		GATEWAY TECHNICAL COLLEGE			Career Cluster ►	Career Pathway ►	CNC PROGRAMMER

Effective 2015/2016 — Manufacturing — Production — **CNC PROGRAMMER (31-444-3)** *Technical Diploma* — Most Courses Offered at Racine Campus

△Suggested Sequence	√	Course Number		Course Title	Requisites	Credits	Hrs/Wk Lec - Lab
Semester 1		444-331	*	CNC Machining Technology	Coreq: 444-337	3	3-3
		444-337	*	Fund. of Blueprint and Shop Safety		3	4-2
		444-338	*	Fund. of CNC Machine Application	Coreq: 444-337	4	4-4
		444-339	*	Gauging and Quality Control		3	4-2
		801-302		Speaking Principles		1	2-0
		804-370		Mathematics I, Applied	Prereq: 854-760 (See Note 1)	2	4-0
Semester 2		421-316	*	Blueprint Reading, Advanced	Prereq: 444-337	2	2-2
		444-333	*	Fund. of CNC Turning Applications	Prereq: 444-331 Coreq: 421-316; 804-371	3	2-4
		444-334	*	Fund. Of CNC Milling Applications	Prereq: 444-331 Coreq: 421-316; 804-371	3	2-4
		444-335	*	CNC Lathe Set-Up	Coreq: 444-333	3	2-4
		444-336	*	CNC Mill Set-Up	Coreq: 444-334	3	2-4
		801-301		Writing Principles	Prereq: 851-760 (See Note 1)	1	2-0
		804-371		Mathematics II, Applied	Prereq: 804-370	1	2-0
Semester 3		444-307 444-308	*OR	Fund. of Swiss CNC Turning Fund. of Live Tooling	Prereq: 444-335; 444-336	3	2-4
		444-306 444-309	*OR	Swiss CNC Setup and Operation Live Tooling Setup and Operation	Prereq: 444-335; 444-336	3	2-4
		444-311	*	CNC Lathe Process	Prereq: 444-335; 444-336	3	2-4
		444-314	*	CNC Mill Process	Prereq: 444-335; 444-336	3	2-4

Program Total Required   44

△Courses may be taken out of suggested sequence as long as requisites have been met.

PROGRAM DESCRIPTION

The *CNC Programmer Technical Diploma* program gives an overview of essential machine shop practices including machine safety, blueprint reading and part inspection methods. CNC Machine programming, set-up and operation will also be covered in-depth. Graduates of this program will have the skills necessary for entry-level employment in a machine shop setting. Machinists already employed will find the program a great way to improve their skill set. Special emphasis will be placed on learning the skills necessary to transform raw material into a finished part. Students will be able to apply the techniques learned in lectures within a machine shop setting. Overall this program is intended to introduce students to many different aspects within a machine shop setting.

PROGRAM LEARNING OUTCOMES

Graduates of the CNC Programmer Technical Diploma Program should be able to:

1. Apply basic safety practices in the machine shop.
2. Interpret industrial/engineering drawings.
3. Apply precision measuring methods to part inspection.
4. Perform basic machine tool equipment set-up and operation.
5. Perform programming, setup and operation on CNC milling centers.
6. Perform programming, setup and operation on CNC turning centers.

CORE ABILITIES

Gateway believes students need both technical knowledge and skills and core abilities in order to succeed in a career and in life. The following nine core abilities are the general attitudes and skills promoted and assessed by all Gateway programs. All Gateway graduates should be able to:

1. Act responsibly
2. Communicate clearly and effectively
3. Demonstrate essential comp. skills
4. Demonstrate essential math skills
5. Develop job seeking skills
6. Respect themselves and others as a member of a diverse community
7. Think critically and creatively
8. Work cooperatively
9. Value learning

ADMISSION REQUIREMENTS

1. Students must submit an application & $30 fee.
2. Students must complete reading, writing, math, and computer skills placement assessments.
3. Students must submit official high school, GED, or HSED transcript.

GRADUATION REQUIREMENTS

1. Minimum 44 credits with an average of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.

For a complete list of Graduation Requirements check the Student Handbook.

NOTES

1. A satisfactory placement test score (or successful remediation) is required prior to enrollment. See an advisor for details.
2. Safety glasses (marked Z-87) are required in labs. If prescription glasses are needed, allow a minimum of 90 days.
3. A hand calculator capable of trigonometric functions is required for 804-370; the cost is approximately $25.
4. Any course may be taken prior to entry in the program, assuming prerequisites and corequisites have been satisfied (or waived with department approval).

OTHER INFORMATION

Gateway Technical College reserves the right to modify curriculum requirements for students who interrupt enrollment for a period of two years or take over seven years to complete. Tuition and material fees are determined by the board of the Wisconsin Technical College System. Consult the Master Class Schedule for exact fee amounts. Occasionally, the District may offer a particular course out of published sequence. By doing so, the District does not obligate itself to offer succeeding courses out of published sequence.

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You may call Student Services at (262) 767-5300 (Burlington), (262) 741-8300 (Elkhorn), (262) 564-2300 (Kenosha), or (262) 619-6300 (Racine) for additional information. For a complete list of course descriptions (and possible online courses) for this program, please consult our web page at www.gtc.edu.

My advisor is _____.   My advisor's contact information is _____.