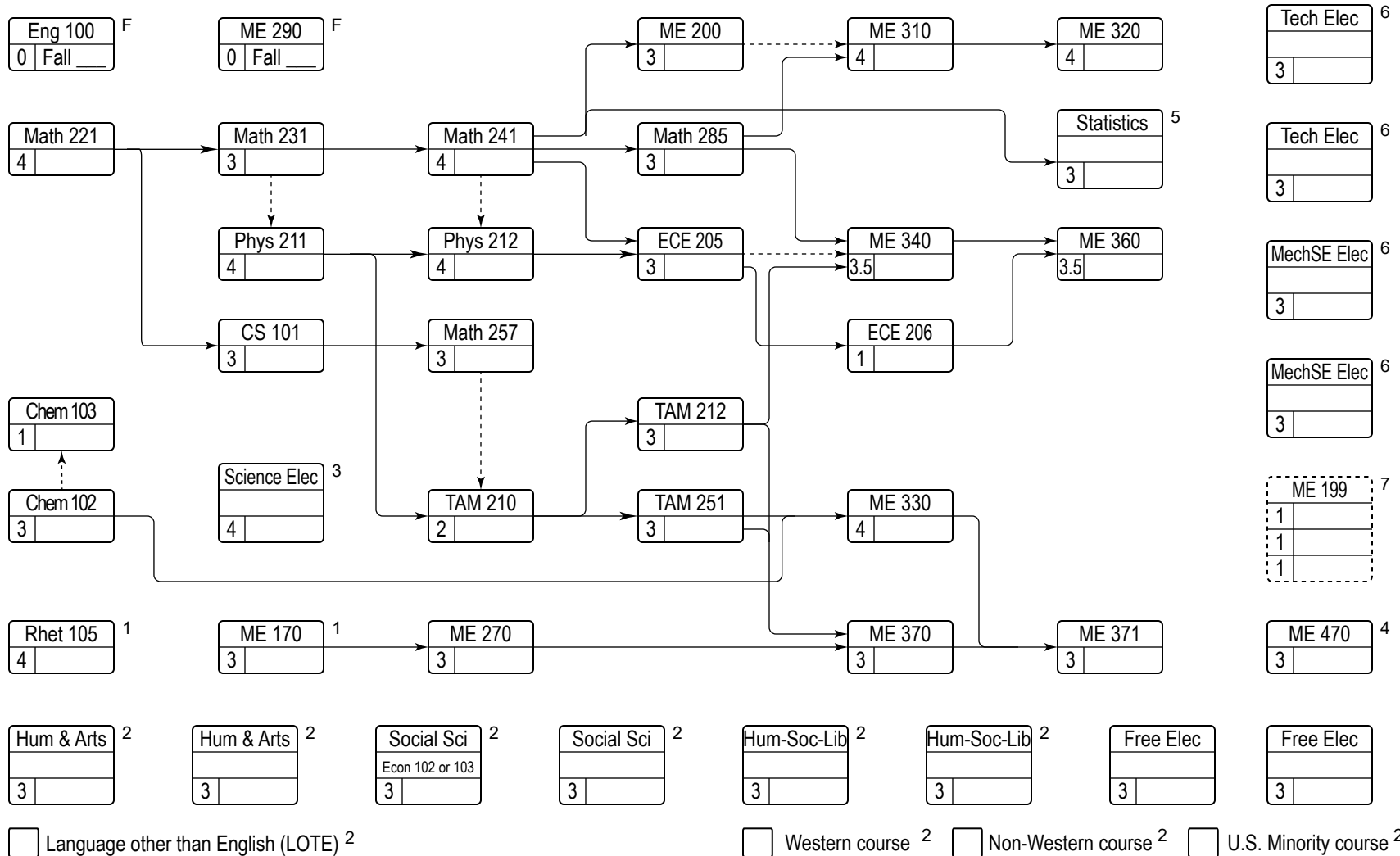


→ Prerequisite

-----> Corequisite

Mechanical Engineering Flowsheet



08/01/2021

Name _____ UIN _____

^FOffered in the Fall semester only.

¹Rhet 105 is taken in the first year, during the fall by students with even UIN's and in the spring by students with odd UIN's. Rhet 105 fulfills the University Composition I requirement. ME 170 is taken the other semester.

²A total of 18 hours is required to fulfill general education requirements. Of these, at least one must be a Western, at least one a non-Western, and at least one a U.S. Minority cultures course. At least 2 humanities courses and at least 2 social-sciences courses (with Econ 102 or 103 being a required social science course for Mechanical Engineering majors) 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 Grainger College of Engineering and University websites for more information and course lists.

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

⁴ME 470 requires credit or concurrent registration in all ME courses that are required by number

(e.g. ME 360, ME 371). *Concurrent* registration not advised and is limited to 2 courses. ME 470 is taken in the final year, during the fall by students with even UIN's and in spring by students with odd UIN's. Note that ME 470 fulfills the University Advanced Composition requirement.

⁵Choose from IE 300 (3 cr) or Stat 400/Math 463 (4 cr).

⁶Technical electives are generally 400-level courses in engineering, physics, chemistry, and mathematics. MechSE electives are generally limited to 400-level ME and TAM courses only. Some restrictions apply to special-topics and individual-study courses. One Professional Elective of no more than 3 hours can replace one Technical elective and MechSE electives can replace Technical electives, but not vice versa. See the complete departmentally approved list on MechSE's website.

⁷[Optional] Three hours of MechSE 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.

CURRICULUM IN MECHANICAL ENGINEERING

The curriculum requires 128 hours for graduation.

Course Rubric	Course Name	Credit	TGPA ⁹	2.25 GPA ¹⁰
Orientation and Professional Development				
ENG 100	Engineering Orientation	0	<input type="checkbox"/>	<input type="checkbox"/>
ME 290	Seminar	0	<input type="checkbox"/>	<input 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"/>
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 257	Linear Algebra w/Computational Applications	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MATH 285	Intro Differential Equations	3	<input type="checkbox"/>	<input checked="" 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"/>
Mechanical Engineering Technical Core				
CS 101	Intro Computing: Engrg & Sci	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ECE 205	Elec & Electronic Circuits	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ECE 206	Elec & Electronic Circuits Lab	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TAM 210	Introduction to Statics	2	<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"/>
ME 170	Computer-Aided Design	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ME 200	Thermodynamics	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ME 270	Design for Manufacturability	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 310	Fundamentals of Fluid Dynamics	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 320	Heat Transfer	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 330	Engineering Materials	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 340	Dynamics of Mechanical Systems	3.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 360	Signal Processing	3.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 370	Mechanical Design I	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 371	Mechanical Design II	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 470	Senior Design Project	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Electives and composition				
RHET 105 ¹	Principles of Composition	4	<input type="checkbox"/>	<input type="checkbox"/>
Statistics Elective ⁵	IE 300, STAT 400 / MATH 463	3	<input type="checkbox"/>	<input type="checkbox"/>
Science Elective ³	CHEM 104/105	4	<input type="checkbox"/>	<input type="checkbox"/>
	PHYS 213/214, MCB 150		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Technical electives ⁶	Chosen from MechSE approved list	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MechSE electives ⁷	TAM and ME courses from MechSE approved list	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
General education ²		18	<input type="checkbox"/>	<input type="checkbox"/>
Free electives		6	<input type="checkbox"/>	<input type="checkbox"/>

9. 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"

10. 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"