



Effective 2014/2015

Career Cluster ►



Manufacturing

Career Pathway ►

Production

CNC PRODUCTION TECHNICIAN

(31-444-2)

Technical Diploma

Most Courses Offered at Racine Campus

△ Suggested Sequence	✓	Course Number	Course Title	Requisites	Credits	Hrs/Wk Lec - Lab
Semester 1		420-342 *	CNC Intro/Support Equip Basic	Coreq: 420-345; 623-147	1	0-2
		420-344 *	CNC Offsets and Operations	Coreq: 420-345	1	2-0
		420-345 *	Gauging / Inspection	Coreq: 421-376; 804-370	2	2-2
		421-376 *	Blueprint Reading		2	2-2
		444-331 *	CNC Machining Technology	Coreq: 420-342	3	3-3
		444-332 *	CNC Production Applications	Prereq: 420-342 Coreq: 420-344; 444-331	2	2-2
		623-147 *	Manufacturing Shop Safety		1	1-0
		623-183 *	Statistical Process Control/CT		1	1-0
		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: 421-376	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

Minimum Program Total Credits Required 32

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

Federal regulations require disclosure of the following information for this program:

Books and Supplies	Resident Tuition and Fees	Median Loan Debt ¹	On-time Graduation Rate ²	U.S. Department of Labor Standard Occupational (SOC) Code & Occupational Profile – available at http://www.onetonline.org
\$335	\$4,880	\$4,577	10.0%	Numerical Tool & Process Control Programmer (51-4012) & CNC Machine Tool Operators (51-4011)

¹ **Median Loan Debt:** Based on eligibility, students can receive loans to help pay for the total cost of attending college. The cost is comprised of tuition and fees, books and supplies, transportation costs, room and board, and miscellaneous personal expenses. Therefore, medial loan debt may be more than the listed tuition, fees, books, and supplies cost.

² **On-time Graduation Rate:** Dependent upon students' choice to attend college part-time or full-time. Students decide to attend college part-time for a number of reasons including work schedule/demands and family responsibilities. 76 percent of students at Gateway attend part-time, therefore taking longer to complete their chosen program of study.



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PROGRAM DESCRIPTION

CNC Production Technician is a well rounded approach to becoming a CNC Technician. We teach the skills necessary for students to become qualified set-up technicians. Students are taught the basics of G-Code programming, proper M-Code usage, and the required steps to efficiently set fixture and tool offsets. Students create their own CNC programs and DNC to the proper machine tool. An excellent overall knowledge of CNC Controls is achieved by working on several different brand name controls. Overall, students will be proficient at programming, set-up, operation, editing, and part inspection.

PROGRAM LEARNING OUTCOMES

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

1. Develop an inspection plan and inspect simple parts using precision tools and techniques. Prepare reports on the compliance of the parts.
2. Keep the duty station clean and safe for work. Keep the tools, workbenches, and manual equipment clean, maintained, and safe for work.
3. Interpret blueprints to determine part details and specifications.
4. Set up and operate a CNC milling center.
5. Set up and operate turning centers.
6. Determine common programming codes and program format.

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

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 32 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.
5. 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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To schedule an appointment with an advisor, please call 1-800-247-7122.

For a complete list of course descriptions (and possible online courses) for this program, please consult Web Advisor on our web page at www.gtc.edu.

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