



Tidewater Community College



**Associate in Applied Science in Computer Engineering Technology**

**STUDENT DATA:**

**NAME:** ROADMAP'S DEGREE

**SSN:** 000-00-0000

**Credit Potential**  
**Required Credit**

**College Composition I (ENG 111) [EN024A] 3.00**

(Develops writing ability for study, work, and other areas of writing based on experience, observation, research, and reading of selected literature. Guides students in learning writing as a process, understanding audience and purpose, exploring ideas of information, composing, revising, and editing. Supports writing by integrating experience in thinking, reading, listening, and speaking. College credit by examination may apply.)  
{DANTES Code = 11.07.00}

**College Composition II (ENG 112) [EN025A] 3.00**

(Develops writing ability for study, work, and other areas of writing based on experience, observation, research, and reading of selected literature. Guides students in learning writing as a process, understanding audience and purpose, exploring ideas of information, composing, revising, and editing. Supports writing by integrating experience in thinking, reading, listening, and speaking. College credit by examination may apply.)  
{DANTES Code = 11.07.00}

**Precalculus and Trigonometry (MTH 166) [MH054A] 5.00**

(Presents college algebra, analytic geometry, trigonometry, and algebraic, exponential, and logarithmic functions. Prerequisites: A placement recommendation for MTH 166 and Algebra I, Algebra II, and Geometry or equivalent. Credit will not be awarded for both MTH 163-164 and MTH 166. College credit by examination may apply.)  
{DANTES Code = 14.01.05}

**Calculus with Analytic Geometry I (MTH 173) [MH055A] 5.00**

(Presents analytic geometry and the calculus of algebraic and transcendental functions including the study of limits, derivatives, differentials, and introduction to integration along with their applications. Designed for mathematical, physical, and engineering science programs. Prerequisites: A placement recommendation for MTH 173 and four units of high school mathematics including Algebra I, Algebra II, Geometry, and Trigonometry or equivalent.)  
{{DANTES Code = 14.04.00 or 14.04.01}}

**Humanities Elective 3.00**

(College credit by examination may apply. Visit the TCC website for a description of courses available.)

{DANTES Code = 08.06.00 or most 08.XX.XX series}

**Social Science Electives** 6.00

(Eligible courses are listed under Electives. See your academic advisor or counselor to choose the appropriate courses. College credit by examination may apply. Visit the TCC website for a description of courses available.)

**College Success Skills (SDV 100)** 1.00

(Assists students in transition to college. Provides over-views of college policies, procedures, curricular offerings. Encourages contacts with other students and staff. Assists students toward college success through information regarding effective study habits, career and academic planning, and other college resources available to students. May include English and math placement testing. Strongly recommended for beginning students. Required for graduation. Students may substitute SPD 105 for SPD 100. Consult transfer institution to insure that the substitution is appropriate for your transfer program.)

**Health/Physical Education Elective** 2.00

(Visit the TCC website for a description of this course.)

**Electronic Fundamentals with Computer Applications (ETR 104)** 4.00

(Provides an introduction to the fundamentals of DC and AC circuit analysis and computer applications. Includes the study of electrical units and components, series, parallels, series-parallels, DC and AC circuits, inductive and capacitive reactance, impedance and use of circuit analysis software.)

{DANTES Code = 04.10.00}

**DC and AC Fundamentals (ETR 113)** 4.00

(Studies DC and AC circuits, basic electrical components, instruments, network theorems, and techniques used to predict, analyze and measure electrical quantities.)

{DANTES Code = 21.04.03}

**DC and AC Fundamentals (ETR 114)** 4.00

(Studies DC and AC circuits, basic electrical components, instruments, network theorems, and techniques used to predict, analyze and measure electrical quantities.)

{DANTES Code = 21.04.03}

**Amplifiers and Integrated Circuits (ETR 148)** 4.00

(Studies amplifiers, solid state and thermionic devices with emphasis on analysis and design of the time and frequency domain. Included also are linear and non-linear op-amps circuits. May include summing and integrating amplifiers, chippers, modulators and other new devices.)

**Solid State Circuits (ETR 250)** 4.00

(Teaches theory and application of amplifiers and oscillators. Includes amplifier circuit configurations, amplifier classes, operational amplifiers, power amplifiers, band-width distortion, and principles of feedback.)

