CNC LATHE OPERATOR - MFG 217

Designed for those familiar with machine shop equipment, theory, cutter-speed calculations, basic blueprint reading, micrometer, caliper inspection tools, and manual lathe. This is a lab-based and online course designed to introduce participants to computer numerical control (CNC) turning machines, including set up and programming. Seven projects will be completed via individual practice with instructor support during fabrication.

Deliverables
- Safety procedures for CNC lathe operation
- Preventative maintenance for lathe operation
- Load, indicate, and teach static and live tooling including OD turning tools, threading, grooving, ID boring bars, cut off and live tools such as center drill, drill, and tap
- Load, indicate, and secure workholding jaws
- Load CNC program(s) and establish Z offset
- Single step through each process, part inspection, and calculate and enter tool offsets into machine control
- Hands-on use and operation of Haas 2-axis Lathe and Mazak Smart 3-axis Lathe with Live Tooling
- Course projects progressing from simple to complex, including single and multiple operations to manufacture part to blueprint specifications
- 24 hours online content through ToolingU (subscription provided as part of training)

Peter Povolo, Instructor
Peter Povolo works for the TBAISD Career Technical Center in their Precision Machining Program as well as being a Machining Instructor for NMC. Pete has worked as a CNC machinist for local manufacturers and brings that industry experience to the projects in this course. He has a BS in Education from Northern Michigan University and holds a Michigan Teaching Certificate.

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