



NORTHEAST STATE

We're here to get you there

Division of Advanced Technologies

2425 Hwy. 75 • P.O. Box 246
Blountville, Tennessee 37617-0246
800.836.7822 (Admissions and Records)
Fax 423.323.0215
www.NortheastState.edu
2014-2015

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 with a \$10 application fee 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.

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 |
| SPCH 2300 | 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, mathematics, and reading, or have appropriate entrance scores.

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.

FOR FURTHER INFORMATION CONTACT:

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or

Sam Rowell

Dean, Advanced Technologies

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ssrowell@NortheastState.edu

PROGRAM COMPETENCIES

The graduate is competent to:

1. Create new or edit existing CAD drawings and print/plot projects.
2. Work with 2D and 3D projects using skills to produce accurate drawings efficiently.
3. Work with multiple drafting disciplines if needed.
4. Apply critical thinking skills to assignments.
5. Demonstrate professional conduct as expected in the work environment.

Division of Academic Affairs

Approved Courses for General Education

Approved Courses for General Education

Communication

| | | |
|--|--------------------------------------|---|
| ENGL 1010 | Composition I | 3 |
| ENGL 1020 | Composition II | 3 |
| To fulfill Oral Presentational Communication Requirement | | |
| SPCH 1010 | Fundamentals of Speech Communication | 3 |
| SPCH 2300 | Public Speaking | 3 |
| SPCH 2320 | Argumentation and Debate | 3 |

Humanities and/or Fine Arts:

To fulfill Literature requirement

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|-----------|------------------------|---|
| ENGL 2030 | Literary Heritage | 3 |
| ENGL 2110 | American Literature I | 3 |
| ENGL 2120 | American Literature II | 3 |
| ENGL 2130 | American Masterpieces | 3 |
| ENGL 2180 | Myth and Tradition | 3 |
| ENGL 2210 | English Literature I | 3 |
| ENGL 2220 | English Literature II | 3 |
| ENGL 2330 | World Literature | 3 |

To fulfill Humanities/Fine Arts requirement

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|-----------|---------------------------------------|---|
| ARTH 1030 | Introduction to Art | 3 |
| ARTH 2010 | Survey of Art History I | 3 |
| ARTH 2020 | Survey of Art History II | 3 |
| HUM 2010 | Introduction to Humanities I | 3 |
| HUM 2020 | Introduction to Humanities II | 3 |
| HUM 2340 | Black Studies | 3 |
| HUM 2350 | Technology in Society | 3 |
| MUS 1030 | Music Appreciation | 3 |
| PHIL 1030 | Self and World | 3 |
| PHIL 2020 | Values and Society | 3 |
| PHIL 2210 | Introduction to the Study of Religion | 3 |
| THEA 1030 | Introduction to Theatre | 3 |
| THEA 2010 | Theatre History I | 3 |
| THEA 2020 | Theatre History II | 3 |

Behavioral and Social Sciences

To fulfill Behavioral and Social Sciences requirement

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| ECON 1050 | Economics and Society | 3 |
| ECON 2010 | Macroeconomics | 3 |
| ECON 2020 | Microeconomics | 3 |
| GEOG 1030 | Cultural Geography | 3 |
| GEOG 2010 | World Geography | 3 |
| POLS 1030 | American Government | 3 |
| PSYC 1030 | General Psychology | 3 |
| PSYC 2130 | Life Span Psychology | 3 |
| SOCI 1010 | Introduction to Sociology | 3 |
| SOCI 1020 | Social Problems | 3 |
| SOCI 1030 | Introduction to Anthropology | 3 |
| SOCI 2010 | Marriage and Family | 3 |
| SOCW 2010 | Fitness, Wellness, and Society | 3 |
| WMST 2010 | Introduction to Women's Studies | 3 |

Approved Courses for General Education Continued:

History

To fulfill History requirement

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|-----------|-------------------|---|
| HIST 1210 | World History I | 3 |
| HIST 1220 | World History II | 3 |
| HIST 2010 | U.S. History I | 3 |
| HIST 2020 | U.S. History II | 3 |
| HIST 2030 | Tennessee History | 3 |

Natural Science

To fulfill Natural Science requirement

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| ASTR 1010 | Astronomy I | 4 |
| ASTR 1020 | Astronomy II | 4 |
| BIOL 1010 | Introduction to Biology I | 4 |
| BIOL 1020 | Introduction to Biology II | 4 |
| BIOL 1030 | Concepts in Biology | 4 |
| BIOL 1110 | General Biology I (Majors) | 4 |
| BIOL 1120 | General Biology II (Majors) | 4 |
| BIOL 2010 | Human Anatomy and Physiology I | 4 |
| BIOL 2020 | Human Anatomy and Physiology II | 4 |
| CHEM 1030 | Introduction to Chemistry | 4 |
| CHEM 1110 | General Chemistry I | 4 |
| CHEM 1120 | General Chemistry II | 4 |
| PHYS 1030 | Introduction to Physics | 4 |
| PHYS 2010 | Non-Calculus Based Physics I | 4 |
| PHYS 2020 | Non-Calculus Based Physics II | 4 |
| PHYS 2110 | Calculus-Based Physics I | 4 |
| PHYS 2120 | Calculus-Based Physics II | 4 |
| PSCI 1010 | Physical Science I (Physics and Chemistry) | 4 |
| PSCI 1020 | Physical Science II (Earth/Space Science) | 4 |

Mathematics

To fulfill Mathematics requirement

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|-----------|--|---|
| MATH 1010 | Mathematical Applications | 3 |
| MATH 1410 | Foundations of Numerical Concepts (Education Majors Only) | 3 |
| MATH 1530 | Probability and Statistics (Non-Calculus Based) | 3 |
| MATH 1630 | Finite Mathematics | 3 |
| MATH 1710 | Pre-Calculus I (Algebra) | 3 |
| MATH 1720 | Pre-Calculus II | 3 |
| MATH 1830 | Calculus for Business | 3 |
| MATH 1910 | Calculus I | 4 |

Note: Some majors may require specific general education courses. Students and advisors should consult curriculum guides before making general education course selections.

ACADEMIC PLAN FOR CATALOG YEAR 2014-2015

TIMELINE FOR DEGREE COMPLETION

| Semester: | Cr Hrs |
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Student Signature

Date

Academic Advisor Signature

Date



NORTHEAST STATE

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Meeting Dates:

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This academic plan is an unofficial document intended to be used for advising/course planning only. This document cannot be used to supersede or waive requirements listed in the Northeast State Community College Catalog. Course availability is not guaranteed.

Northeast State Community College is part of the Tennessee Board of Regents (TBR) system, which consists of 46 institutions with a combined annual enrollment of over 200,000 students, making it among the nation's largest systems of public higher education. TBR's six state universities, 13 community colleges, and 27 colleges of applied technology offer classes in 90 of Tennessee's 95 counties.

Northeast State is an AA/EEO institution and does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. For questions regarding non-discrimination policies, please contact the Equity & Compliance Officer at complianceofficer@northeaststate.edu or 423.354.5255.

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.