

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING COURSE PLAN BY SEMESTER

Catalog Year
2014—2015

**TOTAL
CREDITS:
122**

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.



| 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 | Introduction to Engineering | 3 | 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 | | | 15 |
| TOTAL CREDITS | | 17 | 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 | ENGR 245 | Introduction to Materials Science & Engineering | 3 |
| ENGR 210 | Engineering Statics | 3 | ENGR 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 |

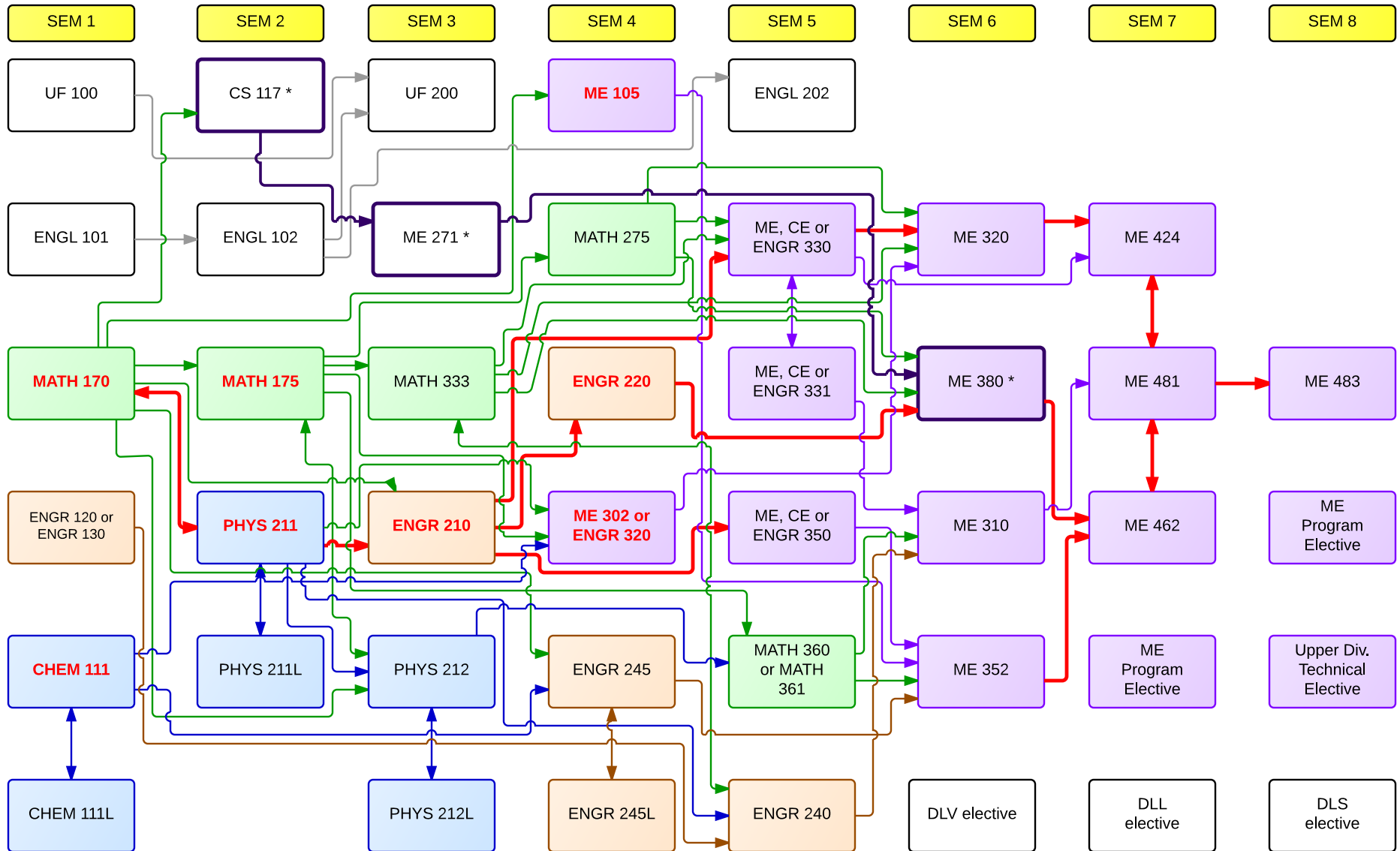
| THIRD YEAR | | | | | |
|-----------------------|---|-----------|----------------------|-------------------------------------|-----------|
| Fall Semester | | | Spring Semester | | |
| MATH 360 or MATH 361* | Engineering Statistics or Probability and Statistics* | 3 | ME 380† | Kinematics & Machine Dynamics | 3 |
| ME, CE, or ENGR 330 | Fluid Mechanics | 3 | ME 320 | Heat Transfer | 3 |
| ME, CE, or ENGR 331 | Fluid Mechanics Lab | 1 | ME 310 | Experimental Methods Lab (CID) | 2 |
| ME, CE, or ENGR 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 | | | 14 |
| 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 | | | |
| TOTAL CREDITS | | 15 | 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 Flowchart

2014 - 2015 Catalog (rev. 10/14)



KEY:



Red Text
ME Core Courses for Upper Division

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