

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING COURSE PLAN BY SEMESTER

Catalog Year
2017—2018

**TOTAL
CREDITS:
122-124**

For questions about program requirements, please contact your advisor. Boise State recommends that you meet with an advisor annually to ensure that problems are identified and resolved quickly.

Highlighted courses are core for upper-division consideration.

| FIRST YEAR | | | | | |
|----------------------|-----------------------------|--------------|----------------------|-----------------------------------|-----------|
| Fall Semester | | | Spring Semester | | |
| CHEM 111 | College Chemistry (DLN) | 3 | CS 117† | Introduction to C++ | 3 |
| CHEM 111L | College Chemistry Lab (DLN) | 1 | ENGL 102 | English Composition | 3 |
| ENGL 101 | English Composition | 3 | MATH 175 | Calculus II | 4 |
| ENGR 120 or ENGR 130 | Introduction to Engineering | 3-4 | PHYS 211 | Mechanics, Waves & Heat (DLN) | 4 |
| UF 100 | Intellectual Foundations | 3 | PHYS 211L | Mechanics, Waves & Heat Lab (DLN) | 1 |
| MATH 170 | Calculus 1 (DLM) | 4 | | | 1 |
| TOTAL CREDITS | | 17-18 | TOTAL CREDITS | | 15 |

| SECOND YEAR | | | | | |
|----------------------|---|-----------|----------------------|---|-----------|
| Fall Semester | | | Spring Semester | | |
| PHYS 212 | Electricity, Magnetism & Optics | 4 | MATH 275 | Multiple Variable & Vector Calculus | 4 |
| PHYS 212L | Electricity, Magnetism & Optics Lab | 1 | ENGR 220 | Engineering Dynamics | 3 |
| MATH 333 | Differential Equations and Matrix Theory | 4 | MSE 245 | Introduction to Materials Science & Engineering | 3 |
| ENGR 210 | Engineering Statics | 3 | MSE 245L | Introduction to Materials Science & Engineering Lab | 1 |
| UF 200 | Civic and Ethical Foundations | 3 | ME 302 or ENGR 320 | Thermodynamics I | 3 |
| ME 271† | Introduction to Computation for Engineers | 1 | ME 105 | Mechanical Engineering Graphics | 3 |
| TOTAL CREDITS | | 16 | TOTAL CREDITS | | 17 |

