### Master of Science in Mechanical Engineering

#### No Thesis/No Report Degree Requirements

**Manufacturing & Design Area**

<table>
<thead>
<tr>
<th>Total Hrs.:</th>
<th>Min. 36</th>
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<tbody>
<tr>
<td>Grad. Hrs.:</td>
<td>Min. 30 (Max 6 UG hrs)</td>
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<tr>
<td></td>
<td>No required ME UG courses accepted</td>
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<td>Min. of 24 hrs. in Mechanical Engineering</td>
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<tr>
<td>Major Hrs.:</td>
<td>Min. 18 hrs. in Manufacturing and Design</td>
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<td>12 hrs. from core courses, two from each area (see below)</td>
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<tr>
<td>Grading:</td>
<td>All major hours must be taken for letter grade</td>
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<tr>
<td>Minor Hrs.:</td>
<td>6-18</td>
</tr>
<tr>
<td>Related Hrs.:</td>
<td>Max. 6 (0-2 courses)</td>
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</table>

#### M&D Core Courses

Students must take at least two courses from each of the following areas:

**Manufacturing:**

- ME397 Additive Manufacturing
- ME397 Bioinspired Micro/Nanostructures
- ME397 Composites Manufacturing
- ME397: Data Analytics and Process Control in Semiconductor Manufacturing
- ME397 High Throughput Nanopatterning
- ME397 Medical Device Design and Mfg
- ME397 Optical Engineering
- ME397 Precision Machine Design
- ME397 Statistical Methods in Mfg

**Design:**

- ME392M.6 Engineering Design Theory and Mathematical Techniques
- ME392M.7 Product Design, Development, and Prototyping
- ME397 Bioinspired Micro/Nanostructures
- ME397 Composites Design
- ME397 Computational Methods for Engineering Design
- ME397 Data-Driven Design and Decision-Making in Complex Systems
- ME397 Medical Device Design and Mfg
- ME397 Precision Machine Design
- ME397 Theory/Design of Mechanical Measurements

*Document revised: 11-Apr-22*