CNC MACHINE OPERATOR/PROGRAMMER

One-Year Embedded Technical Diploma
31-444-1

The CNC Machine Operator/Programmer Embedded Technical Diploma prepares learners for CNC machine setups and operations. With a flex lab format, individuals can attend when it is convenient for them. Students can also take advantage of the nationally recognized National Institute of Manufacturing Standards (NIMS) certification process as they complete the program.

Upon successful completion of this technical diploma, students will be able to:

- Apply basic safety practices in the machine shop
- Interpret industrial/engineering drawings
- Apply precision measuring methods to part inspection
- Perform advanced machine tool equipment set-up and operation

Semester 1		Credits
804-315	Trade Math	1
449-300	Safety for General Industry	1
421-310	Print Reading for Manufacturing	1
444-331	Blueprint Reading 2	1
422-310	Metrology Fundamentals	1
422-311	Metrology Inspection	1
444-332	Layout & Benchwork	1
420-314	Semi-Precision Operations	1
420-312	Lathe Fundamentals 1	1
420-313	Lathe Fundamentals 2	1
420-310	Milling Fundamentals 1	1
420-311	Milling Fundamentals 2	1
420-315	Turning Setup 1	1
420-316	Turning Setup 2	1
420-317	Milling Setup 1	1
420-318	Milling Setup 2	1
	Credits	**16**
Semester 2		
804-308	Shop Mathematics II	2
444-335	CNC Mill Fundamentals	1
444-336	CNC Lathe Fundamentals	1
444-340	CNC Turning Operations 1	1
444-341	CNC Turning Operations 2	1
444-344	CNC Milling Operations 1	1
444-345	CNC Milling Operations 2	1
444-334	CNC G-Code Programming for Lathes	1
444-333	CNC G-Code Programming for Mills	1
444-342	CNC Turning Programming 1	1
444-346	CNC Milling Programming 1	1
420-320	Fixtures and Tooling - Mills	1
420-321	Fixtures and Tooling - Lathes	1
420-325	Machining Calculations	1
422-312	Metrology Gauging/SPC	1
606-310	GD&T Interpretations	1
	Credits	**17**
	Total Credits	**33**

General Education Courses in the Program:

Code	Title	Credits
804-315	Trade Math	1
804-308	Shop Mathematics II	2