

<sup>1</sup>Rhet 105 is taken the first or second semester of the first year, according to student's UIN. ME 170 is taken the other semester. Rhet 105 is taken in the fall by students with even UIN's and in the spring by students with odd UIN's.

<sup>2</sup>A total of 6 courses in humanities and the arts and in social and behavioral sciences is required. Of these, at least 1 must be a Western cultures course and at least 1 a non-Western. See College of Engineering and University web sites for lists. At least 2 of the humanities courses and at least 2 of the social-sciences courses must be taken for grades.

<sup>3</sup>ME 470 requires credit or concurrent registration in all TAM courses that are required *by number* (e.g. TAM 445 and TAM 470). *Concurrent* registration is limited to 2 courses. ME 470 is taken in the fall by students with even UIN's and in spring by students with odd UINs.

4Secondary Field Elective—12 hr of coherent course work in mechanics or closely relate field. See departmental list or propose an alternate set of courses.

<sup>5</sup>[Optional] Three hours of secondary field coursework can be obtained if ME 199 DES or SAE (1 hr) is taken for three consecutive semesters starting no later than the first semester of the sophomore year or second semester on campus for transfer students and approved by advisor. Projects must be technical in nature and a final report that displays technical merit must be submitted to the Undergraduate Programs office at completion.

<sup>6</sup>TAM 302 to be renamed, register for TAM 498. Intended for students with sophomore status or higher.

FOffered in fall semester only.

SOffered in spring semester only.

## **CURRICULUM IN ENGINEERING MECHANICS**

The curriculum requires 128 hours for graduation.

Course Rubric	Course Name	Credit	TGPA <sup>6</sup>	2.25 GPA <sup>7</sup>
Orientation and P	Professional Development			
ENG 100	Engineering Orientation	0		
ME 390	Seminar	0		
TAM 195	Mechanics in the Modern World	1		
Foundational Mat	thematics and Science			
CHEM 102	General Chemistry I	3		
CHEM 103	General Chemistry Lab I	1		$\boxtimes$
CHEM 104	General Chemistry II	3		$\boxtimes$
CHEM 105	General Chemistry Lab II	1		$\boxtimes$
MATH 221	Calculus I	4		$\boxtimes$
MATH 231	Calculus II	3		$\boxtimes$
MATH 241	Calculus III	4		
MATH 415	Applied Linear Algebra	3	$\boxtimes$	
MATH 441	Differential Equations	3	$\boxtimes$	
MATH 442	Intro Partial Differential Equations	3		<u>_</u> _
PHYS 211	University Physics: Mechanics	4		
PHYS 212	University Physics: Elec & Mag	4		
PHYS 213	University Physics: Thermal Physics	2		$\boxtimes$
PHYS 214 Engineering Mecl	University Physics: Quantum Physics hanics Technical Core	2	Ш	$\boxtimes$
CS 101	Intro Computing: Engrg & Sci	3	П	$\boxtimes$
ECE 205	Elec & Electronic Circuits	3		
ME 170	Computer-Aided Design	3	П	<u>\</u>
ME 300	Thermodynamics	3		
ME 470	Senior Design Project	3		
TAM 211	Statics	3		_
TAM 212	Introductory Dynamics	3	$\boxtimes$	$\boxtimes$
TAM 251	• •	3		
	Introductory Solid Mechanics			
TAM 252	Solid Mechanics Design	1		
TAM 302	Engineering Design Principles	3		
TAM 324	Behavior of Materials	4		
TAM 335	Introductory Fluid Mechanics	4		
TAM 412	Intermediate Dynamics	4	$\boxtimes$	
TAM 445	Continuum Mechanics	4	$\boxtimes$	
TAM 470	Computational Mechanics	3	$\boxtimes$	
Electives and com	position			
RHET 105 <sup>1</sup>	Principles of Composition	4		
Secondary field electives <sup>4</sup>	Chosen from departmentally approved list or custom build upon advisor's approval	12		
Liberal education	2	18		
Free electives		6		

<sup>6.</sup> To remain in good academic standing and to graduate from the EM curriculum, a student must have a GPA of at least 2.00 in the courses marked with an "X"

<sup>7.</sup> To register for third-year Engineering Mechanics (EM) courses, students are required to have a grade-point average of 2.25 or above in the courses marked with an "X"