Bachelor of Science (B.S.) Major in Manufacturing Engineering (Mechanical Systems Concentration)

Minimum required: 129 semester credit hours

General Requirements

1. The general education core curriculum courses are listed in the degree plan below along with the statewide component code number. See the General Education Core Curriculum (http://mycatalog.txstate.edu/undergraduate/general-education-core-curriculum/) section of this catalog for the Texas State requirements and options in the core curriculum, including Honors courses.

2. Majors must complete a minimum of 36 advanced hours (3000 or 4000 level courses).

3. Nine semester credit hours must be writing intensive (WI).

4. If two years of the same language are taken in high school, then no additional language hours will be required for the degree. In the absence of such high school language, two semesters of the same modern language must be taken at the college level.

5. The Manufacturing Engineering degree programs include all the courses required for an Applied Mathematics minor.

Course Requirements

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
<th>Second Semester</th>
<th>Hours</th>
<th>Summer</th>
<th>Hours</th>
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<td>MATH 3323</td>
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<td>ENGR 3375</td>
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<td>ENGR 2300</td>
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<td>ENG 1310</td>
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<td>MFGE 3316</td>
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<td>ENGR 3311</td>
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<td>ENGR 3315</td>
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<td>ART 2313, DPN 2313, MU 2313, or TH 2313</td>
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<td>MFGE 4390</td>
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<td>MFGE 4391</td>
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Bachelor of Science (B.S.) Major in Manufacturing Engineering (Mechanical Systems Concentration)

<table>
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<tr>
<th>Electives¹</th>
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Total Hours: 129

¹ A minimum of six (6) hours of advanced Manufacturing Engineering electives chosen from the list below are required.

### Advanced Manufacturing Engineering Electives

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<tr>
<th>Code</th>
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<td>MFGE 4367</td>
<td>Polymer Properties and Processing</td>
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<td>MFGE 4392</td>
<td>Microelectronics Manufacturing I</td>
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<td>MFGE 4394</td>
<td>Microelectronics Manufacturing II</td>
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<tr>
<td>MFGE 4399A</td>
<td>Reverse Engineering and Rapid Prototyping</td>
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<tr>
<td>MFGE 4399B</td>
<td>Introduction to Reinforced Polymer Nanocomposites in Industrial Applications</td>
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<td>MFGE 4399C</td>
<td>Introduction to Industrial Robotics</td>
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<tr>
<td>TECH 4330</td>
<td>Foundry &amp; Heat Treatment</td>
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<tr>
<td>ENGR 3190</td>
<td>Cooperative Education</td>
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<tr>
<td>ENGR 4395</td>
<td>Independent Studies in Engineering</td>
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