

Legend:

Taken or In Progress

Register for Next Semester

Prereqs met

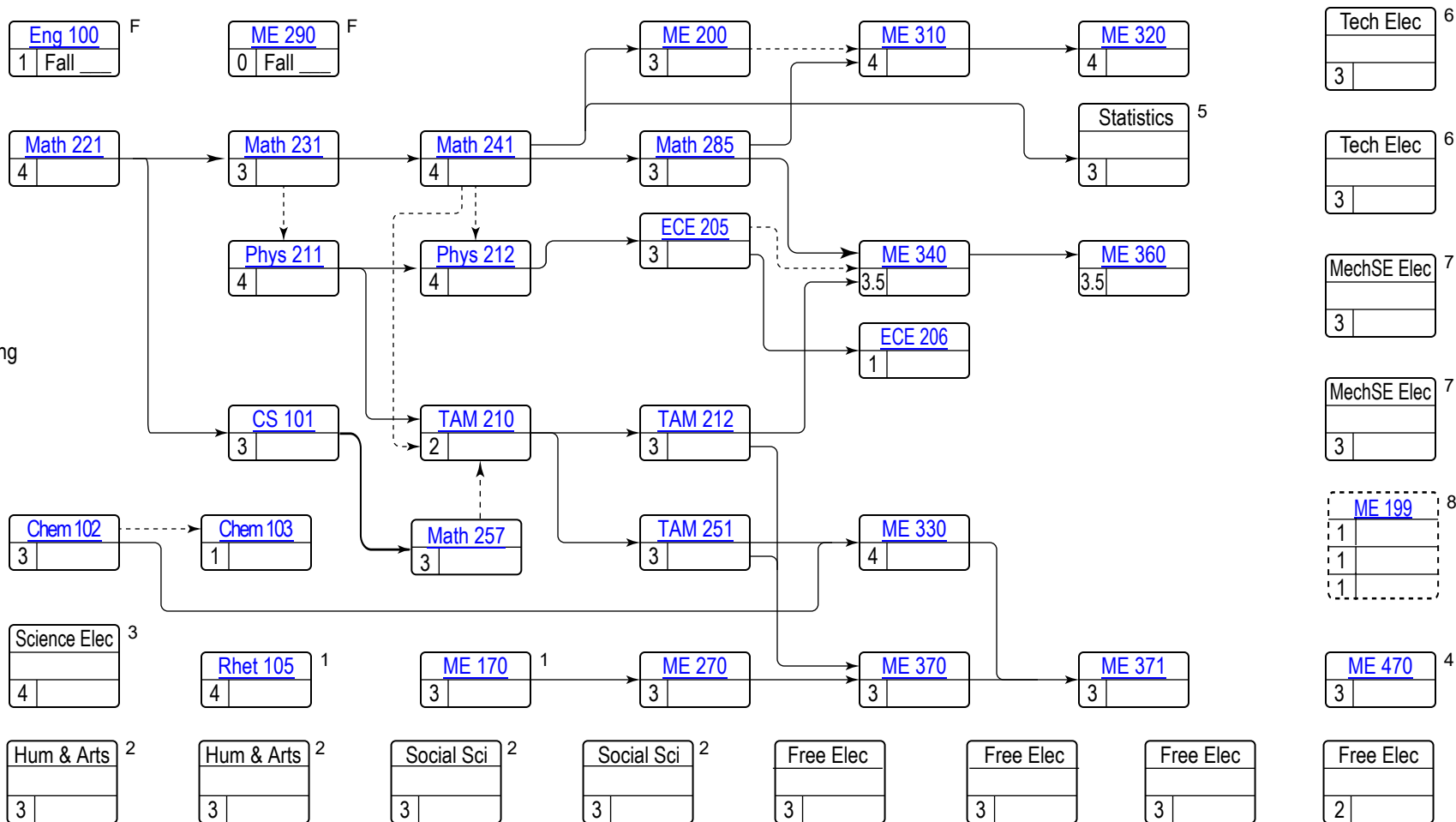
Prereqs not met

Mechanical Engineering Flowsheet

→ Prerequisite

----- Corequisite

Fall
 Spring



5/31/2022

Name _____ UIN _____

Western course Non-Western course U.S. Minority course LOTE

^FOffered in the fall semester only.

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

²A total of four courses must be taken for grades to fulfill general education requirements. At least two of these must be Humanities and the Arts courses and the other two must be Social and Behavioral Science courses. Among the Social and Behavioral Science courses, ECON 102 or 103 is required for Mechanical Engineering majors. Additionally, of these four courses, at least one must be a Western, at least one must be a Non-Western, and at least one must be a U.S. Minority cultures course. Students must also complete the Language Other Than English requirement (LOTE). 1st and 2nd level language courses can count as free electives and be taken CR/NC, but 3rd level of languages courses must be taken for a grade. See College of Engineering and University web sites for more information and course lists.

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

⁴ME 470 requires credit or concurrent registration in all required ME core courses by number (e.g. ME 371, ME 360, etc.). Concurrent registration is limited to 2 courses; however, may limit projects you meet the prerequisites for. ME 470 is taken in the fall by students with odd UINs and in the spring by students with even UINs.

⁵Choose from IE 300 or Stat 400/Math 463.

⁶Technical 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.

⁷MechSE electives are ME and TAM courses on the MechSE departmental approved list (see above).

⁸[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 third semester for incoming first-year students or second semester for incoming transfer students. A final report must be submitted to the Undergraduate Programs office at completion per guidelines set by the course instructor. There is a 6 hour maximum for advanced elective credit obtained from independent study and/or SAE type credits.

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	1	<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 type="checkbox"/>	<input checked="" type="checkbox"/>
MATH 285	Intro Differential Equations	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
PHYS 211	University Physics: Mechanics	4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PHYS 212	University Physics: Elec & Mag	4	<input checked="" 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 ¹	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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>
Science Elective ³	CHEM 104 & 105, MCB 150, PHYS 213 & 214	4	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
Technical electives ⁶	CChosen from departmental list, often in TGPA	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MechSE electives ⁷	TAM and ME courses from technical elective list	6	<input checked="" type="checkbox"/>	<input type="checkbox"/>
General education ²		12	<input type="checkbox"/>	<input type="checkbox"/>
Free electives		11	<input type="checkbox"/>	<input type="checkbox"/>

9. To remain in good academic standing and to graduate from the Mechanical Engineering (ME) curriculum, a student must have a technical grade-point average (TGPA) of at least 2.00. Courses that contribute to TGPA are the courses marked with an "X" in the TGPA column.

10. To register for third-year or 300-level ME courses, students are required to have a grade-point average (GPA) of 2.25 or above for courses marked with an "X" taken from the 2.25 GPA column.

Please note all of these are calculated on an average basis across all courses taken from the applicable list(s).