**Checklist for B.S. Degree in Chemistry with Materials Science Option (Track Two)**

### Core Science Courses (81 Credits Required)

<table>
<thead>
<tr>
<th>Chemistry</th>
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<tbody>
<tr>
<td>CH 231 (or 231H) &amp; 271</td>
<td>(5 Credits)</td>
<td>CH 361</td>
</tr>
<tr>
<td>CH 232 (or 232H) &amp; 272</td>
<td>(5 Credits)</td>
<td>CH 362</td>
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<tr>
<td>CH 233 (or 233H) &amp; 273</td>
<td>(5 Credits)</td>
<td>CH 411</td>
</tr>
<tr>
<td>CH 324 or CH 421, 422 &amp; 461&lt;sup&gt;c&lt;/sup&gt;</td>
<td>(4-9 Credits)</td>
<td>CH 412</td>
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<tr>
<td>CH 334</td>
<td>(3 Credits)</td>
<td>CH 440</td>
</tr>
<tr>
<td>CH 335</td>
<td>(3 Credits)</td>
<td>CH 441</td>
</tr>
<tr>
<td>CH 336</td>
<td>(4 Credits)</td>
<td>CH 442</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CH 462&lt;sup&gt;a&lt;/sup&gt;</td>
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</tbody>
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<thead>
<tr>
<th>Mathematics</th>
<th>Physics</th>
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</thead>
<tbody>
<tr>
<td>MTH 251</td>
<td>(4 Credits)</td>
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<tr>
<td>MTH 252</td>
<td>(4 Credits)</td>
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<tr>
<td>MTH 254</td>
<td>(4 Credits)</td>
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### University Baccalaureate Core<sup>b</sup> (33 Credits Required)

#### Skills (12 Credits)
- WR 121 (3 Credits)
- Writing II (3 Credits)
- Speech (3 Credits)
- HHS plus PAC or HHS Lab (2 Credits + 1 Credits)

#### Perspectives (12 Credits)
- Western Culture (3 Credits)
- Cultural Diversity (3 Credits)
- Social Processes and Institutions (3 Credits)
- Literature and Arts (3 Credits)

#### Difference, Power & Discrimination (3 Credits)

#### Synthesis (6 Credits)
- Contemporary Global Issues (3 Credits)
- Science, Technology & Society (3 Credits)

#### Biological Science (BI 212 rcmd) (4 or 5 Credits)

### Materials Science Option Courses (30-33 Credits Required)<sup>e</sup>

**Chemistry:**

**Choose one option:**
- CH 445 | (3 Credits) |
- CH 448 | (3 Credits) |
- CH 413 | (3 Credits) |

**Chemical Engineering:**
- CHE 445 | (4 Credits) |

**Math:**
- MTH 256 | (4 Credits) |

**Electives (choose 3 courses from below): (9-12 credits)<sup>f</sup>**
- CH 401 or CHE 401, ECE 416, ENGR 212, 221, 322, ME 316 or ME 581

### Other Requirements:
- 180 Credits for Graduation
- Last 45 credits (or 45 of last 75) completed at OSU
- 60 Upper Division Credits
- Foreign Language<sup>d</sup>

**Footnotes**

<sup>a</sup> Meets WIC Requirement. It is strongly recommended that CH 422 be taken as a co-requisite with CH 462.

<sup>b</sup> Courses from approved list. For Perspectives, no more than two courses from one department. For Synthesis, courses must be from different departments. Transfers from Oregon Community Colleges with an AA degree have fulfilled the skills and perspective requirements.

<sup>c</sup> The combination of CH 421, CH 422, and CH 461 is recommended for the strongest background in analytical chemistry, with this option only one inorganic chemistry course is required (CH 411) which means this option only adds two additional credits.

<sup>d</sup> Two years of one foreign language in high school. Requirement can also be met by taking two terms of a college-level language (C- or higher) or an approved proficiency test (For students entering in Fall 1997 or later.)

<sup>e</sup> Students will need to petition the College of Engineering to obtain approval to enroll in ENGR 300 level courses which are normally restricted to engineering majors. Students should first complete math through MTH 256 with at least a C grade, and physics sequence through PH 212. Starting Spring 2014, all pre-requisite courses to ENGR, CBEE, or CHE courses require a C or better grade.