No Thesis/No Report Degree Requirements
Manufacturing & Design Area

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

**M&D Core Courses**

**Manufacturing:**
- ME392Q.9 Additive Manufacturing
- ME392Q.11 High Throughput Nanopatterning
- ME392M.8 Medical Device Design and Mfg
- ME392M.9 Precision Machine Design
- ME397 Additive Manufacturing Lab
- ME397 Bioinspired Micro/Nanostructures
- ME397 Data Analytics and Process Control in Semiconductor Manufacturing
- ME397 Optical Engineering
- ME397 Statistical Methods in Mfg
- ME397 Introduction to Micro and Nanomanufacturing

**Design:**
- ME392M.6 Engineering Design Theory and Mathematical Techniques
- ME392M.7 Product Design, Development, and Prototyping
- ME392M.8 Medical Device Design and Mfg
- ME392M.9 Precision Machine Design
- ME397 Bioinspired Micro/Nanostructures
- ME397 Computational Methods for Engineering Design
- ME397 Data-Driven Design and Decision-Making in Complex Systems
- ME397 Theory/Design of Mechanical Measurements

**Other:**
- ME380Q-1 Engineering Analysis: Analytical Methods

*(Document revised: 05-June-23)*
MASTER OF SCIENCE IN MECHANICAL ENGINEERING

- ME383Q-2 Dynamics of Mechanical Systems
- ME383Q-4 Modeling of Physical Systems
- ME384Q-3 Time Series Modeling, Analysis, and Control
- ME384Q-7 Stochastic Systems, Estimation, and Control
- ME 398S Assessment and Curriculum Design in Engineering
- ME 398T Supervised Teaching in Mechanical Engineering

(Document revised: 05-June-23)