Industrial Technician CAS

Certificate of Applied Science Degree

Program Director: Karry Hardman

Program Website (http://www.gfcmsu.edu/webs/industrialtech/)

This program prepares students for operation and maintenance jobs dealing with industrial machinery. Program graduates have general skills in industrial safety, electrical troubleshooting, hydraulic and pneumatic system operation, and mechanical system repair. These skills are built on a strong educational foundation in math, writing, communications, and computing.

For more information on other programs in this field, visit the catalog pages for the Industrial Technician AAS (http://catalog.gfcmsu.edu/academic-programs/industrial-technician-aas/) and the Renewable Energy Technician AAS (http://catalog.gfcmsu.edu/academic-programs/renewable-energy-technician/).

Outcomes

Graduates are prepared to:

- Identify and practice safe workplace habits.
- Demonstrate familiarity with basic electrical tools and the ability to troubleshoot a basic electrical system.
- Demonstrate familiarity with basic mechanical tools and the ability to repair a basic mechanical system.
- Demonstrate a basic understanding of hydraulic and pneumatic systems.
- Demonstrate the ability to use personal computers and common operating systems and applications software.
- Develop and practice professional standards of workplace communication and interpersonal skills.
- Demonstrate an understanding of motor control circuits and how they operate.
- Identify and use specific tooling used in machining process.

Estimated Cost

Estimated Resident Program Cost*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Grade/Sem</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCH 191</td>
<td>Special Topics: Math for the Trades *</td>
<td>3</td>
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</table>

Credits 16

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Grade/Sem</th>
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<tbody>
<tr>
<td>COMX 115</td>
<td>Intro to Interpersonal Communic *</td>
<td>3</td>
</tr>
<tr>
<td>ELCT 130</td>
<td>Elec Motors and Generators *+</td>
<td>3</td>
</tr>
<tr>
<td>ETEC 103</td>
<td>AC/DC Electronics II *+</td>
<td>3</td>
</tr>
<tr>
<td>MCH 130</td>
<td>Machine Shop *+</td>
<td>3</td>
</tr>
<tr>
<td>NRGY 110</td>
<td>Fundmtl Hydraul/Pneu Systems *+</td>
<td>3</td>
</tr>
<tr>
<td>WRIT 104</td>
<td>Workplace Communications +</td>
<td>2</td>
</tr>
</tbody>
</table>

Credits 17

Total Credits 33

* Indicates prerequisites needed.
** Placement in course(s) is determined by placement assessment.

+ A grade of C- or above is required for graduation.

Fall 2020 MUS Student Health Insurance Premiums will be changing. Please check the Health Insurance website (http://students.gfcmsu.edu/insurance.html) and/or Student Central for confirmed premium rates. Students will be charged an additional fee of $21 per credit for online/hybrid courses.

Program Requirements

Many students need preliminary math and writing courses before enrolling in the program requirements. These courses may increase the total number of program credits. Students should review their math and writing placement before planning out their full program schedules.

Tuition and Fees $3,450
Application Fee $30
Program Fee $500
Course Fee $35
Books/Supplies $1,193
Total $5,208

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