CLEAR PATH for ADVISING – *Computer Engineering, B.S.Cp.E.* 2022-2023

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

First Year – 35-36 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
CPSC 1100: *Fundamentals of Computer Science*	4	CPSC 1110: *Data Structures and Program Design*	4
ENME 1011: Intro to 2 & 3 Dimensional Modeling	1	ENME 1850: Intro to Engineering Design	2
ENME 1030/1030L: *Basic Engineering Science/Lab*	4	ENCE 1040: *Vector Statics*	3
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	MATH 2200: *Elementary Linear Algebra*	3
		ENGL 1020 or HIST 2100 (Rhetoric and Writing II)	3
	16-17		19
Second Year – 32 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
CPEN 3700: *Digital Logic & Intro to Comp. Hardware*	4	CPSC 2100: *Software Design and Development*	3
ENEE 2700/2710L: *Electrical Circuits I/Lab*	4	ENCE 2220: *Probablity & Stats for Engineering* (Statistics)	3
MATH 2450: *Intro to Differential/Difference Equations*	3	ENEE 2720: *Electrical Circuits II*	3
PHYS 2310/2310L: *Principles of Physics - Electricity & Magnetism/Lab* (Natural Science)	4	CHEM 1110/1110L: General Chemistry I/Lab (Natural Science)	4
		MATH 2560: Calculus w Analytic Geometry III	4
	15		17
Third Year – 31 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
ENEE 3250: *Signals & Systems*	3	CPSC 3200: *Algorithm Analysis & Adv Data Structure*	3
ENEE 3720/3720L: *Analog Electronics/Lab*	4	ENEE 3790: *Modern Control Systems Analysis & Design*	3
MATH 2030: *Discrete Math for Computer Science*	3	ENCE 3520: *Engineering Economy* or ENIE 3520: *Project & Economic Engineering*	3
CPSC 2800: *Intro to Operating Systems*	3	CSPC or CPEN or ENEE Elective (3000-4000 Level)	3
CPSC 3610: *Ethical & Social Issues in Computing* (FAH: Thought, Values and Beliefs)	3	FAH: Historical Understanding or Literature or Visual & Performing Arts	3
	16		15
Fourth Year – 31 Hours			
Fall Semester:	**Hrs**	***Spring Semester:***	**Hrs**
CPEN 3710: *Computer System Organization & Assembly Language Programing*	4	CPEN 4710: *Adv. Comp. Systems,* 4720: *Embedded Microcontroller Systems* or ENEE 4710: *Embedded Systems*	3
CPEN 3850: *Interdisciplinary Design Project I*	3	CPEN 4850: *Interdisciplinary Design Project II**	3
CPSC 4550: *Computer Networks*	3	CSPC or CPEN or ENEE Elective (3000-4000 Level)	3
CPEN 4700: *Computer Architecture*	3	Non-Western Culture	3
Behavioral and Social Science	3	Behavioral and Social Science	3
	16		15

*Qualified students may substitute CPEN 4995r or ENGR 4995r: *Departmental Thesis.*

Graduation Requirements:	**Hrs**	**Degree Requirements:**	**Hrs**
128 Total Hours		18-19 General Education Hours	
39 Upper Division (3000-4000) Hours		111 Program (Major) Hours	
32 Hours at UTC		Minor *(Not Required)*	
60 Hours at 4-year Institution		Elective Hours *(Not Required)*	
		Foreign Language *(Not Required)*	