CLEAR PATH for ADVISING – Computer Engineering, B.S.Cp.E.

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

Fall Semester:	Hrs	Spring Semester:	Hrs
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CPSC 1100: Fundamentals of Computer Science	4	CPSC 1110: Data Structures and Program Design	4
ENME 1011: Intro to Two/Three-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 (Quantitative Reasoning)	4	MATH 1960: Calculus w/ Analytic Geometry II	4
Writing and Communication (ENGL 1010 or 1011)	3-4	MATH 2200: Elementary Linear Algebra	3
		Writing and Communication (ENGL 1020)	3
	16-17		19
Second Year – 32 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
CPEN 3700: Digital Logic and Introduction to Computer Hardware	4	CHEM 1110/1110L: General Chemistry I/Lab (Natural Science)	4
ENEE 2700/2710L: Electrical Circuits I/Lab	4	ENEE 2720: Electrical Circuits II	3
MATH 2450: Intro to Differential/Difference Equations	3	CPSC 2100: Software Design and Development	3
PHYS 2310/2310L: Principles of Physics - Electricity & Magnetism/Lab (Natural Science)	4	ENCE 2220: Probability and Statistics for Engineering (Quantitative Reasoning)	3
		MATH 2560: Calculus w/ Analytic Geometry III	4
	15		17
Third Year – 31 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
CPSC 2800: Introduction to Operating Systems	3	CPSC 3200: Algorithm Analysis and Advanced Data Structures	5 3
CPSC 3610: Ethical and Social Issues in Computing		ENCE 3520: Engineering Economy or ENIE 3520: Project and	
(Humanities and Fine Arts)	3	Economic Engineering	3
ENEE 3250: Signals and Systems	3	ENEE 3790: Modern Control Systems Analysis & Design	3
ENEE 3720/3720L: Analog Electronics/Lab	4	CPSC or CPEN or ENEE Elective (3000-4000 Level)	3
MATH 2030: Discrete Mathematics for Computer Science	3	Humanities and Fine Arts	3
	16		15
Fourth Year – 31-32 Hours	1-0		15
Fall Semester:	Hrs	Spring Semester:	Hrs
CPSC 4550: Computer Networks	4	CPEN 4710: Advanced Computer Systems or ENEE 4710:	3-4
CPEN 3710: Computer System Organization and Assembly	3	Embedded Systems CPEN 4850: Interdisciplinary Design Project II*	3
Language Programming	2		2
CPEN 3850: Interdisciplinary Design Project I	3	CSPC or CPEN or ENEE Elective (3000-4000 Level)	3
CPEN 4700: Computer Architecture Behavioral and Social Science	3	Individual and Global Citizenship	3
	3	Behavioral and Social Science	3
	16		15-

*Qualified students may substitute CPEN 4995r or ENGR 4995r: *Departmental Thesis* (4hrs) for CPSC 4850.

Graduation Requirements:	Hrs	Degree Requirements:	Hrs
128 Total Hours		18-19 General Education Hours	
39 Upper Division (3000-4000 Level) Hours		111-112 Program (Major) Hours	
32 Hours at UTC		Minor (Not Required)	
45 Hours at 4-year Institution		Elective Hours (Not Required)	
		Foreign Language (Not Required)	