ENME/ENCH 3030: *Thermodynamics*	3	ENCH 3320: *Heat Transfer Processes*	3
ENME 3400: *Engineering Materials Science*	3	Approved Junior Technical Elective	4
CHEM 3710: *Physical Chemistry: Thermodynamics & Kinetics*	3		
	16		18
Fourth Year – 29 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
ENCH 4320: *Fractional Distillation Separation Processes*	3	ENCH 4300: *Chemical System Design*	3
ENCH 4330: *Chemical Process Operations*	3	ENCH 4340: *Chemical Kinetics and Reactor Design*	3
ENCH 4350: *Chemical Processes Lab*	2	Approved Senior Technical Elective	3
ENCH 4290: *Intro to Chemical Engineering Design*	3	Fine Arts and Humanities*	3
Behavioral and Social Science (ECON 1020)	3	Non-Western Culture	3
	14		15

*Fine Arts and Humanities: 6 hours must be taken so that two different categories in FAH: Historical Understanding; Literature; Thought, Values & Beliefs; or Visual & Performing Arts are satisfied.

Completed:			
Graduation Requirements:	**Hrs**	**Degree Requirements:**	**Hrs**
128 Total Hours		21-22 General Education Hours	
39 Upper Division (3000-4000) Hours		108 Program (Major) Hours	
32 Hours at UTC		Minor *(Not Required)*	
60 Hours at 4-year Institution		Elective Hours *(Not Required)*	
		Foreign Language *(Not Required)*	