CLEAR PATH for ADVISING – Mechanical Engineering, B.S.M.E.

Please see the Courses section of this catalog for complete course descriptions.

First Year – 31-33 Hours					
Fall Semester:	Hrs	Spring Semester:	Hrs		
ENME 1011: Introduction to Two/Three-Dimensional Modeling	1	ENCE 1040: Vector Statics	3		
ENME 1030/1030L: Basic Engineering Science/Lab	4	ENME 1850: Introduction to Engineering Design	2		
MATH 1950: Calculus w/ Analytic Geometry I (Quantitative Reasoning)	4	MATH 1960: Calculus w/ Analytic Geometry II	4		
CHEM 1110/1110L: General Chemistry I/Lab (Natural Science)	4	Writing and Communication	3		
Writing and Communication	3-4	Humanities and Fine Arts	3-4		
	16-17		15-16		
Second Year – 33 Hours					
Fall Semester:	Hrs	Spring Semester:	Hrs		
ENCE 2460/2460L: Mechanics of Materials/Lab	4	ENCE 2220: Probability and Statistics for Engineering (Quantitative Reasoning)	3		
ENEE 2700: Electrical Circuits I	3	ENME 2240: Introduction to Engineering Computation	03		
MATH 2450: Introduction to Differential/Difference Equations	3	ENME 2480: Dynamics	3		
PHYS 2310/2310L: Principles of Physics - Electricity and Magnetism/Lab (Natural Science)	4	MATH 2560: Calculus w/ Analytic Geometry III	4		
Behavioral and Social Science	3	Behavioral and Social Science	3		
	17		16		
Third Year – 33-34 Hours					
Fall Semester:	Hrs	Spring Semester:	Hrs		
ENEE 3700: Energy Conversion and Electronics	3	ENCE 3520: Engineering Economy	3		
ENME/ENCH 3030: Thermodynamics	3	ENME 3040: Mechanical Engineering Thermodynamics	3		
ENME 3070/3070L: Fluid Mechanics/Lab	4	ENME 3090: Heat and Mass Transfer	3		
ENME 3400: Engineering Materials Science	3	ENME 3580: Manufacturing Processes	3		
ENME 3470: Mechanical Engineering Experimentation	2	Individual and Global Citizenship	3-4		
ENME 3480: Kinematics and Dynamics of Machinery I	3				
	18		15-16		
Fourth Year – 30-31 Hours					
Fall Semester:	Hrs	Spring Semester:	Hrs		
ENME 3850: Interdisciplinary Design Project I	3	ENCH/ENME 3280/3280L: Control Systems/Lab	4		
ENME 4420: Machine Design	3	ENME 4500: Mechanical Engineering Design Project	3		
ENME 4430: Thermal Component Design	3	ENME 4850: Interdisciplinary Design Project II**	3		
ENME 4470: Mechanical Engr Experimentation Lab	2	Approved ENME Elective (4000 Level)	3		
Approved ENME Elective (4000 Level)	3	Humanities and Fine Arts	3-4		
	14		16-17		

**Qualified students may substitute ENME 4995r or ENGR 4995r: Departmental Thesis (4 hrs)

Completed:			
Graduation Requirements:	Hrs	Degree Requirements:	Hrs
127 Total Hours		21-25 General Education Hours	
39 Upper Division (3000-4000) Hours		106 Program (Major) Hours	
32 Hours at UTC		Minor (Not Required)	
45 Hours at 4-year Institution		Electives (Not Required)	
		Foreign Language (Not Required)	