



Troy University



Bachelors of Science in Applied Computer Science

STUDENT DATA:

NAME: ROADMAP'S DEGREE

SSN: 000-00-0000

**Credit Potential
Required Credit**

Composition and Modern English I (ENG 1101)

3.00

(Intensive instruction in the writing process. Focuses on organization of ideas in well-developed expository and argumentative essays (usually 6 to 8 essays), with stress on grammar, punctuation, and vocabulary development. This requirement may be filled with college level testing credit. TROY accepts the CLEP General English with essay.)

{DANTES Code = 11.07.00}

Composition and Modern English II (ENG 1102)

3.00

(Text-based analyses and application of principles and tools of research in writing short research papers. This requirement may be filled with college level testing credit. TROY accepts the CLEP General English with essay.)

{DANTES Code = 11.07.00}

Fundamentals of Speech (SPH 2241)

3.00

(Study of the principles and practices basic to all areas of oral communication.)

{DANTES Code = 04.10.00}

Fine Arts Electives

4.00

(Students should select four semester hours from the following (each course is a 2 semester hour course):

ART 1133 Visual Arts

DRA 2200 Introduction to Drama

MUS 1131 Music Appreciation

Visit the TROY website for a description of these courses.)

World Literature I (ENG 2205) or World Literature II (ENG 2206)

3.00

(Visit the TROY website for a description of these courses.)

{DANTES Code = 11.21.00}

Humanities Elective

3.00

(Select three semester hours from the following:

CLA 2260 * Classical Mythology

ENG 2205 World Literature I
 ENG 2206 World Literature II
 FRN, GER, GRK, LAT, OR SPN Introductory I
 PHI 2203 Introduction to Philosophy
 PHI 2204 Ethics & the Modern World
 REL 2280 World Religions

Visit the TROY website for a description of these courses.)

Principles of Biology (BIO 1100) 3.00

(Biological principles including chemistry of life, cell structure and function, bioenergetics, cell reproduction, heredity, and ecology. Credit for this course cannot be applied toward any curriculum in biology.

Co-requisite: BIO L100.)

{DANTES Code = 16.03.00}

Principles of Biology Lab (BIO 1100L) 1.00

(Measurements, microscopy, ecology, cell structure, bioenergetics, cell reproduction, and heredity. Co-requisite: BIO 1100.)

Business Calculus (MTH 2201) 3.00

(An introduction to the basic ideas and techniques of differential and integral calculus, especially as they relate to problems involving maximum and minimum values of functions and marginal analysis. Prerequisite: MTH 1112 or 1115 with a grade of C or better, or advanced placement.)

{DANTES Code = 14.04.04}

Applied Discrete Mathematics (MTH 2215) 3.00

(Discrete mathematics with a computer science orientation is presented. Topics include sets, relations, logic, algorithms, and recursion.

Prerequisite: A grade of C or better in MTH 1112.)

{DANTES Code = 14.14.00}

Natural Science Elective 4.00

(Select a four hour course/lab combination from the following:

SCI2 234/L 3/1 Earth & Space Science w/Lab
 SCI2 233/L 3/1 Physical Science w/Lab
 CHM 1142/L 3/1 General Chemistry I w/Lab
 PHY 2252/L 3/1 General Physics I w/Lab
 PHY 2262/L 3/1 Physics with Calculus I w/Lab

Visit the TROY website for a description of these courses.)

{DANTES Code = 16.13.00 or 16.99.00 or most 16.XX.XX series}

History Elective 3.00

(Select three hours from the following:

HIS 1101 Western Civilization I

HIS 1102 Western Civilization II
 HIS 1111 US to 1877
 HIS 1112 US from 1877
 HIS 1122 World History to 1500
 HIS 1123 World History from 1500

Visit the TROY website for course descriptions.)

{DANTES Code = 20.07.05, 20.07.06, or 20.07.07}

Social/Behavioral Science Electives

9.00

(Select nine hours from the following courses:

ANT 2200 Anthropology
 ECO 2251 Principles of Macroeconomics
 ECO 2252 Principles of Microeconomics
 GEO 2210 World Regional Geography
 HIS 1101 Western Civilization I
 HIS1102 Western Civilization II
 HIS 1111 US to 1877
 HIS 1112 US from 1877
 HIS 1122 World History to 1500
 HIS 1123 World History from 1500
 POL 2200 World Politics
 POL 2241 American National Government
 PSY 2200 General Psychology
 PSY 2210 Developmental Psychology
 SOC 2275 Sociology for General Studies

Visit the TROY website for a description of these courses.)

{DANTES Code see 20.XX.XX series}

Computer Concepts and Applications (IS 2241)

3.00

This course provides an interdisciplinary introduction to microcomputer literacy, word processing, spreadsheets, database, business graphics and the internet.

University Orientation: Required for all students (TROY 1101)

1.00

(The primary purpose of this course is to assist entering students in acquiring the necessary knowledge and skills to manage effectively the Troy University campus environment in order to maximize their potential for success at the University, in their careers, and throughout their lives.)

