

FOffered in Fall semester only.

Legend:

Taken or In Progress

Register for Next Semester

<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 spring by students with odd UIN's.

<sup>2</sup>A total of 6 courses to fulfill general education requirements. Of these, at least one must be a Western, at least one a Non-Western cultures course. For students entering after SU18, at least one a U.S. Minority cultures course is also required. Among the Social Sciences courses, ECON 102 or 103 is required for Mechanical Engineering majors. At least 2 Humanities courses and at least 2 Social Sciences courses must be taken for grades. Students must also complete the Language Other Than English requirement (LOTE). 1st and 2nd level language courses can count as Liberal Education electives and be taken CR/NC. See College of Engineering and University web sites for more information and course lists.

<sup>3</sup>Choose from Chem 104/105, MCB 150, or Phys 213/214. If MCB 150 is taken, then MCB 151 is also recommended.

<sup>4</sup>ME 470 requires credit or concurrent registration in all ME courses that are required *by number* (e.g. ME 360, ME 371). *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 UIN's.

Prerequisite

<sup>7</sup>MechSE electives are ME and TAM courses on the MechSE departmental approved list (online).
<sup>8</sup>[Optional] Three hours of MechSE or technical elective credit 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 for transfer students. A final report must be submitted to the Undergraduate Programs office at completion.

<sup>&</sup>lt;sup>5</sup>Choose from IE 300 or Stat 400/Math 463.

<sup>&</sup>lt;sup>6</sup>Technical electives are generally 400-level courses in engineering, physics, chemistry, and mathematics. Some restrictions apply to special-topics and individual-study courses. One Professional elective of no more than 3 hours can replace one Technical elective. See the complete list of Technical, Professional, and MechSE electives online at the MechSE departmental website.

## **CURRICULUM IN MECHANICAL ENGINEERING**

The curriculum requires 128 hours for graduation.

Course Rubric	Course Name	Credit	TGPA <sup>9</sup>	2.25 GPA <sup>10</sup>
Orientation and Profes	ssional Development			
ENG 100	Engineering Orientation	0		
ME 290	Seminar	0		
Foundational Mathem	atics and Science			
CHEM 102	General Chemistry I	3		$\boxtimes$
CHEM 103	General Chemistry Lab I	1		$\boxtimes$
MATH 221	Calculus I	4		$\boxtimes$
MATH 231	Calculus II	3		$\boxtimes$
MATH 241	Calculus III	4		$\boxtimes$
MATH 285	Intro Differential Equations	3		<u> </u>
MATH 415	Applied Linear Algebra	3		
PHYS 211	University Physics: Mechanics	4		
PHYS 212	University Physics: Elec & Mag	4		
Mechanical Engineerii CS 101	_	2		
	Intro Computing: Engrg & Sci	3		
ECE 205	Elec & Electronic Circuits	3	$\boxtimes$	
ECE 206	Elec & Electronic Circuits Lab	1	$\boxtimes$	$\boxtimes$
TAM 210	Introduction to Statics	2	$\boxtimes$	
TAM 212	Introductory Dynamics	3	$\boxtimes$	$\boxtimes$
TAM 251	Introductory Solid Mechanics	3	$\boxtimes$	$\boxtimes$
ME 170	Computer-Aided Design	3		$\boxtimes$
ME 270	Design for Manufacturability	3	$\boxtimes$	
ME 200	Thermodynamics	3	$\boxtimes$	$\boxtimes$
ME 310	Fundamentals of Fluid Dynamics	4	$\boxtimes$	
ME 320	Heat Transfer	4	×	
ME 330	Engineering Materials	4	$\boxtimes$	
ME 340	Dynamics of Mechanical Systems	3.5	$\boxtimes$	
ME 360	Signal Processing	3.5	$\boxtimes$	
ME 370	Mechanical Design I	3	$\boxtimes$	
ME 371	Mechanical Design II	3	$\boxtimes$	
ME 470	Senior Design Project	3	$\boxtimes$	
Electives and composit	tion			
RHET 105 <sup>1</sup>	Principles of Composition	4		
Statistics Elective <sup>5</sup>	IE 300, STAT 400 / MATH 463	3		
Science Elective <sup>3</sup>	CHEM 104/105, PHYS 213/214, MCB 150	4		
Technical electives <sup>6</sup>	Chosen from departmentally approved list	6	$\boxtimes$	
MechSE electives <sup>7</sup>	TAM and ME courses from technical elective list	6	$\boxtimes$	
Liberal education <sup>2</sup>		18		
Free electives		6		

<sup>9.</sup> To remain in good academic standing and to graduate from the ME curriculum, a student must have a GPA of at least 2.00 in the courses marked with an "X"

<sup>10</sup>. To register for third-year Mechanical Engineering (ME) courses, students are required to have a grade-point average of 2.25 or above in the courses marked with an "X"