



## Northern Virginia Community College



### Associate in Applied Science in Construction Management Technology

**STUDENT DATA:****NAME:** ROADMAP'S DEGREE**SSN:** 000-00-0000**Credit Potential**  
**Required Credit****College Composition I (ENG 111) [EN024A]****3.00**

(This course constitutes the first semester of the Freshman English sequence, focused on expository writing ranging from single paragraphs to essays of some length and complexity. Content will include study of rhetorical and linguistic structures, argumentation, and an introduction to library skills and formal methods of documentation. College credit by examination may apply.)

{DANTES Code = 11.07.00}

**Technical Writing (ENG 115) [EN032A]****3.00**

(Prerequisite is ENG 111 or division approval. Develops ability in technical writing through extensive practice in composing technical reports and other documents. Guides students in achieving voice, tone, style, and content in formatting, editing, and graphics. Introduces students to technical discourse through selected reading. Lecture 3 hours per week. College credit by examination may apply. Visit the NVCC website for a description of these courses.)

{DANTES Code = 04.06.02}

**Technical Mathematics (MTH 115) [MH062A]****3.00**

(Prerequisites are a satisfactory score on an appropriate mathematics proficiency examination, Algebra II and Geometry, or the equivalent of these two courses. Designed for the technical student. Presents algebra through exponential and logarithmic functions, trigonometry, vectors, analytic geometry, and complex numbers. Lecture 3 hours per week. College credit by examination may apply. Visit the NVCC website for a description of courses available.)

{DANTES Code = 14.07.00}

**Lifetime Fitness & Wellness (PED 116)****1.00**

(PED 116 is the study of fitness and wellness, and how they relate to a healthy lifestyle. Course content will define fitness and wellness and attempt to motivate the student to incorporate physical fitness and wellness into daily living.)

**Physical Education / Wellness Elective****1.00**

(The PED requirement may be met by one of the following options: PED 116, 2 cr.; PED 116, 1 cr. plus a PED activities course, 1 cr.; or PED 116, 1 cr. plus RPK 205, 216, or 225. PED 116 is offered as both a 1-credit and a

2-credit course. Visit the NVCC website for a description of these courses.)

**Student Development Course** 1.00

(The SDV elective may be selected from the following: SDV 100, 110, 115, 126, and 229.)

**History of Western Civilization I (HIS 101)** 3.00

(Examines the development of western civilization from ancient times to the present. The first semester ends with the 17th century; the second semester continues through modern times. Lecture 3 hours per week.)

{DANTES Code = 20.07.06. or 20.07.07 or 20.07.08}

**Social Science Elective** 3.00

(The social science elective may be selected from the following: economics, geography, history, political science, psychology, or sociology (includes anthropology). Students planning to transfer to a four-year degree program should consider taking HIS 102. College credit by examination may apply.)

{DANTES Code = most 20.09.XX or 20.10.XX series or 20.XX.XX series}

**Construction Management I (BLD 101) [VO034A]** 3.00

(Presents overviews of all phases of construction project management. Introduces students to philosophy, responsibilities, methodology, and techniques of the construction process. Introduces topics related to the construction and design industries, organizations, construction contracts, bidding procedures, insurance, taxes, bonding, cost accounting, business methods, including basic computer usage, safety, and general project management procedures. Lecture 3 hours per week.)

**Construction Management II (BLD 102) [VO034A]** 3.00

(Emphasizes advanced management techniques and methodology. Includes engineering economics, accounting principles, life cycle costing, value engineering, systems analysis with computer applications, work improvement, quality control, and a broad overview of the construction management profession. Lecture 3 hours per week.)

**Construction Management III (BLD 241) [VO034A]** 3.00

(Presents fundamentals of construction supervision including responsibilities of the construction superintendent, operations manager, general superintendent and project engineer, with factors relating to their work and that of their subordinates, aspects of job leadership, and effective human relations as related to efficient supervision. Lecture 3 hours per week.)

**Construction Management IV (BLD 242) [VO034A]** 3.00

(Presents a comprehensive overview of all aspects of construction law and labor relations, exposing the students to responsibilities and requirements. Includes history of labor relations in the United States, trade unionism, federal labor laws and their direct effect on construction, OSHA Occupational Safety and Health Act laws and regulations that apply. Lecture 3 hours per week)

