Tribology Minor

This 15-hour multidisciplinary minor prepares students from various science and engineering majors for careers that require a background in friction, wear and lubrication (tribology). Students will be prepared for not only the lubricant and bearing manufacturing industry, but for design and maintenance in the power generation, vehicle, and manufacturing industries. Students who complete this minor will acquire the skills necessary to identify critical parameters in a tribological system, design a tribological system for the needs of a specific application, including geometry, lubricant, and surface properties. Students will also understand the chemical formulation and operating mechanisms of lubricants and additives.

Courses required

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MECH 5230</td>
<td>Friction, Wear and Lubrication</td>
<td>3</td>
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<tr>
<td>PFEN 5300</td>
<td>Rheology</td>
<td>3</td>
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<tr>
<td>CHEM 2080</td>
<td>Organic Chemistry II</td>
<td>3</td>
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Electives courses

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<tr>
<td>BUSI 3510</td>
<td>Introduction to Business and Engineering</td>
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<tr>
<td>MATL 5600</td>
<td>Corrosion</td>
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<tr>
<td>MECH 5240</td>
<td>Boundary and Full-Film Lubrication</td>
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<tr>
<td>MECH 5270</td>
<td>Metalworking and Manufacturing Tribology</td>
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<tr>
<td>CHEN 5660</td>
<td>Macroscale Assembly and Applications of Nanomaterials</td>
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<tr>
<td>MECH 5970</td>
<td>Intermediate Special Topics in Mechanical Engineering</td>
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