# Materials Science and Engineering - Minor

## Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
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<tbody>
<tr>
<td>MSEN 210</td>
<td>Thermodynamics of Materials</td>
<td>3</td>
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<tr>
<td>or MSEN 260 or Structure of Materials</td>
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Select two of the following:  

- BAEN 354 Engineering Properties of Biological Materials  
- BAEN 427 Engineering Aspects of Packaging  
- BMEN 344 Biological Interactions and Testing  
- BMEN 482 Polymeric Biomaterials  
- BMEN 483 Polymeric Biomaterial Synthesis  
- CHEM 466 Polymer Chemistry  
- CHEM 468 Materials Chemistry of Inorganic Materials  
- CHEN 451 Introduction to Polymer Engineering  
- CHEN 475 Microelectronics Process Engineering  
- CVEN 342 Materials of Construction  
- CVEN 343 Portland Cement Concrete Materials for Civil Engineers  
- CVEN 417 Bituminous Materials  
- ECEN 370 Electronic Properties of Materials  
- ECEN 440 Thin Film Technology and Device Application  
- MEEN 360 Materials and Manufacturing Selection in Design  
- MEEN 455 Engineering with Plastics  
- MEEN 458 Processing and Characterization of Polymers  
- MEEN 460 Corrosion Engineering  
- MEEN 471 Elements of Composite Materials  
- MEEN 475 Materials in Design  
- MMET 207 Metallic Materials  
- MMET 313 Industrial Welding Processes  
- NUEN 465 Nuclear Materials Engineering  
- PHYS 416 Physics of the Solid State  

**Total Semester Credit Hours:** 15

1. Except MSEN 201, MSEN 205, MSEN 222/MEEN 222, MSEN 281, MSEN 301, MSEN 302, MSEN 380, MSEN 400, MSEN 401, MSEN 402, MSEN 485, MSEN 491.
2. Up to 2 of these electives (6 credits total) could consist of "Materials-focused course(s)" within the student's home major.
3. Maximum of 3 credits of MSEN 485 or MSEN 491.
4. Students must make a grade of C or better in all courses.
5. Student must achieve an overall GPA of 2.5 in approved minor courses.