INDUSTRIAL MANUFACTURING TECHNOLOGY (614)
Welding and Fabrication (Certificate)

ABOUT OUR PROGRAM
This program develops skills that students require to lay out, fabricate, and weld various metals. These skills will be developed in the areas of Print Reading, Shielded Metal Arc Welding (SMAW), Metal Inert Gas (GMAW), and Tungsten Inert Gas Welding (TIG).

NATURE OF WORK AND EMPLOYMENT
Graduates will use a fusion process to join (weld) two pieces of metal by applying intense heat, pressure, or both to melt the edges of metal so they fuse permanently. This work requires laying out jobs according to drawings or blueprints and determining the welding process best suited for the metals being fused.

PROGRAM CONTACTS
Call Highland at 815-235-6121 for the following program contacts:
- Mr. Scott Anderson, Dean of Business & Technology
- Mr. Eric Dietmeier, Industrial Technology Faculty
- Mr. Steve Gellings, Industrial Technology Faculty
- Mr. Dana Zimmerman, Coordinator of Career Services/Student Advisor

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSN 141</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>or COMM 101</td>
<td>or ENGL 121</td>
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<tr>
<td>DRAF 110</td>
<td>Print Reading and Inspection</td>
<td>2</td>
</tr>
<tr>
<td>MATH 111</td>
<td>Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>MTEC 164</td>
<td>Manufacturing Processes</td>
<td>3</td>
</tr>
<tr>
<td>WELD 130</td>
<td>Introduction to Welding</td>
<td>3</td>
</tr>
<tr>
<td>* WELD 232</td>
<td>Intermediate Welding &amp; Fabrication</td>
<td>3</td>
</tr>
<tr>
<td>* WELD 233</td>
<td>Advanced Welding Processes</td>
<td>3</td>
</tr>
<tr>
<td>Technical Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours = 23

* Course has a prerequisite. See course descriptions.

Technical Electives:
Electives should be selected from courses with prefixes INFT, DRAF, ELET, MTEC, or WELD.