

CURRICULUM IN ENGINEERING MECHANICS

The curriculum requires 128 hours for graduation.

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

1. 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"
2. 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"