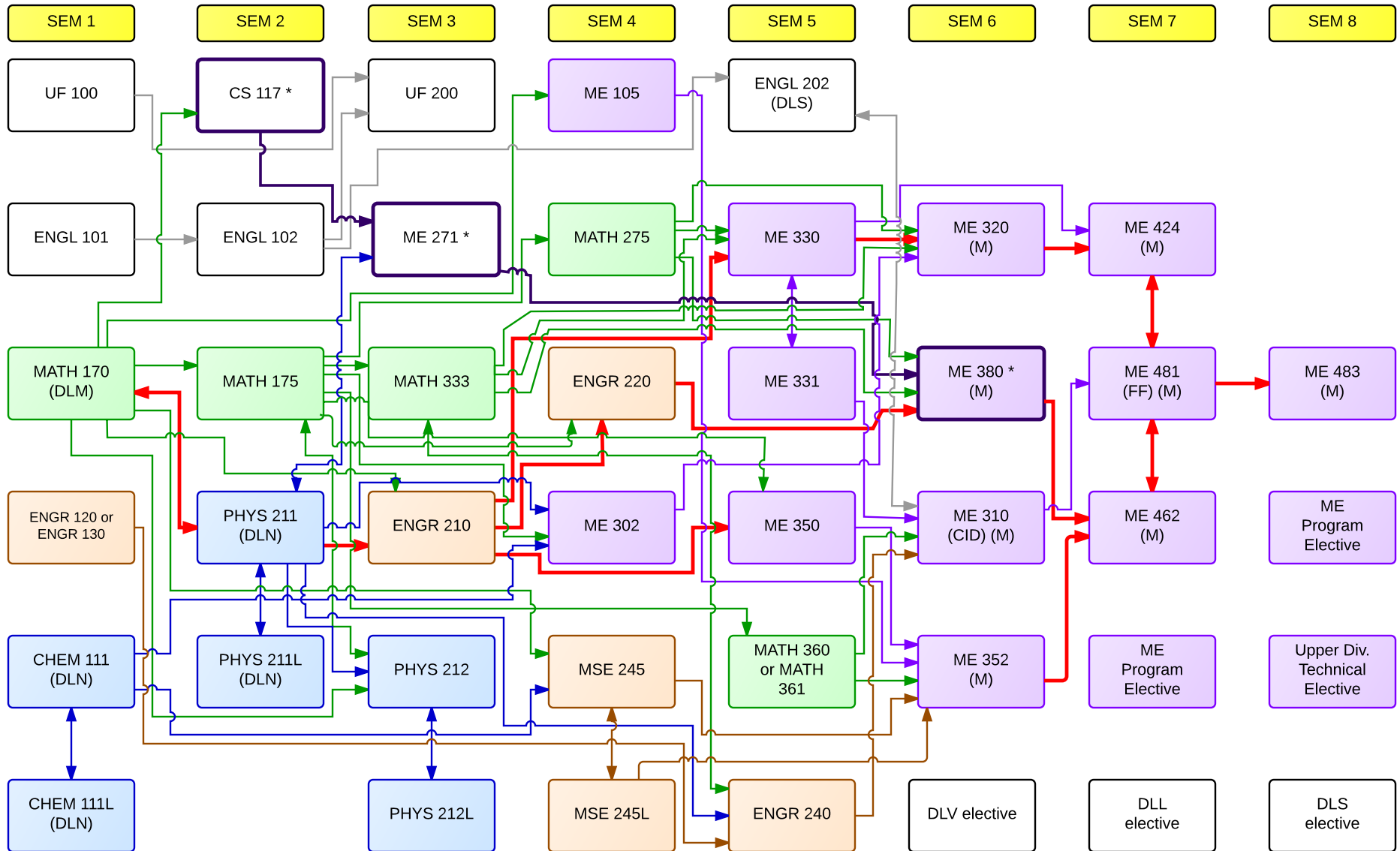
| THIRD YEAR | | | | | |
|-----------------------|---|-----------|----------------------|-------------------------------------|-----------|
| Fall Semester | | | Spring Semester | | |
| MATH 360 or MATH 361* | Engineering Statistics or Probability and Statistics* | 3 | ME 380† | Kinematics & Machine Dynamics | 3 |
| ME 330 | Fluid Mechanics | 3 | ME 320 | Heat Transfer | 3 |
| ME 331 | Fluid Mechanics Lab | 1 | ME 310 | Experimental Methods Lab (CID) | 2 |
| ME 350 | Engineering Mechanics of Materials | 3 | ME 352 | Machine Design I | 3 |
| ENGR 240 | Introduction to Circuits | 3 | DLV | Visual and Performing Arts Elective | 3 |
| ENGL 202 | Technical Communication (DLS) | 3 | | | 3 |
| TOTAL CREDITS | | 16 | TOTAL CREDITS | | 14 |

| FOURTH YEAR | | | | | |
|----------------------|------------------------------------|--------------|----------------------|--------------------------------------|-----------|
| Fall Semester | | | Spring Semester | | |
| ME 481 | Senior Design Project I (FF) | 3 | ME 483 | Senior Design Project II | 3 |
| ME 424 | Thermal & Fluids Systems Design | 3 | ME | ME Program Elective | 3 |
| ME 462 | Machine Design II | 3 | Tech Elective | Upper-Division Technical Elective | 3 |
| ME | ME Program Elective | 3 | DLS | Social Science Second Field Elective | 3 |
| DLL | Literature and Humanities Elective | 3-4 | | | 3 |
| TOTAL CREDITS | | 15-16 | TOTAL CREDITS | | 12 |

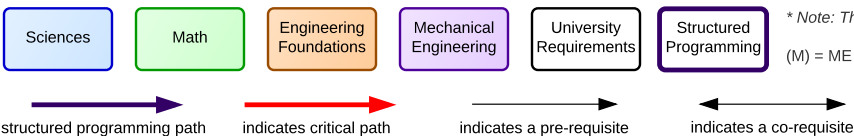
† This programming sequence is the only approved way to complete the structured programming requirement for the ME degree.
* In this instance, either course meets the requirement.

Mechanical Engineering Curriculum Flowchart

(rev. 3/17)



KEY:



* Note: The only approved combination to complete the ME structured programming requirement is CS117, ME 271, and ME 380.

(M) = ME major status required