MATERIALS SCIENCE OPTION

This option is offered within the following major(s):

- Chemistry - College of Science (http://catalog.oregonstate.edu/college-departments/science/chemistry/chemistry-ba-bs-hba-hbs)

The Materials Science option is customized to include applied courses in a variety of materials areas to enhance career opportunities in, for example, electronics, polymers and biotechnology. Students can earn a BS degree in Chemistry in four years while targeting a career in this field or preparing for graduate school in chemistry or related areas.

The Materials Science option is designed for the Track-Two BS degree in Chemistry.

The track-two core requirements are slightly modified for the Materials Science option:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH 211 &amp; PH 212 &amp; PH 213</td>
<td>*GENERAL PHYSICS WITH CALCULUS and *GENERAL PHYSICS WITH CALCULUS (Required)</td>
<td>12</td>
</tr>
<tr>
<td>CHE 444</td>
<td>THIN FILM MATERIALS PROCESSING</td>
<td>4</td>
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<tr>
<td>CHE 445</td>
<td>POLYMER ENGINEERING AND SCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 321</td>
<td>INTRODUCTION TO MATERIALS SCIENCE</td>
<td>4</td>
</tr>
<tr>
<td>ENGR 322</td>
<td>MECHANICAL PROPERTIES OF MATERIALS</td>
<td>3</td>
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<tr>
<td>MTH 256</td>
<td>APPLIED DIFFERENTIAL EQUATIONS</td>
<td>4</td>
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Select four of the following: 12-14

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH 401</td>
<td>RESEARCH</td>
</tr>
<tr>
<td>CH 413</td>
<td>RESEARCH</td>
</tr>
<tr>
<td>ECE 416</td>
<td>ELECTRONIC MATERIALS AND DEVICES</td>
</tr>
<tr>
<td>ENGR 211</td>
<td>STATICS</td>
</tr>
<tr>
<td>ENGR 212</td>
<td>DYNAMICS</td>
</tr>
<tr>
<td>ENGR 213</td>
<td>STRENGTH OF MATERIALS</td>
</tr>
<tr>
<td>ENGR 221</td>
<td>THE SCIENCE, ENGINEERING AND SOCIAL IMPACT OF NANOTECHNOLOGY</td>
</tr>
<tr>
<td>ME 316</td>
<td>MECHANICS OF MATERIALS</td>
</tr>
</tbody>
</table>

Total Hours 43-45

* Baccalaureate Core Course (BCC)

Option Code: 522