

**Clackamas Community College (Oregon City, OR)**  
**Summary of Manufacturing-Related Programs and Career Pathways**

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<b>Overview of Manufacturing Program(s)</b>	Clackamas offers over 30+ manufacturing-related programs at both the certificate and AAS degree levels that span a wide range of content area, including Electronic Systems, CAD/CAM, Industrial Maintenance, Manufacturing/Machining Tech, Manufacturing Engineering, Welding/Fabrication, Microelectronics, and pre-Engineering. The college also offers both Employment and Occupational Skills Training to promote skill development for new and current workers in manufacturing, and extensive customized training options.
<b>Approach to Pathways/ Focus of Pathways Grant</b>	Clackamas is committed to the concept of career pathways as a framework for linking secondary, community college and four-year programs of study, and is approaching the development of manufacturing related roadmaps from that perspective. Efforts to date relative to specific Career Pathways Certificates have focused on the development of CNC Machining Technician and entry level welder. Both of these programs The program offers 21-25 credits of core CNC competencies plus optional machining tech electives. Based on the level of skill requirements required by employers in some areas, such as electronics, the minimal education level is a one year certificate, which precludes a Career Pathways Certificate but not a career pathways approach.
<b>Challenges</b>	<ul style="list-style-type: none"> <li>▪ High school students, parents, teachers and counselors need exposure to the modern manufacturing workplace and career opportunities it offers.</li> </ul>
<b>Opportunities</b>	<ul style="list-style-type: none"> <li>▪ Clackamas is actively engaged in the WIRED initiative to transform the regional delivery for manufacturers and align program offerings and delivery systems with employer needs.</li> </ul>
<b>Relationship with Secondary Schools re Manufacturing</b>	As part of the Career Clackamas Technical Education Consortium (C-TEC), Clackamas is working closely to develop manufacturing related Programs of Study/High School Planners and ensure that secondary/post-secondary pathways are aligned. In working with C-TEC, high school students have access to classes and labs on campus, and can earn credits through dual enrollment options.
<b>Relationship with WIB and/or Apprenticeship</b>	Clackamas enjoys a strong working relationship with the WIB. The Unified Workforce Plan for Region 15 supports investments in integrating career pathways into the workforce development by mapping secondary to post-secondary course alignment/articulation in high-demand sectors, including manufacturing. The college also has an expansive Industrial Technology Apprenticeship program.
<b>Relationship with Universities re Manufacturing</b>	Clackamas is designing its manufacturing-related programs to articulate with four year institutions as part of its overall career pathways approach. Numerous programs in the Manufacturing Technology Division articulate with OIT programs in Electronics, Manufacturing and Mechanical Engineering Technology.

**Manufacturing-Related Pathways Focus (MP) Other Manufacturing-Related Offerings (M)**

HS/Perkins Linkages	ABE/VESL	Pre-Apprentice	Pathways (12-44 hours)	Certificates (45 hours)	Two-Year Degrees	Apprenticeship
M			MP	M	M	M