<b>Digital Principles, Terminology and Applications (ETR 279)</b>	<b>4.00</b>	
(Studies digital principles, terminology and applications covering number systems, arithmetic, Boolean algebra, Karnaugh maps and advanced local circuits such as A/D, D/A displays and others.)		
<b>Microprocessor Application I (ETR 261)</b>	<b>4.00</b>	
(Teaches the fundamentals of microprocessors, including architecture, internal operations, memory, I/O devices, machine level programming and interfacing. ETR 193 Virtual Instrumentation can be substituted for ETR 261)		
<b>Introduction to Engineering Methods (EGR 125) [CS021A]</b>	<b>4.00</b>	
(Applies problem-solving techniques to engineering problems utilizing computer programming and algorithms in a higher level computer language such as FORTRAN, PASCAL, or C++.)		
<b>General College Physics I (PHY 201)</b>	<b>4.00</b>	
(Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. Prerequisite: MTH 115 or equivalent.) {DANTES Code = 16.11.00}		
<b>General College Physics II (PHY 202)</b>	<b>4.00</b>	
(Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. Prerequisite: MTH 115 or equivalent.) {DANTES Code = 16.11.00}		
<b>Excess or Duplicate Credit</b>		
<b>TOTAL .....</b>	<b>68.00</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.

#### Tidewater Community College General Information:

Tidewater Community College (TCC) is the second largest of the 23 community colleges in the Commonwealth of Virginia, enrolling more than 34,000 students annually. It is the 37th largest community college in the nation's 1,600-school network, and among the 50 fastest growing large community colleges. Founded in 1968 as a part of the Virginia Community College System, the college serves the South Hampton Roads region with campuses in Chesapeake, Norfolk, Portsmouth, and Virginia Beach, a regional Visual Arts Center in Olde Towne, Portsmouth, the TCC Jeanne and George Roper Performing Arts Center in the downtown Norfolk theater district, and a regional Advanced Technology Center on its Virginia Beach Campus. Forty-three percent of the region's residents who attended a college or university in Virginia last fall were enrolled at TCC.

The college is committed to meeting the region's education and training needs as it advances the quality of life of the region through an educated, globally aware, and technologically engaged citizenry. It has been nationally recognized for its work in incorporating the best of technological advances into the teaching and learning process, and was recently cited by the American Council on Education as one of eight "Promising Practices" colleges and universities in the country for its work in international education. TCC students do as well as the native university students when they transfer to four-year schools, and area employers consistently register high levels of satisfaction with the performance of their employees who are TCC graduates.

At TCC, the needs of the student body are as diverse as the wealth of opportunities. Some students come seeking an affordable start toward a bachelor's degree at a four-year institution. Some come for our high-quality occupational and technical training. Still others make their way to TCC to take part in our highly acclaimed customized training programs, developed in close partnership with various area businesses and government agencies.

Tidewater Community College online classes are academically equivalent to face-to-face classes but has few or no face-to-face meetings. Online classes offer many benefits to disciplined, motivated students: flexible scheduling, active and interactive learning, time for reflection, enhanced verbal and computer skills, and participation in an online learning community.

Online classes offered predominantly on the World Wide Web that use Blackboard and other online delivery methods have the same content and the same academic rigor as their on-site counterparts. With their alternative access and delivery media, online classes are particularly valuable for motivated, disciplined students who cannot easily attend regularly scheduled on-site classes because of their jobs, their

health, or other obligations.

Tuition and fees for students is: \$216.60 for 3 credit course (\$72.20 per semester hour) in-state or \$658.95 per 3 credit course (\$219.65 per semester hour) for out of state. (subject to change)

For more information regarding this degree, please contact:  
TCC Information Center - a full service help desk: (757) 822-1122

or, for specific questions, contact Dr. Lonnie Schaffer,  
Associate Vice President for College Transfers  
Tidewater Community College  
121 College Place  
Norfolk, VA 23510  
Her phone number is: (757) 822-1065  
E-mail: LSchaffer@tcc.edu  
<http://www.tcc.edu>

POLICY NOTES:

General Requirements:

- . College's general admission requirements, students are required to complete Student Assessment Program (placement) tests in reading, composition, and mathematics. The college has a required developmental program for students who need to remedy deficiencies in these areas.
- . In order to graduate with the associate's degree, you must meet the college's computer competency requirement

Evaluation completed by: Charles Morrison

On: 07 June 2007