



CNC 3-Axis Milling Programmer



Date	February 21, 2025	Orientation Time	7:30 a.m. (CLOSED to instructors)
Location	Delaware Area Career Center 4565 Columbus Pike Delaware, OH 43015	Contest Time	Immediately following orientation (CLOSED contest)
Scope of Contest	<p>This competition will assess the ability to program CNC milling machines, interpret prints (including GDT), and measure/gauge parts. Competitors also will demonstrate theoretical knowledge of CNC machine configuration, setup, and operations.</p> <p>The use of generative Artificial Intelligence (AI) is strictly prohibited and will result in an automatic disqualification of the contestant.</p>		
Testing	NO		
Eligibility	2 contestants per building IRN (chapter)		
Clothing	Clothing Competition Guide: CLASS D		
Provided by Contestant	<ul style="list-style-type: none"> • Professional Resume - Typed Hardcopy • Emergency Medical Forms (Contestants must have this to compete) • Contestants may bring their own laptop, but must come with either the 2023, 2024, or 2025 version(s) of Mastercam software or Autodesk Fusion 360 installed and operational. • Safety Glasses • G&M Handbook (Optional) • Machinery Handbook (Optional) • Non-programmable calculator • Blank note paper • Two pencils • Verification of Tool Training and Safety (Contest Specific See forms on SkillsUSA Ohio Web site) • Provided at site: Hard copy of Haas CNC Mill and CNC Lathe reference manual to use during contest, plain paper for notes and calculations on contest, computer with Mastercam software. • Disqualifications: Cell phone in competition area, smart watches. Use of internet or Artificial Intelligence (AI) 		
Contest Standards	<p>Contest Skilled Performance Standards</p> <p>CNCM 1.0 - Apply basic machining skills per industry standards as set forth by the technical committee.</p> <p>CNCM 2.0 - Demonstrate knowledge of CNC programming per industry standards as set forth by the technical committee.</p>	<p>Aligned ODEW Manufacturing Career Field Technical Content Standard Outcomes</p> <p>Outcome 6.9 Computer Numerical Control (CNC)</p> <p>Outcome 6.1 Measurement and Interpretation</p> <p>Outcome 6.2 Layout and Planning</p> <p>Outcome 6.3 Cutting</p>	

	<p>CNCM 3.0 - Perform mathematical calculations as needed for calculating speeds, feeds, program coordinates, angles, radii and tangent points.</p>	<p>Above Outcomes can be found in the following ODEW courses: 176006 Machining with Industrial Milling Machines 176007 Computer Numerical Control Technology with Industrial Mills and Lathes</p>
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