CNC Production Technician (31-444-2)

Technical Diploma
Effective 2024/2025

The course sequence shown on this sheet is the recommended path to completion. Courses will be scheduled in the terms indicated here.
All courses should be taken in the order shown to help you stay on track and graduate according to your academic plan.
Courses in this program may be offered in a variety or combination of formats (for example: in-person, video conferencing, online, etc.).

E-D = Elkhorn/days, I-E = iMET Center/evenings, F=Fall, S=Spring, SU=Summer

Term	Course #	Cr.	Course Title	Requisites (prereq- before/ coreq-with)	E-D	I-E
1	890-155	1	⚲ Gateway to Success (G2S)		F	F+
1	*444-331	3	🎓CNC Machining Technology		F	F
1	*444-337	3	🎓Fund. of Blueprint and Shop Safety		F	F
1	*444-339	3	Gauging and Quality Control[4]		F	F+
2	*444-316	3	Foundations of CNC Machining		S	S
2	*444-334	3	Fund. Of CNC Milling Applications		S	S
2	804-370	2	Mathematics I, Applied[1]	Prereq: 854-760	S	S+
3	*444-333	3	Fund. of CNC Turning Applications	Prereq: 444-331	SU	SU
3	*444-335	3	CNC Lathe Set-Up		SU	SU
3	*444-336	3	CNC Mill Set-Up		SU	SU

Minimum Program Total Credits Required: 27

Students interested in continuing into the 31-444-3 CNC Programmer program can earn their technical diploma
by completing an additional 12 credits. Please see your academic advisor for details.

Notes associated with courses (identified by a superscript number at the end of the course title) are located on the back of the sheet.
⚲ Mastery of this course will put students on a path to achieve successful degree completion, on-time graduation, and enrich the college experience. Students are required to take this course in their first semester of enrollment. Please see an advisor for details.
🎓 = Milestone Course. Faculty have identified this course as providing a strong foundation for success throughout the program.
(*) indicates students must achieve a combined average of 2.0 ("C") or above for these major courses to meet graduation requirements.
(+) indicates students may take these courses at any one of the three main campuses; Kenosha, Racine, Elkhorn or Online.

CNC Production Technician (31-444-2)

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 will 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, set-up, and operations of CNC machine tools.

Essential Career Competencies

Gateway's six essential career competencies are the general attitudes and skills promoted and assessed by all programs. All Gateway graduates will develop skills in:

- Communication Competence
- Critical Thinking and Problem Solving
- Professionalism and Career Management
- Teamwork and Collaboration
- Cultural Competence
- Technology Competence

Admission Requirements

1. Students must submit an application and pay $30 fee.
2. Students must meet one of the following: minimum cumulative high school GPA of 2.6 (unweighted); earned at least 12 college credits with a minimum GPA of 2.0; or complete valid reading, writing, and math placement assessments.

Graduation Requirements

1. Minimum 27 credits with a cumulative GPA of 2.0 or above.
2. *Average of 2.0 ("C") or above for these major courses.
3. Complete 890-155 Gateway to Success (G2S) in the first semester.

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

Notes

1. Satisfactory college placement results (through multiple measures or placement test scores) 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 before the program start to obtain prescription and glasses.
3. A hand calculator capable of trigonometric functions is required for 804-370; the cost is approximately $25.
4. A credit for prior learning assessment is available for this course. For more information, please contact cfpl@gtc.edu.