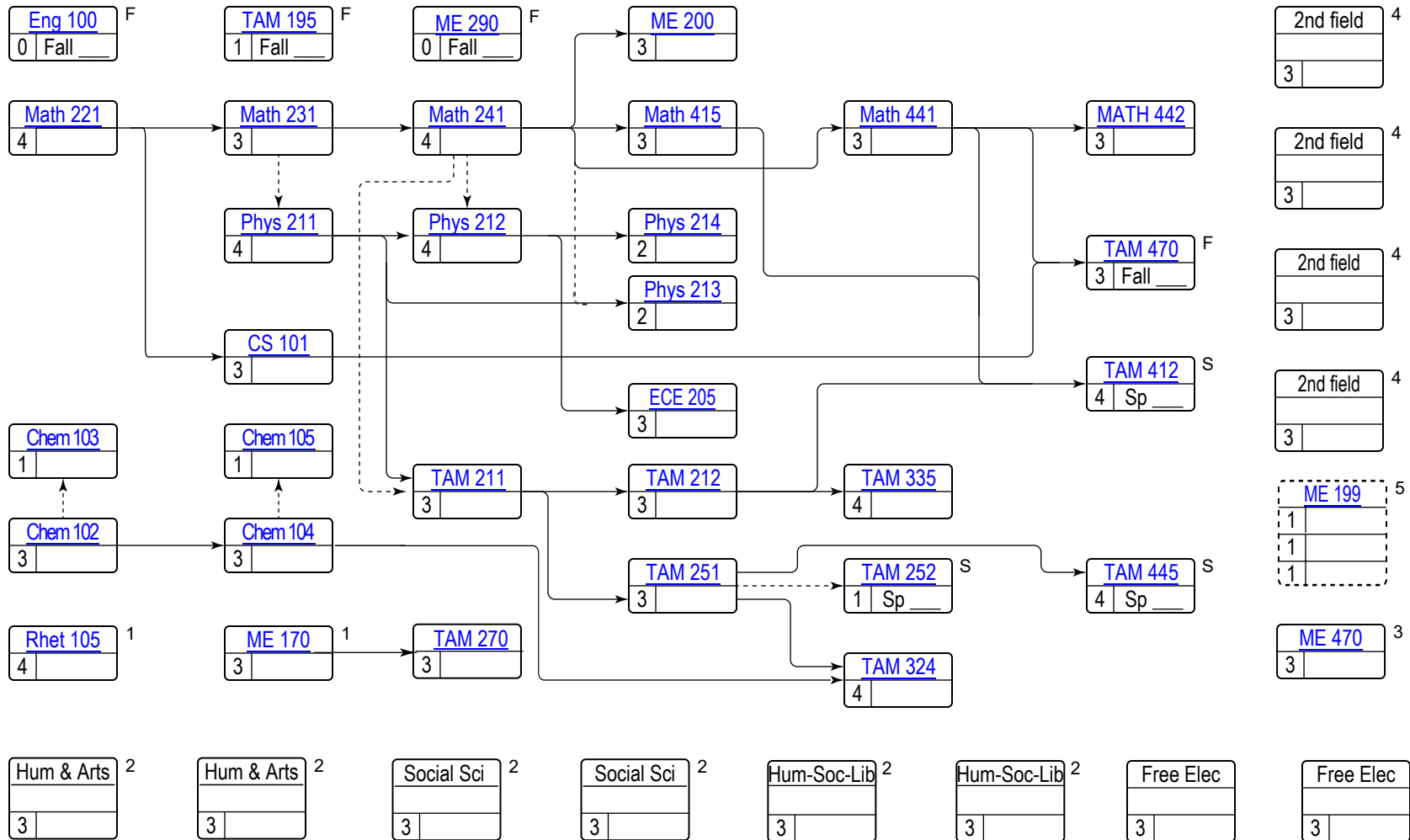


——> Prerequisite

-----> Corequisite

Engineering Mechanics (EM) Flowsheet



03/01/2019

Name _____ UIN _____

Western² course Non-Western² course U.S. Minorities² course LOTE²

^FOffered in Fall semester only.

