

[Please see the Courses section of this catalog for complete course descriptions.](#)

First Year – 30-32 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ENME 1011: <i>Intro 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>Intro to Engineering Design</i>	2
MATH 1950: <i>Calculus w Analytic Geometry I (Math)</i>	4	MATH 1920: <i>Calculus II (or MATH 1960)</i>	3-4
CHEM 1110/1110L: <i>Gen. Chemistry I/Lab (Nat. Science)</i>	4	MATH 2200: <i>Elementary Linear Algebra</i>	3
ENGL 1010 or 1011 (Rhetoric and Writing I)	3-4	ENGL 1020 or HIST 2100 (Rhetoric and Writing II)	3
	16-17		14-15
Second Year – 35-36 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ENCE 2460/2460L: <i>Mechanics of Materials/Lab</i>	4	ENCE 2220: <i>Probability & Stats for Engineering (Stats)</i>	3
ENEE 2700: <i>Electrical Circuits I</i>	3	ENME 2240: <i>Intro to Engineering Computations</i>	3
MATH 2450: <i>Intro to Differential/Difference Equations</i>	3	ENME 2480: <i>Dynamics</i>	3
PHYS 2310/2310L: <i>Principles of Physics - Electricity & Magnetism/Lab (Natural Science)</i>	4	MATH 2550: <i>Multivariable Calculus (or 2560)</i>	3-4
Behavioral and Social Science (ECON 1010)	3	Behavioral and Social Science (ECON 1020)	3
		Fine Arts and Humanities*	3
	17		18-19
Third Year – 33 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ENME/ENCH 3030: <i>Thermodynamics</i>	3	ENME 3580: <i>Manufacturing Processes</i>	3
ENME 3400: <i>Engineering Materials Science</i>	3	ENCE 3520: <i>Engineering Economy</i>	3
ENME 3070/3070L: <i>Fluid Mechanics/Lab</i>	4	ENMNE 3090: <i>Heat & Mass Transfer</i>	3
ENME 3470: <i>Mechanical Engineering Experimentation</i>	2	ENME 3040: <i>Mechanical Engineering Thermodynamics</i>	3
ENME 3480: <i>Kinematics & Dynamics of Machinery I</i>	3	Non-Western Culture	3
ENEE 3700: <i>Energy Conversion & Electronics</i>	3		
	18		15
Fourth Year – 30 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ENME 3850: <i>Interdisciplinary Design Project I</i>	3	ENME 4850: <i>Interdisciplinary Design Project II**</i>	3
ENME 4420: <i>Machine Design</i>	3	ENCH 3280/3280L: <i>Control Systems/Lab</i>	4
ENME 4430: <i>Thermal Component Design</i>	3	ENME 4500: <i>Mechanical Engineering Design Project</i>	3
ENME 4470: <i>Mechanical Engr Experimentation Lab</i>	2	Approved ENME Elective (4000 Level)	3
Approved ENME Elective (4000 Level)	3	Fine Arts and Humanities*	3
	14		16

*Fine Arts and Humanities: 6 hours must be taken so that two different categories in FAH: Historical Understanding; Literature; Thought, Values & Beliefs; or Visual & Performing Arts are satisfied.

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

Completed:			
Graduation Requirements:	Hrs	Degree Requirements:	Hrs
128 Total Hours		21-22 General Education Hours	
39 Upper Division (3000-4000) Hours		107 Program (Major) Hours	
32 Hours at UTC		Minor (<i>Not Required</i>)	
60 Hours at 4-year Institution		Electives (<i>Not Required</i>)	
		Foreign Language (<i>Not Required</i>)	