ADVANCED MANUFACTURING GRADUATE OPTION

This option is offered within the following major(s):

- Industrial Engineering - College of Engineering (http://catalog.oregonstate.edu/college-departments/engineering/school-mechanical-industrial-manufacturing-engineering/industrial-engineering-meng-ms-phd/)
- Mechanical Engineering - College of Engineering (http://catalog.oregonstate.edu/college-departments/engineering/school-mechanical-industrial-manufacturing-engineering/mechanical-engineering-meng-ms-phd/)

The Advanced Manufacturing graduate option is offered under both the Industrial Engineering and Mechanical Engineering majors. Advanced Manufacturing (AM) focuses on the integration of nanomaterial synthesis and microfabrication techniques and conventional macroscale manufacturing technologies to produce nano- and microscale systems in an economically, environmentally, and socially sustainable manner.

Option Code: 3191

A minimum of 12 credits from the following set of specific courses will be required of students wishing to declare the IE Advanced Manufacturing (AM) graduate option.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>Select one materials science course:</td>
<td>4</td>
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<tr>
<td></td>
<td>MATS 570 STRUCTURE-PROPERTY RELATIONS IN MATERIALS</td>
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<td>Select one or more manufacturing system course:</td>
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<tr>
<td></td>
<td>IE 552 DESIGN OF INDUSTRIAL EXPERIMENTS</td>
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<td></td>
<td>MFGE 535 INDUSTRIAL SUSTAINABILITY ANALYSIS</td>
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<td></td>
<td>MFGE 536 LEAN MANUFACTURING SYSTEMS ENGINEERING</td>
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<td>Select one or more manufacturing processes course(s):</td>
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<td></td>
<td>MFGE 531 MICROMANUFACTURING</td>
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<td>MFGE 538 COMPOSITES MANUFACTURING</td>
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Total Credits 12

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