



Effective 2014-2015

Career Cluster ►



Career Pathway ►

Production

**TOOL AND DIE TECHNICIAN**

(31-439-1)

*Technical Diploma*

Most Courses Offered at Racine Campus

<sup>Δ</sup> Suggested Sequence	✓	Course Number	Course Title	Requisites	Credits	Hrs/Wk Lec - Lab
Semester 1		420-329	* Industrial Print Interpretation		2	4-0
		420-333	* Metallurgy Principles		1	1-1
		420-334	* Precision Measuring and Gauging		1	1-1
		420-330	* Machine Tool I	Coreq: 420-334	4	2-6
		420-317	* CNC Machining Operations	Prereq: 420-330	2	2-2
		804-115	College Technical Math 1	Prereq: 834-110 (See Note 1)	5	5-0
Semester 2		420-328	* Heat Treating Processes	Prereq: 420-333	2	2-2
		420-332	* Machine Tool II	Prereq: 420-317	4	2-6
		420-335	* Surface Grinding	Prereq: 420-330	1	0-2
		420-319	* Electrical Discharge Machining	Prereq: 420-317	2	2-2
		420-326	* GD & T for Die Making	Prereq: 420-329	1	2-0
		420-318	* Die Stamping	Prereq: 420-332	4	2-6

**Minimum Program Total Credits Required 29**

<sup>Δ</sup> Courses may be taken out of suggested sequence as long as requisites have been met.



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**PROGRAM DESCRIPTION**

The Tool and Die Technician program prepares students for entry into the metal working industry. Instruction is offered on basic machine tools as well as machines such as the electrical discharge machine, along with jigs, fixtures, gauges, and machinist hand tools. Related training includes blueprint reading, mathematics, precision inspection, and the use of the latest tooling available. This area of study prepares students to enter the field by developing quality skills in precision machining and enables learning of the specific abilities used to create precise machine parts and components. The tool and die work environment centers around the machine shop, tool rooms, and working on factory floors.

**PROGRAM LEARNING OUTCOMES**

**Graduates of the Tool and Die Technician Technical Diploma Program should be able to:**

1. Adhere to all required safety regulations by wearing personal protective clothing and practicing safe work habits.
2. Interpret specifications and drawings.
3. Compute dimensions, sizes, shapes, and tolerances of assemblies based on specifications.
4. Select metals to be used based on properties such as hardness and heat tolerance.
5. Operate conventional or computer-numerically controlled machine parts, and produce parts to prescribed dimensions and finishes.
6. Use machine and hand tools to fit and assemble parts used to make common repairs or modify dies, jigs, gauges, and tools.

**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 29 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. 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](http://www.gtc.edu).

My advisor is \_\_\_\_\_ My advisor's contact information is \_\_\_\_\_