## Program Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSEN 601</td>
<td>Fundamental Materials Science and Engineering</td>
<td>3</td>
</tr>
<tr>
<td>MSEN 643</td>
<td>Materials Electrochemistry and Corrosion</td>
<td>3</td>
</tr>
<tr>
<td>MSEN 644</td>
<td>Corrosion and Electrochemistry Lab</td>
<td>3</td>
</tr>
<tr>
<td>MSEN 646</td>
<td>Corrosion Prevention and Control Methods</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following: 3

- BMEN 635  Biomaterials Compatibility
- CHEM 623  Surface Chemistry
- CHEN 655/ SENG 655  Process Safety Engineering
- MEMA 611  Fundamentals of Engineering Fracture Mechanics
- MSEN 602  Physics of Materials
- MSEN 603  Fundamentals of Soft and Biomaterials
- MSEN 616/ Surface Science
- MEEN 616  
- MSEN 620  Kinetic Processes in Materials Science
- MSEN 625/ MEEN 625  Mechanical Behavior of Materials
- MSEN 640  Thermodynamics in Materials Science
- NUEN 662  Nuclear Materials Under Extreme Conditions
- PETE 643  Oil Field Chemistry

**Total Semester Credit Hours** 15