

MINNESOTA STATE UNIVERSITY, MANKATO
MECHANICAL ENGINEERING PROGRAM
2024-2025 (FOUR-YEAR PLAN)

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|---------------------------------|-----------|-------------------------------------|-----------|
| FRESHMAN FALL | | FRESHMAN SPRING | |
| MATH 121 Calculus I | 4 | MATH 122 Calculus II | 4 |
| CHEM 191 Chem. for Engineers | 3 | PHYS 221 Physics I | 4 |
| ENG 101 English Comp. | 4 | CMST 102* | 3 |
| ME 101 Intro. to Engr.—ME | 2 | ME 103 Computer Graph. Com. | 1 |
| ECON 201 or 202 | 3 | ME 201 Intro. to Prob. Solv. & Des. | 2 |
| | | H/SS Elective | 3 |
| TOTAL | 16 | TOTAL | 17 |
| SOPHOMORE FALL | | SOPHOMORE SPRING | |
| MATH 321 Differential Equations | 4 | MATH 223 Calculus III | 4 |
| PHYS 222 Physics II | 3 | ME 214 Dynamics | 3 |
| PHYS 232 Physics II Lab | 1 | ME 223 Mechanics of Materials | 3 |
| ME 212 Statics | 3 | ME 241 Thermodynamics | 3 |
| EE 230 Circuits I | 3 | ME 281 Computation Methods | 2 |
| EE 240 Circuits Lab | 1 | | |
| ME 203 GD&T in Engr. Design | 2 | | |
| TOTAL | 17 | TOTAL | 15 |
| JUNIOR FALL | | JUNIOR SPRING | |
| ME 306 Material Science | 3 | ME 324 Heat Transfer | 3 |
| ME 321 Fluid Mechanics | 3 | ME 329 Applied Thermodynamics | 3 |
| ME 341 Linear Systems | 3 | ME 333 Manufacturing Processes | 3 |
| | | ME 336 ME Experimentation I | 2 |
| ME 344 Instrumentation | 3 | ME 417 Machine Elements | 3 |
| Science Elective ** | 4 | H/SS Elective*** | 3 |
| TOTAL | 16 | TOTAL | 17 |
| SENIOR FALL | | SENIOR SPRING | |
| ME 420 CAE or ME 450 FEM | 3 | ME 438 Design Project II | 3 |
| ME 428 Design Project I | 3 | ME 466 ME Experimentation III | 2 |
| ME 436 ME Experimentation II | 2 | ME 4xx ME Elective | 3 |
| ME 463 Automatic Controls | 3 | H/SS Elective | 7 |
| ME 4xx ME Electives | 3 | | |
| ME 492 ME Seminar | 1 | | |
| TOTAL | 15 | TOTAL | 15 |

Total Credits = 128

* Note: Students may, with permission from their advisor, elect to substitute Technical Communications, ENG 271, or Public Speaking for Technical Professionals, CMST 233.

** Science/Math Elec – Either BIOL 105(4), PHYS 223 and 233 (3+1), CHEM 202(4), MATH 247(4), MATH 422(4), OR ENVR101

*** H/SS courses must be chosen correctly to meet program and the university cultural diversity requirements. Courses should be chosen in consultation with a ME academic advisor.

This plan is for students planning to graduate under the 2023-2024 Bulletin. Plans for previous bulletins can be found at me.mnsu.edu