<b>Construction Estimating I (BLD 231) [VO034A]</b>	<b>3.00</b>
(Focuses on materials take-off and computing quantities from working drawings and specifications. Includes methods for computing quantities of concrete, steel, masonry, roofing, and excavation. Deals with pricing building components, materials and processes, as well as transportation and handling costs, mark-up discount procedures, equipment cost, and labor rates. Lecture 3 hours per week.)	
<b>Construction Estimating II (BLD 232) [VO034A]</b>	<b>3.00</b>
(Prerequisite is BLD 231. Presents an introduction to computer programs for construction estimating. Produces a cost estimate for a major project with the aid of a computer program. Lecture 3 hours per week.)	
<b>Construction Field Operations (BLD 165)</b>	<b>2.00</b>
(Introduces areas of construction field management which relate directly to on-the-job requirements of construction operations viewed from the construction superintendent's standpoint. Includes theories of project management and field supervision; utilization of equipment, labor and material; construction site development; requirements of field scheduling; management input requirements; job recording and documentation; supervision responsibility. May include field trips to project sites. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.)	
<b>Construction Planning &amp; Scheduling (BLD 247) [VO036A]</b>	<b>3.00</b>
(Introduces principles of planning and scheduling of a construction project. Includes sequence of events and processes on a construction site. Studies scheduling techniques including the critical path method. Lecture 3 hours per week.)	
<b>Construction Methodology &amp; Procedures I (ARC 133) [VO035A]</b>	<b>3.00</b>
(Studies materials used in construction of buildings, covering foundations to structural framing systems. Includes appropriate use of materials for various construction types. Lecture 3 hours per week.)	
<b>Construction Methodology &amp; Procedures II (ARC 134)</b>	<b>3.00</b>
(Studies materials and systems for building construction. Includes specification of materials and installation procedures; types of specifications and writing procedures; bidding procedures; and contract documents. Lecture 3 hours per week.)	
<b>Site Planning and Technology (ARC 225)</b>	<b>3.00</b>
(Corequisite is ARC 121 or equivalent. Studies the impact of building codes and zoning ordinances on site design; storm drainage, grading design, erosion and flood control; site materials for paving and retaining walls; and site utilities. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.)	
<b>Environmental Systems (ARC 243) or Technical Elective</b>	<b>4.00</b>
(Studies energy sources and strategies for use in buildings; heat loss and heat gain; heating and cooling equipment and system; water supply, distribution and waste systems and equipment; and principles of electricity, electrical systems, and equipment. Lecture 4 hours per week.)	

<b>Architectural Blueprint Reading (DRF 165)</b>	<b>3.00</b>	
(Emphasizes reading, understanding, and interpreting standard types of architectural drawings, including plans, elevation, sections, and details. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.)		
<b>Computer Aided Drafting and Design I (DRF 201)</b>	<b>4.00</b>	
(Prerequisite is EGR 115 or division approval. Teaches computer aided drafting concepts and equipment designed to develop a general understanding of components of a typical CAD system and its operation. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.)		
<b>Surveying I (CIV 171) [VO038A]</b>	<b>3.00</b>	
(Prerequisite: MTH 115 - Technical Math. Introduces surveying equipment, procedures and computations including adjustment of instruments, distance measurement, leveling, angle measurement, traversing, traverse adjustments, area computations, and introduction to topography. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.)		
<b>Speech Communication Elective</b>	<b>3.00</b>	
Visit the NVCC website for listings and descriptions of courses.		
<b>Excess Duplicate Credit</b>		
<b>TOTAL .....</b>	<b>67.00</b>	<b>0.00</b>

Thank you for requesting support from the U.S. Coast Guard Institute (CGI). Whereas we serve as an activity in support of your unit Educational Services Officer (ESO), you are encouraged to seek assistance from your local ESO in your academic endeavors. The following information is provided to help you understand what is presented in this degree plan:

This document is an UNOFFICIAL Degree Plan to provide you with a preliminary assessment of how your prior learning experiences might fit into the specified degree program for this academic institution. If you choose to pursue this degree option, you must present it to a college representative, who will review it for the following:

- o Accurate representation of the college's degree program requirements, including course numbers and titles, credit hours for each course, lower- and upper-level course requirements, and the total number of credits needed for the degree.

- o Appropriate assignment of ACE Guide-recommended credit at the lower or upper level for military service schools and occupations, CLEP, DSST, and other tests, transfer credit for courses from other colleges and universities, certification programs, etc.

- o Appropriate assignment of SOC Course Category Codes from the SOC Handbook Transferability Tables. The SOC Degree Program Handbooks can be obtained from the SOC web site at: [www.soc.aascu.org](http://www.soc.aascu.org) should you wish to learn more about the course transfer guarantees among SOC network institutions.

IMPORTANT NOTE: When you are ready to seek admission into this degree program, please contact the USCG Institute at 1-405-954-7241. Your advisor will send the

college or university an official U.S. Coast Guard Institute transcript, a copy of the degree plan, and a ready-for-signature SOC Student Agreement which, when signed by a college official, becomes a contract for degree completion committing the college or university to supporting you in your academic endeavors.

Credit for all courses you have taken must be reflected on official transcripts sent directly to this college from the administrative offices of the colleges you previously attended. This degree plan is often used for information purposes by college counselors pending receipt of the official transcripts from the source colleges.

This degree plan is not intended to compete with your local college or university. Keep in mind, you are allowed to transfer in a significant amount of the degree requirements to this institution. As such, credit from local colleges, college level examination programs, or advanced military training may be applied to this degree. You may also complete the courses necessary from this college either in residence (on campus or possibly on a military base at a campus extension in the Education Center) or through distance delivery of the courses. If you have questions, please contact the college counselor or your advisor listed at the bottom of this Degree Plan.

