<table>
  <thead>
    <tr>
      <th>Freshman</th>
      <th>Sophomore</th>
      <th>Junior</th>
      <th>Senior</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td><strong>Engl 101 (3)</strong> <br>College English I</td>
      <td><strong>Engl 102 (3)</strong> <br>College English II</td>
      <td><strong>Comm 111 (3)</strong> <br>Public Speaking</td>
      <td><strong>PHIL 385 (3)</strong> <br>Engineering Ethics</td>
    </tr>
    <tr>
      <td>P: See course Catalog</td>
      <td>P: See course Catalog</td>
      <td>SP101</td>
      <td>P: Junior or Senior Standing</td>
    </tr>
    <tr>
      <td><strong>Chem 211 (5)</strong> <br>General Chemistry</td>
      <td><strong>Calculus I</strong> <br>Math 243 or equivalent</td>
      <td><strong>Math 344 (3)</strong> <br>Differential Equations I</td>
      <td><strong>EE 282 (4)</strong> <br>Circuits I</td>
    </tr>
    <tr>
      <td>P: Math 242 with grade C or better</td>
      <td>MA262</td>
      <td>P: Math 243 with grade 2.0 or better</td>
      <td>PH410 & 411</td>
    </tr>
    <tr>
      <td><strong>Chem 212 & 214</strong> <br>General Chemistry</td>
      <td><strong>Physics 313 (4)</strong> <br>Univ Physics I</td>
      <td><strong>Physics 314 (4)</strong> <br>University Physics II</td>
      <td><strong>ME 398 (3)</strong> <br>Thermodynamics I</td>
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    <tr>
      <td>P: Math 243</td>
      <td>PH190 & 192</td>
      <td>MA322</td>
      <td>H/FA/SSC(3)</td>
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    <tr>
      <td>C: Math 243</td>
      <td>C: Math 243 w/C or better, Phys 313</td>
      <td>Math 243 w/C or better, Phys 313 w/C</td>
      <td>Math 243 w/C or better, Phys 313 w/C</td>
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    <tr>
      <td><strong>PH 319 & 320 (6)</strong> <br>Physics Lab I</td>
      <td><strong>ME 250 (3)</strong> <br>Materials Engineering</td>
      <td><strong>CS 497B (3)</strong> <br>Intro to Prog Engineers</td>
      <td><strong>ME 521 (3)</strong> <br>Fluid Mechanics</td>
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    <tr>
      <td>P: Math 242</td>
      <td>PH191</td>
      <td>PH310</td>
      <td>P: CHEM 211/MATH 242</td>
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    <tr>
      <td>C: Math 243</td>
      <td>Coreq: ENGR 311</td>
      <td>Co: MATH 243</td>
      <td>P: ME 398/ Math 55/ AE 373</td>
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    <tr>
      <td><strong>IME 222 (3)</strong> <br>Engineering Graphics</td>
      <td><strong>ME 251 (1)</strong> <br>Intro to Social & Behavioral Science</td>
      <td><strong>AE 333 (3)</strong> <br>Mechanics of Materials</td>
      <td><strong>Technical Elective (3)</strong>
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      <td>P: Math 123 or equivalent</td>
      <td>PHIL 385 (3) <br>H/F/SSC(3)</td>
      <td>P: AE 223 with grade 2.0 or better, Coreq: MATH 344</td>
      <td>P: ME 339/ME 439</td>
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      <td><strong>IME 225 (3)</strong> <br>Engineering Graphics</td>
      <td>Fals11</td>
      <td>ME 533 (3) <br>Mechanical Control Systems</td>
      <td>P: ME 522</td>
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    <tr>
      <td>P: Math 242</td>
      <td>ENGR 311</td>
      <td>P: EE 282/AE 333</td>
      <td>P: EE 282/AE 333</td>
    </tr>
    <tr>
      <td>C: Math 242</td>
      <td>MATH 242</td>
      <td>Coreq: ME 252</td>
      <td>Coreq: ME 522</td>
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    <tr>
      <td><strong>IME 228 (3)</strong> <br>Engineering Graphics</td>
      <td><strong>ME 410 (3)</strong> <br>Design of Machinery</td>
      <td><strong>ME 413 (3)</strong> <br>Heat Transfer</td>
      <td><strong>Technical Elective (3)</strong>
          </td>
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    <tr>
      <td>P: Math 123 or equivalent</td>
      <td>PH191</td>
      <td>P: IME 222</td>
      <td>P: IME 222</td>
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      <td><strong>IME 229 (3)</strong> <br>Engineering Graphics</td>
      <td>PHIL 385 (3) <br>H/F/SSC(3)</td>
      <td>ME 533 (3) <br>Mechanical Control Systems</td>
      <td>P: ME 339/ME 439</td>
    </tr>
    <tr>
      <td>P: Math 242</td>
      <td>ENGR 311</td>
      <td>P: EE 282/AE 333</td>
      <td>P: EE 282/AE 333</td>
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    <tr>
      <td>C: Math 242</td>
      <td>MATH 242</td>
      <td>Coreq: ME 252</td>
      <td>Coreq: ME 522</td>
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  </tbody>
</table>

Notes:
