**Precision Machining Technology**

**Associate of Applied Science**

**June 22, 2016**

**2016-2017 Catalog**

**www.eastcentral.edu**

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**The Career**

Machinists use machine tools, such as lathes, milling machines and machining centers to produce precision metal parts. Although they may make large quantities of one part, precision machinists often produce small batches or one-of-a-kind items. They use their knowledge of the working properties of metals and their skill with machine tools to plan and carry out the operations needed to make machined products that meet precise specifications.

**Professional Traits**

Those pursuing a career in precision machining technology should:

- Be mechanically inclined
- Have good problem-solving abilities
- Be able to work independently
- Be able to do highly accurate work

**Employment & Salary Information**

Per the U.S. Bureau of Labor Statistics, the manufacturing industries employing the largest number of machinists were:

- Machine shops
- Turned product and screw, nut and bolt manufacturing
- Metalworking machinery
- Employment services
- Motor vehicle parts manufacturing
- Aerospace product and parts manufacturing

In May 2013, the median hourly wage for machinists was $19.03, or $39,582 annually.

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**The Program**

The Precision Machining Technology program is designed in conjunction with the region’s extensive machine tool industry, students learn the latest processes of manufacturing and machining from faculty who have worked in the field. Students study in laboratories with state-of-the-art machining equipment including a Wire EDM machine. Students explore coursework leading to an Associate of Applied Science degree or certificate intended to prepare them to enter the workforce.

A consortium of the leading local companies in the field work with educators at ECC to design a program that fits the needs of students and employers. Students are well prepared to enter the workforce, and employers know that graduates of the program are trained and dependable.

**Admissions Requirements**

Students must have completed:

- High school diploma or the equivalent
- Application for admission
- A placement test as specified by the college

**Transfer Options**

Associate of Applied Science degrees are designed for students seeking employment immediately upon graduation. Many of the credits, particularly the general education electives earned with this program, however, are also accepted as transfer credit by four-year colleges and/or universities.

Please note that transferring credit is decided solely by the bachelor degree-granting institution. Students are advised to contact the four-year school of their choice regarding transferability before beginning a program and/or reviewing other AAS or AA degrees offered through East Central College.

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**Accreditations**

East Central College is accredited by the Higher Learning Commission and a participant in the Academic Quality Improvement Program (AQIP).

30 N. LaSalle St., Suite 2400
Chicago, Illinois 60602-2504
1 (800) 621-7440

**National Career Readiness Certificate**

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**East Central College**

1964 Prairie Dell Road
Union, Missouri 63084
(636) 584-6500
www.eastcentral.edu

**Admissions Office**

ECC Campus
(636) 584-6563
admissions@eastcentral.edu

**Program Location**

The Business & Industry Center
42 Prairie Dell Plaza Drive
Union, Missouri 63084

**Division**

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(636) 584-6635
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Business and Industry
(636) 584-6139

**Program Faculty**

Curtis Elliott
Program Coordinator
(636) 239-0598
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**Rolla**

573-466-4100

**Washington**

636-239-0598

**Sullivan**

573-468-8287

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636-584-6588

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## Program of Study

**AAS Program (67 credit hours)**

This program of study is for a full-time student; part-time study is also available. Please contact an academic advisor for full course options. All academic schedules are subject to change. Many of these courses are also part of the Certificate of Achievement programs. For current schedule or the view a Certificate program, please visit www.eastcentral.edu.

### Year 1

#### Fall Semester

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
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<td>1</td>
</tr>
<tr>
<td>EN 1223/EN 1233</td>
<td>3</td>
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<tr>
<td>MA 1013</td>
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<tr>
<td>MA 1161/MA 1162</td>
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<tr>
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<td>MT 1083</td>
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<td><strong>Total Hours</strong></td>
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#### Spring Semester

<table>
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<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MA 2021/MA 2023</td>
<td>4</td>
</tr>
<tr>
<td>MA 2132/MA 2142</td>
<td>4</td>
</tr>
<tr>
<td>MA 2151/MA 2152</td>
<td>3</td>
</tr>
<tr>
<td>IE 2123</td>
<td>3</td>
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<tr>
<td><strong>Ethics and Social Responsibility</strong></td>
<td><strong>3</strong></td>
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<td><strong>Total Hours</strong></td>
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### Year 2

#### Fall Semester

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<tr>
<td>MA 2132/MA 2142</td>
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</tr>
<tr>
<td>MA 2151/MA 2152</td>
<td>3</td>
</tr>
<tr>
<td>IE 2123</td>
<td>3</td>
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<tr>
<td><strong>Total Hours</strong></td>
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#### Spring Semester

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<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MA 2163</td>
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</tr>
<tr>
<td>MA 2232/MA 2242</td>
<td>4</td>
</tr>
<tr>
<td>MA 2421/MA 2422</td>
<td>3</td>
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<tr>
<td><strong>PH 1104</strong></td>
<td><strong>4</strong></td>
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<td><strong>Total Hours</strong></td>
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</table>

**CS Course** is part of the Certificate of Specialization program  
**CA Course** is part of the Certificate of Achievement program  
**CNC Course** is also part of the CNC Certificate of Achievement

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East Central College does not discriminate on the basis of race, color, religion, national origin, ancestry, gender, sexual orientation, age, disability, genetic information or veteran status. Inquiries/concerns regarding civil rights compliance as it relates to student programs and services may be directed to the Vice President of Student Development, 131 Buescher Hall, 1964 Prairie Dell Road, Union, Missouri 63084, (636) 584-6565 or stnotice@eastcentral.edu.

June 22, 2016