Welding Certificate - 24 credits
Program Area: Integrated Manufacturing Welding (Fall 2019)

***REMEMBER TO REGISTER EARLY***

Program Description
The certificate is designed to provide a basic working knowledge of Integrated Manufacturing, and/or enhance the education of a student who may come in contact with Welding, Machine Tool, and Engineering CAD Technology through another related technical field of study. This certificate is designed to provide a basic working knowledge of Integrated Manufacturing, and/or enhance the education of a student who may come in contact with Welding, Machine Tool, and Engineering CAD Technology through another related technical field of study. This certificate is not intended to take the place of either the two-year AAS degree or the two-year diplomas from any of the Integrated Manufacturing Programs.

Required Courses

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Credits</th>
<th>Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>CADE 1468</td>
<td>Solidworks I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>INMG 1400</td>
<td>Introduction to Manufacturing Technology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>INMG 1410</td>
<td>Mechanical Blueprint Reading</td>
<td>3</td>
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<tr>
<td>MTCC 1600</td>
<td>Engineering Materials</td>
<td>1</td>
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<tr>
<td>WLDG 1550</td>
<td>Gas Metal Arc Welding</td>
<td>3</td>
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<tr>
<td>WLDG 1520</td>
<td>Gas Tungsten Arc Welding I</td>
<td>3</td>
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<td>WLDG 1540</td>
<td>Shielded Metal Arc Welding</td>
<td>3</td>
<td></td>
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<tr>
<td>MTCC 1603</td>
<td>Turning</td>
<td>2</td>
<td></td>
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<tr>
<td>MTCC 2500</td>
<td>CNC Mill Conversational</td>
<td>2</td>
<td></td>
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</tbody>
</table>

Total Credits 24

*Requires a prerequisite or a concurrent course

Program Outcomes
- Demonstrate the proper use of various saws
- Use basic safety skills
- Calculate and set RPMs
- Use four-jaw chuck, turn between centers, and cut tapers
- Drill and bore holes
- Use edge finder
- Square work piece
- Cut pipe threads
- Cut acme threads
- Program using conversational language
- Set up and run parts

Pre-program Requirements
Successful entry into this program requires a specific level of skill in the areas of English, mathematics, and reading. Program entry will depend, in part, on meeting the prerequisites listed below:

English/Reading:
- A score of 78 or higher on the reading comprehension portion of the Accuplacer, or
- Completion of ENGL/READ 0950 or 0955 (or equivalent course or higher). ENGL/READ 0950 may be taken concurrently with Semester I coursework.

Mathematics:
- A score of 33 or higher on the Elementary Algebra Skills portion of the Accuplacer, or
- Completion of MATH 0520 (or equivalent course or higher). MATH 0520 may be taken concurrently with Semester I coursework.

For interpretation of test results and selection of appropriate coursework; or general information about the program, admissions, financial aid, and getting started at LSC, contact the professional advising team (pat@lsc.edu) or 218-733-7601
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For more information about the Welding Certificate including course descriptions, course prerequisites, the gainful employment disclosure, and potential career opportunities, see the program website (https://degrees.lsc.edu/welding-certificate/)

or

Contact Faculty Advisors Jay Vittone at 218-733-7705 or Matthew Farchmin at 218-733-6907