------ Corequisite

## Mechanical Engineering Flowsheet



Name $\qquad$ UIN $\qquad$
FOffered in Fall semester only.
${ }^{1}$ 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
${ }^{2} \mathrm{~A}$ 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.
${ }^{3}$ Choose from Chem 104/105, MCB 150, or Phys $213 / 214$. If MCB 150 is taken, then MCB 151 is also recommended.

Non-Western course
U.S. Minority course $\square$ LOTE
${ }^{4}$ 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.
${ }^{5}$ Choose from IE 300 or Stat 400/Math 463.
${ }^{6}$ 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.
${ }^{7}$ MechSE electives are ME and TAM courses on the MechSE departmental approved list (online).
${ }^{8}$ [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 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 | $\square$ | $\square$ |
| ME 290 | Seminar | 0 | $\square$ | $\square$ |
| Foundational Mathematics and Science |  |  |  |  |
| CHEM 102 | General Chemistry I | 3 | $\square$ | ® |
| CHEM 103 | General Chemistry Lab I | 1 | $\square$ | $\boxtimes$ |
| MATH 221 | Calculus I | 4 | $\square$ | ® |
| MATH 231 | Calculus II | 3 | $\square$ | 区 |
| MATH 241 | Calculus III | 4 | $\square$ | ® |
| MATH 285 | Intro Differential Equations | 3 | $\square$ | ® |
| MATH 415 | Applied Linear Algebra | 3 | ® | $\square$ |
| PHYS 211 | University Physics：Mechanics | 4 | $\square$ | 区 |
| PHYS 212 | University Physics：Elec \＆Mag | 4 | $\square$ | 区 |
| Mechanical Engineering Technical Core |  |  |  |  |
| CS 101 | Intro Computing：Engrg \＆Sci | 3 | $\square$ | ® |
| ECE 205 | Elec \＆Electronic Circuits | 3 | ® | ® |
| ECE 206 | Elec \＆Electronic Circuits Lab | 1 | ® | ® |
| TAM 210 | Introduction to Statics | 2 | 区 | 区 |
| TAM 212 | Introductory Dynamics | 3 | 区 | 区 |
| TAM 251 | Introductory Solid Mechanics | 3 | 区 | 区 |
| ME 170 | Computer－Aided Design | 3 | $\square$ | 区 |
| ME 270 | Design for Manufacturability | 3 | 区 | $\square$ |
| ME 200 | Thermodynamics | 3 | 区 | $\boxtimes$ |
| ME 310 | Fundamentals of Fluid Dynamics | 4 | 区 | $\square$ |
| ME 320 | Heat Transfer | 4 | 区 | $\square$ |
| ME 330 | Engineering Materials | 4 | 区 | $\square$ |
| ME 340 | Dynamics of Mechanical Systems | 3.5 | 区 | $\square$ |
| ME 360 | Signal Processing | 3.5 | 区 | $\square$ |
| ME 370 | Mechanical Design I | 3 | 区 | $\square$ |
| ME 371 | Mechanical Design II | 3 | 凹 | $\square$ |
| ME 470 | Senior Design Project | 3 | ® | $\square$ |
| Electives and composition |  |  |  |  |
| RHET 105 ${ }^{1}$ | Principles of Composition | 4 | $\square$ | $\square$ |
| Statistics Elective ${ }^{5}$ | IE 300，STAT 400 ／MATH 463 | 3 | $\square$ | $\square$ |
| Science Elective ${ }^{3}$ | $\begin{aligned} & \text { CHEM 104/105, PHYS } 213 / 214 \text {, MCB } \\ & 150 \end{aligned}$ | 4 | $\square$ | 区 |
| Technical electives ${ }^{6}$ | Chosen from MechSE approved list | 6 | 区 | $\square$ |
| MechSE electives ${ }^{7}$ | TAM and ME courses from MechSE approved list | 6 | 区 | $\square$ |
| General education ${ }^{2}$ |  | 18 | $\square$ | $\square$ |
| Free electives |  | 6 | $\square$ | $\square$ |

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 ＂

