CNC Technology Diploma (CT12)

Offered at the Clarkesville Campus

Entrance Dates ........................................................................................................... Fall, Spring, Summer
Length of Program ........................................................................................................ 4 Terms
Credit Hours Required for Graduation ............................................................................ 51

Purpose: The CNC Technology diploma program prepares students for careers in the Computerized Numerical Controls (CNC) technology field. Learning opportunities develop academic, technical, and professional knowledge and skills for job acquisition, retention, and advancement. The program emphasizes a combination of CNC theory and practical application necessary for successful employment. Program graduates receive a CNC Technology diploma and have the qualification of a CNC technician.

Admission Requirements:
• Age 16 or older
• High school diploma or GED
• Completion of application process including placement test; or provide SAT or ACT scores less than five years old

Program Courses

Basic Skills Courses
COLL 1010 College and Career Success Skills 3
ENGL 1010 Fundamentals of English I 3
MATH 1012 Foundations of Mathematics 3

Occupational Courses
AMCA 2110 CNC Fundamentals 3
AMCA 2130 CNC Mill Manual Programming 5
AMCA 2150 CNC Lathe Manual Programming 5
AMCA 2190 CAD/CAM Programming 4
MCHT 1011 Introduction to Machine Tool 4
MCHT 1012 Blueprint for Machine Tool 3
MCHT 1013 Machine Tool Math 3

OR
MATH 1013 Algebraic Concepts (3)

AND
MATH 1015 Geometry and Trigonometry (3)
MCHT 1020 Heat Treatment and Surface Grinding 3
MCHT 1119 Lathe Operations I 3
MCHT 1120 Mill Operations I 3
Electives 6

Estimated cost of books and supplies for full program is approximately $1,000.
CNC Specialist Certificate (CS51)
Offered at the Clarkesville Campus

Entrance Dates: Fall, Spring, Summer
Length of Program: 2 Terms
Credit Hours Required for Graduation: 20

Purpose: The CNC Specialist certificate program provides training for graduates to gain employment as Computerized Numerical Controls (CNC) machine tool technicians. Topics include CNC fundamentals, mill and lathe manual programming, CNC practical applications, and CAD/CAM programming. The program emphasizes a combination of CNC theory and practical application necessary for successful employment.

Admission Requirements:
- Age 16 or older
- High school diploma or GED
- Completion of application process including placement test; or provide SAT or ACT scores less than five years old
- Must possess basic machine tool skills; an interview with the faculty is required to assess prerequisite skills acquired through education and/or experience

Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMCA 2110</td>
<td>CNC Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>AMCA 2130</td>
<td>CNC Mill Manual Programming</td>
<td>5</td>
</tr>
<tr>
<td>AMCA 2150</td>
<td>CNC Lathe Manual Programming</td>
<td>5</td>
</tr>
<tr>
<td>AMCA 2170</td>
<td>CNC Practical Applications</td>
<td>3</td>
</tr>
<tr>
<td>AMCA 2190</td>
<td>CAD/CAM Programming</td>
<td>4</td>
</tr>
</tbody>
</table>

Estimated cost of books and supplies for full program is approximately $500.

Lathe Operator Certificate (LP11)
Offered at the Clarkesville Campus

Entrance Dates: Fall, Spring, Summer
Length of Program: 2 Terms
Credit Hours Required for Graduation: 13

Purpose: The Lathe Operator certificate program prepares students to use lathes, lathe set up, and lathe tool grinding. Emphasis is placed on cutting threads, boring holes to precise measurements, and cutting tapers. Topics include an introduction to machine tool technology, blueprint reading for machine tool, and basic and advanced lathe operations.

Admission Requirements:
- Age 16 or older
- High school diploma or GED
- Completion of application process including placement test; or provide SAT or ACT scores less than five years old

Program Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCHT 1011</td>
<td>Introduction to Machine Tool</td>
<td>4</td>
</tr>
<tr>
<td>MCHT 1012</td>
<td>Blueprint for Machine Tool</td>
<td>3</td>
</tr>
<tr>
<td>MCHT 1119</td>
<td>Lathe Operations I</td>
<td>3</td>
</tr>
<tr>
<td>MCHT 1219</td>
<td>Lathe Operations II</td>
<td>3</td>
</tr>
</tbody>
</table>

Estimated cost of books and supplies for full program is approximately $500.
PROGRAMS OF STUDY – INDUSTRIAL TECHNOLOGY

Mill Operator Certificate (MP11)

Offered at the Clarkesville Campus

Purpose: The Mill Operator certificate program prepares students to effectively operate milling machinery. Students become proficient in blueprint reading, general mathematical operations, and are provided the necessary knowledge and skills to obtain employment as a milling machinist.

Admission Requirements:
- Age 16 or older
- High school diploma or GED
- Completion of application process including placement test; or provide SAT or ACT scores less than five years old

Program Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCHT 1011</td>
<td>4</td>
</tr>
<tr>
<td>MCHT 1012</td>
<td>3</td>
</tr>
<tr>
<td>MCHT 1120</td>
<td>3</td>
</tr>
<tr>
<td>MCHT 1220</td>
<td>3</td>
</tr>
</tbody>
</table>

Estimated cost of books and supplies for full program is approximately $500.

Tool and Die Specialist Certificate (TA11)

Offered at the Clarkesville Campus

Purpose: The Tool and Die Specialist certificate program provides students advanced study in machine tool technology to prepare students to become tool and die specialists. Program objectives are to provide a sequence of advanced courses in the area of Tool and Die and to provide advanced training for employees in the machine tool industry.

Admission Requirements:
- Age 16 or older
- High school diploma or GED
- Completion of application process including placement test; or provide SAT or ACT scores less than five years old
- Must possess basic machine tool skills; an interview with the faculty is required to assess prerequisite skills acquired through education and/or experience

Program Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMCA 2205</td>
<td>5</td>
</tr>
<tr>
<td>AMCA 2210</td>
<td>3</td>
</tr>
<tr>
<td>AMCA 2230</td>
<td>7</td>
</tr>
<tr>
<td>AMCA 2240</td>
<td>3</td>
</tr>
</tbody>
</table>

Estimated cost of books and supplies for full program is approximately $230.