

Computer Aided Design Certificate

A Computer Aided Design Certificate prepares the individual to create engineering drawings using CAD software. Typically these individuals will work closely with mechanical engineers, sometimes receiving objectives and technical advice from supervisors and/or engineers (both Electrical and Mechanical), displaying both their knowledge of the software and current knowledge of drafting and design standards. It is expected by employers that individuals demonstrate excellent verbal, written and interpersonal communication skills.

Coursework (100 level or higher) completed in this certificate directly applies toward the associate degree in mechanical engineering technology with a CAD/CAM major.



Career Outlook

Graduates of this program may find employment as an entry-level CAD operator/technician or as a detailer working under the direction of a design engineer. Some of the typical duties of a CAD operator/technician will include: compiling and computing a variety of engineering data; developing and preparing schematics from designs made by you and/or others; making preliminary designs from rough specifications and/or verbal directions; generating and revising current engineering prints and three-dimensional patterns for parts and products; designing and modifying equipment used for manufacturing; building a bill of material for new or revised designs, revising drawings and checking prints for accuracy.

Job opportunities for CAD technicians will remain stable through the next several years, with most of the positions occurring from replacing workers who leave the profession or retire.



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		Credits
+CAD112	2D CAD	4
IND103	Applied Geometry & Trigonometry	3
+IND140	Principles of Machining	3
MET100	Introduction to Engineering Technology	2
+MET107	Engineering Graphic & Sketching	3
		15

Second Semester		Credits
+CAD213	Solid Modeling	4
ENG111	Composition I	3
+IND241	Tooling & Fixtures	3
+MET121	Manufacturing Processes	OR
+MET222	Programming CNC	3
+QCT141	Precision Measurement	3
		16

Total Program Credit Hours **31**

+ Students must attain a minimum grade of “C” in all courses with a ‘+’ 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/computer-aided-design/>

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