

# Computer-Aided Drafting

## An Academic Certificate Program

### PROGRAM DESCRIPTION

The Computer-Aided Drafting academic certificate prepares individuals for possible employment as a detail drafter or drafting design apprentice in the manufacturing or industrial environment, construction field assistant, production process apprentice, or an entry-level position in estimating and procurement.

### PROGRAM ARTICULATION

All courses taken in the Computer-Aided Drafting certificate program will articulate into the Associate of Applied Science degree program in Industrial Technology - Concentration: Engineering Design Technology.

### APPLICATION PROCEDURE

A student desiring to pursue a certificate in Computer-Aided Drafting must:

1. Submit the Northeast State Application for Admission to the Office of Admissions and Records.
2. Indicate Computer-Aided Drafting as the desired major on the Northeast State application form.
3. See a faculty advisor from the Industrial Drafting Design program prior to registering for classes.

### GAINFUL EMPLOYMENT DISCLOSURE

As required by the U.S. Department of Education  
[https://apps.northeaststate.edu/  
GainfulEmployment/](https://apps.northeaststate.edu/GainfulEmployment/)

### TYPICAL PROGRAM OF STUDY

Course No.	Course Title	Credit
<u>FALL</u>		
INTC 1030	Industrial Concepts	3
ENGR 1110	Engineering Graphics	3
MATH 1050	Trigonometric Applications	4
COMM 2045	Public Speaking	3
<u>SPRING</u>		
Elective	General Elective	3
DRAF 1210	Computer-Aided Drafting I	4
DRAF 2510	Geometrical Dimensioning and Tolerancing	3
INTC 1020	Safety in the Workplace	3
Total Credit Hours		26

Students must complete all learning support deficiencies in English, MATH 0050, and reading, or have appropriate entrance scores.

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## TYPICAL JOB OPPORTUNITIES

**Mechanical Drafter:** Prepares detailed working diagrams of machinery and mechanical devices including dimensions, fastening methods, and other engineering information.

**CAD Drafter:** Develops architectural, structural, and mechanical drawings under supervision using CAD software.

## PROGRAM COMPETENCIES

The graduate is competent to:

1. Demonstrate technical sketching, manual drawing, and computer-aided drawing skills to an acceptable level required in modern manufacturing and industry.
2. Develop drawings using both two dimensional (2D) and three dimensional (3D) CAD software.
3. Prepare properly documented orthographic drawings, sectional drawings, and auxiliary view drawings.
4. Apply appropriate blueprint dimensioning and tolerance using both manual and computer-aided design techniques.

## FOR FURTHER INFORMATION CONTACT:

Advanced Technologies Division

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Northeast State Community College is part of the Tennessee Board of Regents system, the nation's sixth largest higher education system, governing 46 post-secondary educational institutions. The TBR system includes six universities, 13 two-year colleges and 27 technology centers, providing programs in 90 of Tennessee's 95 counties to more than 200,000 students.

Northeast State Community College does not discriminate against students, employees or applicants for admission or employment on the basis of race, color, religion, creed, ethnic national origin, sex, sexual orientation, gender identity/expression, disability, age, status as a covered veteran, genetic information or any other legally protected class with respect to all employment, programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Dr. Tim Harrison, Equity & Compliance Officer/Chief Advancement Officer, P.O. Box 246, Blountville, TN 37617-0246, 423.354.5296, [complianceofficer@NortheastState.edu](mailto:complianceofficer@NortheastState.edu). Northeast State Community College's policy on nondiscrimination can be found at <http://cwis.northeaststate.edu/oie/policymanual/pol.asp?p=254>.

Northeast State is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award the associate degree. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Northeast State.