The Minor in Manufacturing

Are you a Mechanical Engineering major interested in manufacturing? The Minor in Manufacturing is designed primarily for engineering students that are interested in additional instruction in the area of Advanced Manufacturing or Applied Robotics. The requirements for the minor fall into four focus areas or groups. Students can complete any one of the four groups to earn the minor.

Mechanical engineering majors already take most of the courses required for the minor (see catalog for details). The table below illustrates the additional courses that would be required to earn the minor. Note that some of the additional courses can also satisfy one or both technical elective requirements.

### Additional Courses for Mechanical Engineering Majors

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<th>Group 1</th>
<th>Manufacturing Processes Focus</th>
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| 4 Additional Courses (2 if double-counted with technical electives) | AMAR 260 (4) – Applied Advanced Manufacturing  
AMAR 360 (4) – Computer Integrated Manufacturing  
2 courses selected from:  
AMAR 352W (3) – Industrial Management  
*AMAR 451 (3) – Quality Management  
*AMAR 458 (3) – Project Management |

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<th>Group 2</th>
<th>Manufacturing Materials Focus</th>
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| 3 Additional Courses (2 if double-counted with a technical elective) | AMAR 260 (4) – Applied Advanced Manufacturing  
2 courses selected from:  
AMAR 316 (3) – Introduction to Plastics  
AMAR 318 (3) – Advanced Plastics & Composites  
*AMAR 477 (3) – Nanoscale Device Manufacturing |

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<tr>
<th>Group 3</th>
<th>Applied Robotics Focus</th>
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| 2 Additional Courses (none if double-counted with technical electives) | *AMAR 420 (4) – Robotics for Advanced Manufacturing  
*AMAR 460 (4) – Robotic Manufacturing Systems |

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<th>Group 4</th>
<th>Business Management Focus</th>
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| 5 Additional Courses (3 if double-counted with technical electives) | AMAR 260 (4) – Applied Advanced Manufacturing  
AMAR 352W (3) – Industrial Management  
*AMAR 451 (3) – Quality Management  
*AMAR 458 (3) – Project Management  
1 course selected from:  
MATH 105 (3) – Introduction to Statistics  
MATH 108 (3) – Statistics of Business and Economics |

*Course can be used to satisfy a technical elective requirement*