

[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: <i>Introduction to Two/Three-Dimensional Modeling</i>	1	ENCE 1040: <i>Vector Statics</i>	3
ENME 1030/1030L: <i>Basic Engineering Science/Lab</i>	4	ENME 1850: <i>Introduction to Engineering Design</i>	2
MATH 1950: <i>Calculus w/ Analytic Geometry I</i> (Quantitative Reasoning)	4	MATH 1960: <i>Calculus w/ Analytic Geometry II</i>	4
CHEM 1110/1110L: <i>General Chemistry I/Lab</i> (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: <i>Mechanics of Materials/Lab</i>	4	ENCE 2220: <i>Probability and Statistics for Engineering</i> (Quantitative Reasoning)	3
ENEE 2700: <i>Electrical Circuits I</i>	3	ENME 2240: <i>Introduction to Engr Computations</i>	3
MATH 2450: <i>Introduction to Differential/Difference Equations</i>	3	ENME 2480: <i>Dynamics</i>	3
PHYS 2310/2310L: <i>Principles of Physics - Electricity and Magnetism/Lab</i> (Natural Science)	4	MATH 2560: <i>Calculus w/ Analytic Geometry III</i>	4
Behavioral and Social Science	3	Behavioral and Social Science	3
	17		16
Third Year – 33 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ENCE 3520: <i>Engineering Economy</i>	3	ENEE 3700: <i>Energy Conversion and Electronics</i>	3
ENME/ENCH 3030: <i>Thermodynamics</i>	3	ENME 3040: <i>Mechanical Engineering Thermodynamics</i>	3
ENME 3070/3070L: <i>Fluid Mechanics/Lab</i>	4	ENME 3090: <i>Heat and Mass Transfer</i>	3
ENME 3400: <i>Engineering Materials Science</i>	3	ENME 3580: <i>Manufacturing Processes</i>	3
ENME 3470: <i>Mechanical Engineering Experimentation</i>	2	ENME 3950: <i>Mechanical Engr Design Project I</i>	3
ENME 3480: <i>Kinematics and Dynamics of Machinery I</i>	3		
	18		15
Fourth Year – 30-32 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ENME 4950: <i>Mechanical Engr Design Project II</i> **	3	ENME 4955: <i>Mechanical Engr Capstone Design</i>	3
ENME 4420: <i>Machine Design</i>	3	ENME 4470: <i>Mechanical Engr Experimentation Lab</i>	2
ENME 4430: <i>Thermal Component Design</i>	3	Approved ENME Elective (4000 Level)	3
ENME/ENCH 3280/3280L: <i>Control Systems/Lab</i>	4	Humanities and Fine Arts	3-4
Approved ENME Elective (4000 Level)	3	Individual and Global Citizenship	3-4
	16		14-16

**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 Level) Hours		106 Program (Major) Hours	
32 Hours at UTC		Minor (<i>Not Required</i>)	
45 Hours at 4-year Institution		Electives (<i>Not Required</i>)	
		Foreign Language (<i>Not Required</i>)	