^SOffered in Spring semester only.

¹Rhet 105 is taken the fall by students with even UINs and spring by students with odd UINs in the first year. ME 170 is taken the other semester.

²A total of 18 hours is required to fulfill general education requirements. Of these hours, there is a 6 hour Humanities requirement and 6 hour Social Science requirement, the remaining 6 hours may be from the two preceding categories or the Liberal Education elective list provided by the CoE. For students entering after SU18, a Western (W), Non-Western (NW), and U.S. Minorities (US) cultures course is required. For students entering prior to SU18, a W and NW or US cultures course is required. Students must also complete the university foreign language requirement by completing the 3rd level of a language other than English (LOTE).

³ME 470 requires credit or concurrent registration in all MechSE courses that are required by number (e.g. TAM 445 and TAM 470). Concurrent registration is limited to 2 courses and excludes TAM 270. ME 470 is taken in the fall by students with even UINs and in spring by students with odd UINs.

⁴Secondary Field Elective, 12 hours of coherent course work in mechanics or closely related field. Visit <http://mechanical.illinois.edu/undergraduate/bs-engineering-mechanics> for the pre-approved secondary field list or consult your advisor to formulate your own.

⁵[Optional] Three hours of secondary field elective credit can be obtained if ME 199 DES or SAE (1 hr) is taken for three consecutive semesters starting no later than third semester, or second semester for transfer students. A final report must be submitted to the MechSE Undergraduate Programs Office upon completion.

CURRICULUM IN ENGINEERING MECHANICS

The curriculum requires 128 hours for graduation.

Course Rubric	Course Name	Credit	2.25 GPA ⁶	TGPA ⁷
Orientation and Professional Development				
ENG 100	Engineering Orientation	0	<input type="checkbox"/>	<input type="checkbox"/>
ME 290/390	Seminar	0	<input type="checkbox"/>	<input type="checkbox"/>
TAM 195	Mechanics in the Modern World	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Foundational Mathematics and Science				
CHEM 102	General Chemistry I	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CHEM 103	General Chemistry Lab I	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CHEM 104	General Chemistry II	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CHEM 105	General Chemistry Lab II	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MATH 221	Calculus I	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MATH 231	Calculus II	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MATH 241	Calculus III	4	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MATH 415	Applied Linear Algebra	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MATH 441	Differential Equations	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MATH 442	Intro Partial 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"/>
PHYS 213	University Physics: Thermal Physics	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PHYS 214	University Physics: Quantum Physics	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Engineering Mechanics Technical Core				
CS 101	Intro Computing: Engrg & Sci	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ECE 205	Elec & Electronic Circuits	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ME 170	Computer-Aided Design	3	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ME 200/300	Thermodynamics	3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ME 470	Senior Design Project	3	<input type="checkbox"/>	<input checked="" 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 270	Design for Manufacturability	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TAM 324	Behavior of Materials	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TAM 335	Introductory Fluid Mechanics	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TAM 412	Intermediate Dynamics	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TAM 445	Continuum Mechanics	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TAM 470	Computational Mechanics	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Electives and composition				
RHET 105 ¹	Principles of Composition	4	<input type="checkbox"/>	<input type="checkbox"/>
Secondary field electives ⁴	Chosen from departmentally approved list or custom build upon advisor's approval	12	<input type="checkbox"/>	<input checked="" type="checkbox"/>
General education ²		18	<input type="checkbox"/>	<input type="checkbox"/>
Free electives ⁸		6	<input type="checkbox"/>	<input type="checkbox"/>

6. To register for third-year Engineering Mechanics (EM) courses, students are required to have a cumulative grade-point average (GPA) of at least 2.25 in the courses marked with an "X".

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

8. Almost any course offered by the University, and most transfer courses, can be used for free electives. Some restrictions apply, visit <https://wiki.illinois.edu/wiki/display/ugadvise/Degree+Requirements#DegreeRequirements-FreeElectives> for more information.