### Department of Materials Science and Engineering

#### Four Year Plan (2013-14 Catalog, ready for calculus)

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Semester</th>
<th>Course Name</th>
<th>Credits</th>
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<tr>
<td><strong>FIRST YEAR</strong></td>
<td>FALL</td>
<td>UF 100 Intellectual Foundations</td>
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<td></td>
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<td>CHEM 111, 111L General Chemistry I with Lab</td>
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<td>MATH 170 Calculus I</td>
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<td></td>
<td></td>
<td>ENGR 120 or ENGR 130 Introduction to Engineering</td>
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<td>SPRING</td>
<td>ENGL 101 Introduction to College Writing</td>
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<td>CHEM 112, 112L General Chemistry II with Lab</td>
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<td>MATH 175 Calculus II</td>
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<td></td>
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<td>PHYS 211, 211L Physics I with Calculus and Lab</td>
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<tr>
<td><strong>SECOND YEAR</strong></td>
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<td>MATH 275 Multivariable and Vector Calculus</td>
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<td>PHYS 212, 212L Physics II with Calculus and Lab</td>
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<td>ENGR 245, 245L Introduction to MSE and Lab</td>
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<td>SPRING</td>
<td>MATH 333 Differential Equations</td>
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<td>PHYS 309, 309L Modern Physics with Lab</td>
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<td>(CID) MSE 215 Materials Processing</td>
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<td>UF 200 Civil and Ethical Foundations</td>
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<tr>
<td><strong>THIRD YEAR</strong></td>
<td>FALL</td>
<td>MSE 305 Structure of Materials</td>
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<td>MSE 308 Thermodynamics of Materials</td>
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<td>ENGR 210 Statics</td>
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<td>MATH 360 Engineering Statistics</td>
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<td>ENGR 240 or ECE 210 Electrical Circuits</td>
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<td>MSE 418 Phase Transformations and Kinetics</td>
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<td>MSE 312 Mechanical Behavior of Materials</td>
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<td><strong>FOURTH YEAR</strong></td>
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<td>PHYS 423 Materials Characterization</td>
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<td>MSE 404L Materials Analysis Lab</td>
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<td>MSE 310 Electrical Properties of Materials</td>
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<td>MSE 480 Senior Project</td>
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<td>DLL, DLV, or DLS course</td>
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**HIGHLIGHTED COURSES** are offered only in the semester in which they are listed.

**COMPSCI ELECTIVE:** The following courses fulfill the computer science elective requirement – CS 115 (Intro to C), CS 117 (Intro to C++), CS 119 (Intro to Java), CS 120 (Intro to Programming Concepts), and CS 125 (Intro to Computer Science)

**DISCIPLINARY LENS COURSES:** Students need to take one DLL, one DLV, and two DLS courses. DLS courses must come from two different fields.

**TECHNICAL + ENGINEERING ELECTIVES:** Students must complete 12 credits of technical and engineering electives. Six of these credits need to be in engineering disciplines (ENGR, MSE, ECE, CE, or MBE). The other 6 can come from engineering, math or science disciplines. Of the 12 credits, 6 must be upper division (300- or 400-level). All technical and engineering electives must be approved by the student’s advisor.

**GRADE POLICY:** A C- or above is required for all prerequisite courses and for all upper division courses within the student’s major.

**MSE UNDERGRADUATE ADVISORS:**

Megan Frary (meganfrary@boisestate.edu, 208-426-1061): freshmen, sophomores, transfer students, second degree students

Chad Watson (chadwatson1@boisestate.edu, 208-426-4897): juniors, seniors