Kentucky CTE

Advanced Manufacturing: Computerized Manufacturing and Machining: CAD/CAM/CNC 470925 (2026–2027)

Practice and perform safe shop procedures at all times. 1	1 Practice and perform safe shop procedures at all times. 1
Apply the technical math required for employment opportunities in machining. 2	2 Apply the technical math required for employment opportunities in machining. 2
Perform all duties with emphasis on integrity, responsibility, quality, discipline and teamwork. 3	3 Perform all duties with emphasis on integrity, responsibility, quality, discipline and teamwork. 3
Perform routine maintenance on tools, equipment, and machines. 4	4 Perform routine maintenance on tools, equipment, and machines. 4
Demonstrate knowledge of manual data input on CNC machines. 5	5 Demonstrate knowledge of manual data input on CNC machines. 5
Create a roughing tool path for milling applications. 6	6 Create a roughing tool path for milling applications. 6
En ge off	nter tool offsets, cutter geometry and work offset. 7

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Test and run a program. 8	8 Test and run a program. 8
Create a thread element, grooving and roughing for turning. 9	9 Create a thread element, grooving and roughing for turning. 9
Use fixed cycles on CNC machines. 10	10 Use fixed cycles on CNC machines. 10
Use an automatic tool changer. 11	11 Use an automatic tool changer. 11
Work with sub-routines. 12	12 Work with sub-routines. 12
Generate code from converted CAD geometry. 13	13 Generate code from converted CAD geometry. 13
Use the CAM system to transfer CAD geometry, RS – 232, DNC link. 14	14 Use the CAM system to transfer CAD geometry, RS – 232, DNC link. 14
Use process planning for CNC equipment. 15	15 Use process planning for CNC equipment. 15
Create drawings on CAM software. 16	16 Create drawings on CAM software. 16
Load a CNC program and set tools and work offsets. 17	17 Load a CNC program and set tools and work offsets. 17
Generate code using CAM software. 18	18 Generate code using CAM software. 18
Operate CNC equipment. 19	19 Operate CNC equipment. 19