1. Several courses are only offered during the fall semester, several other courses are spring semester only courses.
2. ME250 and AE333 must be completed prior to critical semester courses.
3. ME250, AE333, and IME 255 are typically offered during the WSU summer semester.
4. A C-minus grade does not meet an AE or ME departmental “C or better” prerequisite requirement.
5. Dual-Degree Physics students should follow the recommended ESU schedule of classes for years 1-3. For the WSU Mechanical Engineering (ME) degree, they may also take the following technical electives at ESU (a maximum of two courses will transfer from ESU to WSU ME as a technical elective):
   - Electricity and Magnetism 1-PH 762 (3 credits)
   - Electricity and Magnetism 2-PH 763 (3 credits)
   - Mathematical Modeling-MA 291 (3 credits)
   - Introduction to Linear Algebra-MA 322 (3 credits)
   - Probability and Statistics-MA 380 (3 credits)
   - Complex Variables-MA 734 (3 credits)
6. Additionally, for the WSU Mechanical Engineering (ME) degree, they may also take the General Education Natural Science Elective (3) at ESU. The following courses at ESU will transfer for the GE Natural Science Elective:
   - Chemistry 2 & Lab-CH 126/127 (5 credits)
   - Introduction to Space Science & Lab-PH 110&111 (5 credits)
   - Introduction to Earth Science & Lab-ES 110&111 (5 credits)
   - Introduction to Geospatial Analysis-ES 351 (3 credits)
   - Computer Applications in Physics-PH 510 (3 hours)
   - Light-PH 520 (3 credits)
   - Modern Physics-PH 540 (3 credits)
   - Advanced Physics Lab 1-PH 741 (3 credits)
   - Theoretical Physics-PH 790 (3 credits)
   - Introduction to Quantum Mechanics-PH 795 (3 credits)
The chart below is a sample possibility for a student to complete their final two years at WSU (first three at ESU):
Assumes the student takes ME250 and AE333 PRIOR to coming to WSU, General Education Natural Science Elective is also completed PRIOR to matriculating to WSU and assumes that two technical electives would transfer. Also, assumes that all general education requirements except Engineering Ethics were completed at ESU (if student does not complete both technical electives, then those electives may be taken in the final two years at WSU).

<table>
<thead>
<tr>
<th></th>
<th>WSU Year 1</th>
<th></th>
<th>WSU Year 2</th>
<th></th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Fall</td>
<td>Spring</td>
<td>Fall</td>
<td>Spring</td>
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<tr>
<td><strong>PHIL 385 (3)</strong></td>
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<td>IME 255 (3)</td>
<td>ME 633 (3)</td>
<td>ME 662 (3)</td>
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<td>Engineering Economy</td>
<td>Mechanical Systems Laboratory</td>
<td>Senior Capstone Design</td>
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<td></td>
<td>P: Junior or Senior Standing</td>
<td>Offered Summer/Fall/Spring</td>
<td>P: ENGL 102/ME 533</td>
<td>Coreq: In last semester of degree program</td>
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<td><strong>ME 339 (3)</strong></td>
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<td>ME 439 (3)</td>
<td>ME 659 (3)</td>
<td>Technical Elective (3)</td>
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<tr>
<td>Design of Machinery</td>
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<td>Mechanical Engineering Design 1</td>
<td>Mechanical Control Systems</td>
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<td></td>
<td>P: ME 250 / AE 333</td>
<td>Offered Spring Only</td>
<td>P: EE 282/Math 555 or EE 383</td>
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<td><strong>ME 521 (3)</strong></td>
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<td>ME 522 (3)</td>
<td>Thermal Design Elective (3)</td>
<td>Mechanical Elective (3)</td>
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<td>Fluid Mechanics</td>
<td>P: ME 398/ Math 55/ AE 373</td>
<td>Heat Transfer</td>
<td>P: ME 521</td>
<td>P: ME 522</td>
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<td><strong>ME 533 (3)</strong></td>
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<td>Mechanical Design Elective (3)</td>
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</tr>
<tr>
<td>Mechanical Engineering Laboratory</td>
<td>P: EE 282/AE 333</td>
<td>P: ME 339/AE 439</td>
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<tr>
<td>Requirement (2 of 3)</td>
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|                      | 12 hrs.   | 15 hrs.   | 12 hrs. | 12 hrs. |