Overview

The Precision Machining Pathway gives students the opportunity to develop the skills and abilities necessary to be a part of an engineering team that is creating the world. Curriculum includes practice in traditional and computer-aided drafting, layout and design of fabricated products, the study of materials used in manufacturing, plant layout, materials handling, manufacturing processes, and the use of machines.

Student Experience & Projects

Students will enrich their technical skills with participation in activities such as community service events, service learning projects, SkillsUSA competitions, OPPD project, job shadows, Dream-It-Do-It activities, maker space activities, internships, career fairs, and manufacturing tours.

Possible Careers

- Tool/Die/Mold Maker
- Precision Machinist
- Machine Builder
- CNC Programmer/Operator
- Automation/Product/Machine Designer
- Robot Programmer
- Engineering Coordinator
- Multiple Specialist Careers

Field Trips

- Kawasaki
- Molex
- Teledyne Isco
- Garner Industries
- Lincoln Industries
- Lincoln Tool & Design

Guest Speakers

- Brent Parde from Teledyne Isco
- Cliff Carlson, Technical Recruiter for Hudl

14 Dual Credits: Earn up to 14 Southeast Community College credits.
**Recommended Classes to Take at Your Home High School**

**Encouraged:** Intro to Engineering Design, Intro to Construction, Intro to Woods Manufacturing | Machine Tool Manufacturing (offered at LHS only) –OR– Welding Technology (offered at LHS only), Machine Tool/Welding (offered at LNE only)

**Awards**
Potential Job Placement for select students.

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Potential Job Placement for select students.

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**YEAR 1 CLASSES**
Junior (or Senior if pathway is not full)

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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</thead>
<tbody>
<tr>
<td>MACH 1121 (2.0) Manufacturing Processes</td>
<td>MACH 1156 (3.0) Blueprint Reading &amp; Drawing</td>
</tr>
<tr>
<td>MACH 1173 (2.5) Machine Tool Lab I</td>
<td>MACH 1174 (2.5) Machine Tool Lab II</td>
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**YEAR 2 CLASSES**
Returning TCA Senior

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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</thead>
<tbody>
<tr>
<td>MACH 1223 (2.0) Machine Tool Lab III</td>
<td>MACH 1224 (2.0) Machine Tool Lab IV</td>
</tr>
<tr>
<td>Manufacturing II Project/Competition –OR– Pathway Support Team Project</td>
<td>Manufacturing III Project/Competition –OR– Senior Project/Internship</td>
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**Additional high school courses taken at TCA to meet graduation requirements**
(Students earn 30 LPS credits per year toward the 245 LPS credits required for graduation).

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
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<tbody>
<tr>
<td>11th LPS Gov’t &amp; Politics (5 LPS credits)</td>
<td>11th LPS Economics (5 LPS credits)</td>
</tr>
<tr>
<td>12th LPS English (5 LPS credits)</td>
<td>12th LPS English (5 LPS credits)</td>
</tr>
</tbody>
</table>

**Related Associate of Applied Science Degrees Offered at SCC**

**AAS Degrees:** Electronic Systems Technology, Manufacturing Engineering Technology, Precision Machining and Automation Technology. **Diploma:** Precision Machining and Automation Technology.