## CLEAR PATH for ADVISING – Mechatronics, B.A.S.

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

First Year – 29-31 Hours			
Fall Semester:		Spring Semester:	Hrs
ENEE 1010: Introduction to Electrical Engineering	3	CPSC 1100: Fundamentals of Computer Science	4
ENME 1011: Introduction to Two/Three-Dimensional Modeling	1	ENME 1850: Introduction to Engineering Design	
MATH 1130: College Algebra	3	MATH 1730: Combined Precalculus	4
Writing and Communication	3-4	THSP 1090: <i>Public Speaking</i> (Writing and Communication)	
Behavioral and Social Science	3	Humanities and Fine Arts	3-4
	13-14		16-17
Second Year – 29-32 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ETEM 1320: Introduction to Material Science and Technology	3	ETME 1100: Electrical and Electronic Circuits	3
MATH 1950: Calculus w/ Analytic Geometry I (Quantitative Reasoning)	4	ETME 2130: Principles of Mechanical Systems	3
PHYS 1030/1030L: <i>General Physics - Mechanics and Heat/Lab</i> (Natural Science)	4	ETME 2150: Manufacturing Processes	4
Technical Elective	3-4	Technical Elective	3-4
		Humanities and Fine Arts	3-4
	14-15		15-1
Third Year – 31-32 Hours		•	
Fall Semester:	Hrs	Spring Semester:	Hrs
ETCM 2010: Industrial Safety and Risk Management	3	ETEM 3520: Cost Estimation and Analysis for Engineering Management	3
ETME 2100: Intro to Mechatronics Engr Technology	3	ETME 3010: Applied Math for Engineering Technology	3
ETME 2110: Digital Electronics and Microcontrollers	3	ETME 3110: Control Systems Technology	
ENCE 2220: Probability and Statistics for Engineering , MATH 2100: Introductory Statistics, or MGT 2130: Statistics for Rusings (Quantitative Researing)	3	ETME 3230: Industrial Programming & Networking	
Business (Quantitative Reasoning) Technical Elective	3-4	PHYS 1040/1040L: General Physics - Electromagnetism and Optics/Lab (Natural Science)	4
	15-16		16
Fourth Year – 33-34 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ETEM 3550: Project Management and Practice	3	ETME 3120: Maintenance of Mechatronic Systems	3
ETEM 4590: Facilities Management	3	ETME 4210: Integrated Mechatronics Systems II	3
ETME 3210: Automation Systems	3	ETME 4220: Robotics and Motion Control	3
ETME 4110: Integrated Mechatronics Systems I	3	ETEM 4960R: Engineering Technology Management Internship	
LTIME 4110. Integrated Mechationics Systems i			3-4
5 ,	3	Individual and Global Citizenship	3-4
ETME 4110: Integrated Mechanomics Systems F ETME 4120: Applications of Thermal and Fluid Systems ETME 4130: Applied Electric Power and Machinery	3 3	Individual and Global Citizenship	3-4

Completed:				
Graduation Requirements:	Hrs	Degree Requirements:	Hrs	
124 Total Hours		15-16 General Education Hours		
39 Upper Division (3000-4000) Hours		111-114 Program (Major) Hours		
32 Hours at UTC		Minor (Not Required)		
45 Hours at 4-year Institution		Elective Hours (Not Required )		
		Foreign Language (Not Required)		