

Division of Health-Related Professions

Cardiovascular Technology Non-Invasive Option

An Associate of Applied Science Degree Program

PROGRAM DESCRIPTION

The Cardiovascular Technology program Non-Invasive Option provides the general education core, program specific courses, and the clinical practicum for a career as a Registered Cardiac Sonographer. The knowledge and skills acquired within the classroom and laboratory setting enhances the learning opportunities for the cardiovascular non-invasive student. Following the successful completion of the program, students are eligible to sit for the registry examination to become a Registered Cardiac Sonographer through Cardiovascular Credentialing International.

The Cardiovascular Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs and the Joint Review Committee on Education in Cardiovascular Technology.

1449 Hill Street
Whitinsville, MA 01588-1032
Telephone: 978.456.5594.

APPLICATION PROCEDURE

A student desiring to pursue the Associate of Applied Science degree in Cardiovascular Technology Non-Invasive Option must:

1. Submit the Northeast State Application for Admission to the Office of Admissions and Records.
2. Indicate Associate of Applied Science degree program in Cardiovascular Technology Non-Invasive Option as the desired program on the Northeast State application form.
3. See a faculty advisor representing the Health-Related Professions area prior to registering for classes and obtain faculty approval to register.

TYPICAL PROGRAM OF STUDY

<u>Fall</u>		
BIOL 2010	Anatomy and Physiology I	4
SPCH 1010	Fundamentals of Speech Communication	3
Elective	Humanities/Fine Arts (an approved elective from the general education core)	3
CHEM 1030 or BIOL 2230	Introduction to Chemistry Introduction to Microbiology	4 4
<u>Spring</u>		
BIOL 2020	Anatomy and Physiology II	4
MATH 1530	Probability & Statistics	3
ENGL 1010	Composition I	3
HRPR 1000	Introduction to Health-Related Professions	3
PSYC 1030	General Psychology	3

The Cardiovascular Technology Program is a selective admission program. Completing the general education requirements does not guarantee admission.

Semester I-Summer

CVTE 1002	Hospital Policies, Safety, and Procedures	1
CVTE 2990	Special Topics in Cardiovascular Technology	2
EMTP 1015	Cardiopulmonary Resuscitation	1
OFMG 1100	Medical Terminology	3

Semester II- Fall

CVTE 1000	Physical Principles of Medicine	2
CVTE 1010	Cardiovascular Physiology I	3
CVTE 1030	Non-Invasive Instrumentation	3
CVTE 1260	Clinical Practicum I	2
CVTE 2030	Cardiovascular Diagnostic Principles	3

Semester III - Spring

CVTE 1040	Cardiovascular Physiology II	3
CVTE 1110	Cardiovascular Physiology III	3
CVTE 2040	Cardiac Diagnostic Procedures	3
CVTE 2050	Vascular Diagnostic Procedures	3
CVTE 2060	Clinical Practicum II	3

Semester IV- Summer

CVTE 2160	Clinical Practicum III	4
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Total Credit Hours 69

Additional courses may be required to overcome deficiencies in English, mathematics and reading.



Commission on Accreditation
of Allied Health Education Programs

TYPICAL JOB OPPORTUNITIES

Non-Invasive/Echocardiography Technologists may be employed in physician's offices, diagnostic clinics, hospitals, medical centers, and will assist in exercise and stress testing laboratories. Special emphasis for work in echocardiography labs, and vascular labs. Cardiovascular Technology is specifically concerned with the diagnosis and treatment of patients with cardiac and peripheral vascular disease.

CARDIOVASCULAR TECHNOLOGY NON-INVASIVE OPTION PROGRAM REQUIREMENTS

The Cardiovascular Technology program has specific admission criteria, and admission to Northeast State does not guarantee admission to this program. A student desiring admission to the Cardiovascular Technology Non-Invasive Option must complete all required general education courses listed in the typical program of study with a grade of "C" or higher. A student must have attained an overall 2.0 grade point average. Biological science courses previously taken must have been completed within the last 10 years. A student desiring admission to the Cardiovascular Technology Non-Invasive Option should contact the Health-Related Professions Division office at 423.323.0238.

PROGRAM OUTCOMES

Upon completion of the program, all students will demonstrate the ability to comprehend, apply, analyze, and evaluate information relevant to their roles as entry level Cardiovascular Technologists.

Upon completion of the program, all students will demonstrate technical proficiency in all skills necessary to fulfill the role of entry level Cardiovascular Technologists.

Upon completion of the program, all students will demonstrate personal behavior consistent with professional and employer expectations for the entry-level Cardiovascular Technologists.

Upon Completion of the program, all students will demonstrate critical thinking skills for inquiry and analysis assimilation of facts and knowledge, and problem solving.

FOR FURTHER INFORMATION CONTACT:

Sharon B. Mason, R.C.S.
Program Director/Non-Invasive Instructor
Telephone: 423.354.2569
Fax: 423.245.5930
E-mail: sbmason@NortheastState.edu
or
Connie Marshall, R.T. (R)
Dean, Health-Related Professions
Telephone: 423.323.0238
Fax: 423.245.5930
E-mail: cmarshall@NortheastState.edu

Ten-Year Projected Job Increase Rate*
29%

TN Average Salary*
\$48,150

*Source:
Tennessee Bureau of Labor Statistics
<http://www.bls.gov>



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

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

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

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
POLS 2210	Comparative World Politics	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

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

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 2015	Environmental Science	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

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 2015-2016
TIMELINE FOR DEGREE COMPLETION

Semester:	Cr Hrs
Total Credit Hrs	

Semester:	Cr Hrs
Total Credit Hrs	

Semester:	Cr Hrs
Total Credit Hrs	

Semester:	Cr Hrs
Total Credit Hrs	

Semester:	Cr Hrs
Total Credit Hrs	

Semester:	Cr Hrs
Total Credit Hrs	

Semester:	Cr Hrs
Total Credit Hrs	

Semester:	Cr Hrs
Total Credit Hrs	

Semester:	Cr Hrs
Total Credit Hrs	

Student Signature

Date

Academic Advisor Signature

Date



NORTHEAST STATE

We're here to get you there

Meeting Dates:

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 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. Leigh Hornsby, Equity & Compliance Officer/Chief Advancement Officer, P.O. Box 246, Blountville, TN 37617-0246, 423.354.5255, complianceofficer@NortheastState.edu. Northeast State Community College's policy on nondiscrimination can be found at <http://cwis.northeaststate.edu/oie/policymannual/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.