#### DEGREE PLAN LEGEND:

SH = Semester hours  
VOC = Vocational, not relative to an academic degree  
LL = Lower Level, i.e. courses at the Freshman/Sophomore level  
UL = Upper Level, i.e. courses at the Junior/Senior level  
GL = Graduate Level (sometimes recommended by ACE for very complex courses)  
[#] such as [EN024A] or [EN024B] = SOC Course Category Codes\*  
{#} such as {DANTES Code = 01.02.03} = DANTES Academic Codes \*\*

\* SOC Course Category Codes: Service members Opportunity Colleges (SOC) is a consortium of over 1,600 accredited colleges and universities seeking to provide degree opportunities to the military. Over 170 of these institutions participate in network degree programs developed for the Army, Navy, Marine Corps, and Coast Guard. A SOC course category number beside a course from one of these institutions, such as [EN024A] or [EN024B] for English Composition, indicates that courses from other degree program institutions with the same code may be taken to satisfy the degree requirement. See the SOC Degree Programs Handbooks at <http://www.soc.aascu.org/>

\*\* DANTES Academic Codes: The Defense Activity for Non-Traditional Education Support (DANTES) publishes the DANTES Independent Study Catalog (DISC) annually, which lists more than 6,000 courses from dozens of regionally accredited colleges and universities. Because this is a degree from a SOC affiliated college, the academic residency requirements are limited, thereby allowing students to transfer in a significant portion of the degree, as mentioned above. If the course you desire to take is not offered by this institution when you want to take it, consider the opportunities the courses in the DISC present. For more information, visit [http://www.dantes.doded.mil/dantes\\_web/distancelearning/disc/front/cont.htm](http://www.dantes.doded.mil/dantes_web/distancelearning/disc/front/cont.htm) Keep in mind, you should always check with the counselor or academic advisor at this institution before enrolling in a course listed in the DISC to ensure it will be accepted in transfer toward this degree.

Northern Virginia Community College General Information:

Northern Virginia Community College (NVCC) was established in 1964 as Northern Virginia Technical College to serve the eighth planning district. The College opened for classes in the fall of 1965 in a single building in Bailey's Crossroads. Enrollment was 761 students who were served by a faculty and staff of 46. The College was renamed Northern Virginia Community College in 1966 when the General Assembly changed the name of the technical college system to the Virginia Community College System (VCCS).

The College has grown rapidly in enrollment and programs. By 1970, enrollment was more than 10,000 students. By 1973, NVCC became the largest institution of higher education in Virginia with 17,260 students. During 2002-2003, the College served more 65,000 students in credit courses and over 250,000 students in non-credit courses and public service activities.

NVCC offers a wide range of programs meeting standards for transfer to baccalaureate degree programs in 4 year colleges and universities. They also offer developmental courses to assist students in developing skills to insure their success at the college, and community service/continuing education courses, which serve to meet personal development needs and the needs for business/industry training and retraining.

Interested in taking a distance-learning course? Interested in completing a degree or certificate totally by distance? Then you have come to the right place! The mission of the Extended Learning Institute is to design and implement for distant learners excellent and innovative instruction and delivery systems including formats that combine distance education and classroom instruction, independent study, or individualized learning.

The Extended Learning Institute offers over 200 Northern Virginia Community College courses every semester - many with alternate starting dates! Getting started is easy. Decide which course to take and register online with Nova Connect. Once registered you will receive in the mail a "quick start" syllabus with all the information you need to begin your course. In the meantime, complete the Student Orientation for Online Students. Not sure distance learning is for you? Take our interactive quiz, "Is Distance Learning for Me?" or contact the Extended Learning Institute and talk with a student services counselor.

ELI courses are designed for students who prefer to study independently. Most coursework may be completed at home. It is important to schedule at least 2-3 hours of work per course credit per week for each course (a three-credit course requires 6-9 hours per week). ELI courses use one or more of the following media: videotape, cable TV, World Wide Web, computer programs on disk or CD-ROM, audiotape or CD, and voice mail. ELI courses start at the beginning of the semester, and many ELI courses have additional sections starting throughout the semester. When course capacity limits are reached, ELI sections are closed to further registration. Northern Virginia Community College is an open access, comprehensive community college offering two-year associate degrees, one-year certificates, and career studies certificates as well as continuing education and community services programs. NVCC,

as one of the 23 colleges comprising the Virginia Community College System, is governed by the Virginia State Board for Community Colleges.

Tuition for students is: \$71.98 per credit hour for in-state rate, and \$220.18 for out-of-state rate. (subject to change)

For more information regarding the Associate in Applied Science in Accounting degree, please contact:

Dr. Sharon Robertson  
Assoc. VP for Curriculum and Enrollment Services  
Northern Virginia Community College  
4001 Wakefield Chapel Rd  
Annandale VA 22003  
703-323-3087  
srobertson@nvcc.edu  
<http://www.nvcc.edu>

For SOC-related questions, students should contact the SOC counselor at the campus they hope to attend.

Evaluation completed by: Charles Morrison

On: 03 May 2007