

Machining Certificate

The Machining Certificate is designed to meet the needs of a diverse vocational audience. Whether your interest is in computer numerical control programming, tool and die maker or patternmaker, this program is designed to prepare the learner for a number of advantages as a skilled tradesman.

CNC, or computer numerical control machining, has literally replaced the machinist trade. You will be trained in the proper use of mills, drills and lathes, the latest in programming software as well as set-up and operational procedures of CNC equipment to produce a precision part.

As a patternmaker trainee, you will learn the most up-to-date technology needed to build a pattern. To obtain this skill level, the learner will become knowledgeable of the properties of metals, precision measurement and the fundamentals of repairing molds and dies.

The tool and die maker will learn how to create tools, dies and fixtures. This individual will gain a broad understanding of tooling by learning how to properly use mills, drills, lathes and other machining related equipment including non-traditional machining techniques such as the Electrical Discharge Machine.



STEM and Industrial Technology Division



Franklin Roberts
Dean

Questions:

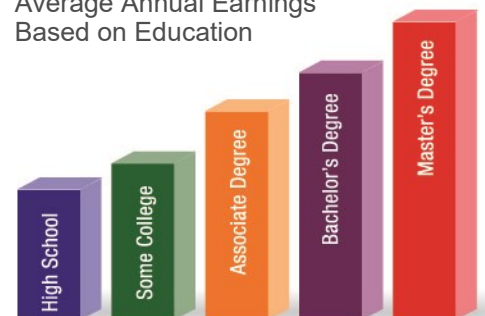
NSCC Admissions Office
(419) 267-1320
admissions@NorthwestState.edu

www.NorthwestState.edu

2019-2020

Education Pays

Average Annual Earnings
Based on Education



Based on data from the Bureau of Labor Statistics

NSCC is accredited by:
The Higher Learning Commission
(312) 263-0456
www.ncahigherlearningcommission.org

PROGRAM SEQUENCE

First Semester / 1st 8 weeks		Credits
+IND107	Print Reading & Sketching	3
IND110*	Industrial Computing I	3
IND105	Industrial Safety	2
+IND132	Benchwork	2
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First Semester / 2nd 8 weeks		Credits
IND103	Applied Geometry & Trigonometry	3
+WLD110	Intro to Applied Welding Techniques	3
+IND140	Principles of Machining	3
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Second Semester / 1st 8 weeks		Credits
+IND100	Precision Measurement	3
+IND240	Machining Processes II	3
	Communications Elective	3
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Second Semester / 2nd 8 weeks		Credits
+IND241	Tooling & Fixtures	3
+IND141	Metallurgy & Heat Treatment	2
+MET222	Programming Computer Numerical Control	3
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Total Program Credit Hours **36**

* Prior to taking IND110, students should have basic computer literacy in Windows and at least one Windows application.

+ Refers to technical courses. Students must attain a minimum grade of "C" in order to progress in the program and to graduate.

Gainful employment information for NSCC's certificate programs can be found online at:

<https://northweststate.edu/gedt/machining/>

Gainful employment information includes: estimated cost of the program, average student loan debt and types of jobs available.