Computer Programming I (CS 2244)

3.00

(An introduction to a programming language. Programming fundamentals include program structure, assignment, data types, repetition, input/output, flow of control, and functions. Program design development and testing is emphasized. Prerequisite: MTH 1112.)

{DANTES Code = 05.03.01}

Computer Programming II (CS 2260)	3.00
(A continuation of Computer Science I to include advanced programming techniques including application of arrays and advanced input/output. Students design, implement, and test a number of moderately large programs. Prerequisites: CS 2244 and MTH 1125 or 2201.)	
{DANTES Code = 05.03.01}	
Advanced Programming I (CS 2265)	3.00
(Provides student the opportunity to gain experience and training in an additional high-level language. The course focuses on advanced topics including objects, structures, applets, graphics, exception handling, files, and streaming. Prerequisite: CS 2260.)	
{DANTES Code = 05.03.01}	
Data Structures and Algorithms (CS 3330)	3.00
(A course in fundamental data structures concepts and alternative techniques for solving real-world problems in computer science. Concepts and application covered include analysis of data representation and associated algorithms, including linked lists, queues, stacks, arrays, graphs, trees, searching, sorting, string matching, and the application of recursive techniques. The course will place an emphasis on the implementation of various algorithms and data structures. Prerequisites: CS 2260 and MTH 2215.)	
{DANTES Code = 05.99.00}	
Introduction to Database Management Systems (CS 4420)	3.00
(The fundamental concepts and structures necessary for the design and implementation of a database management system. Students design, load, and query a database using tools such as E-R diagrams and SQL. Also includes data normalization and file and index organization. Prerequisite: CS 3323 or CS 3330.)	
{DANTES Code = 05.03.00}	
Web-Based Software Development (CS 4443)	3.00
(The essentials of Internet programming. Students will design and write Web page applications utilizing Internet programming techniques including scripting languages and hypertext. Programs will manipulate many forms of data including hypertext, graphics, audio, and video. Students use state-of-the-art development tools and design methods to implement an enterprise web application. Prerequisite: CS 4420.)	
Data Communication and Networking (CS 4445)	3.00
(An overview of local-area and wide-area systems. Issues discussed include standards, topologies, management, communication protocols, and security. Prerequisite: CS 3325 or CS 3330.)	
{DANTES Code = 04.04.01}	

Systems Analysis and Design (CS 4447) 3.00

(Study of the analysis of computer-based information systems. Emphasis is placed on analysis, specifications development, design, and development of information systems, including the software and databases that support the business needs of organizations. Both data-oriented and process-oriented design methods are covered. Topics include the systems analyst, the systems development life cycle, methodologies, development technology, systems planning, project management, systems analysis, systems design, systems implementation, and systems support. Prerequisite: CS 3323 or CS 3330.)

{DANTES Code = 05.03.02}

Operating Systems (CS 4448) 3.00

(An overview of operating system functions and components. Issues include process definition, scheduling, and memory management. Various modern operating systems are compared. Prerequisites: CS 4445 and CS 3323 or 3330.)

{DANTES Code = 05.99.00}

Computer Science Electives 9.00

(Select three of the following courses:

- CS 2262 Business Systems Programming
- CS 3323 Data Structures
- CS 3332 Software Engineering I
- CS 3347 Advanced Programming II
- CS 4449 Applied Networking
- CS 4451 Computer Security
- CS 4495 Special Topics in Computer Science

Visit the TROY website for a description of these courses.)

Minor Area Electives 18.00

(Students must select an 18 semester hour minor in Business Administration, Criminal Justice, History, Psychology, Political Science, or Sociology. 15 sh must be upper-level. Visit the TROY website for complete listing and description of courses.)

Free Electives 17.00

Excess or Duplicate Credit

TOTAL 120.00 0.00

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 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 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.

Troy University (TU) General Information

This degree is available online. Troy University / University College is responsible for the delivery of off-campus, out-of-state educational programs. The college is comprised of five geographic regions with approximately 50 branches and teaching sites located in five countries and 14 states. The branches and sites are primarily based on or near military installations and serve military and civilian personnel and their dependents stationed on the bases. The college is a member of the Servicemembers' Opportunity College (SOC) and the Council for Adult and Experiential learning (CAEL).

The maximum amount of college level testing credit accepted by TROY is 30 semester hours for an Associates Degree or 60 semester hours for a Bachelor's Degree. (Note: TROY does not accept Excelsior College Examinations.)

One-time Application Fee: \$30

Tuition per course: \$163 per semester hour (subject to change)

Employees of government agencies, corporations, and private business may be eligible for military tuition rates if they are members of any of the seven Military Reserve or National Guard components. Check with the admissions office to determine eligibility if applicable.

To discuss your next step toward earning this degree with Troy University, contact:

Wendy Knox, Asst. Site Director for Advising
Distance Learning Center
Troy State University
Phone: (866) MY-TSU-DL
E-mail: wknox@troy.edu
Website: <http://www.troy.edu/>

POLICY NOTES:

Transfer of non-traditional credit accepted by TU may include up to 60 semester hours for a Bachelor's Degree (Military credit or college level testing). The remaining 60 semester hours for a Bachelor's Degree must be taken through a four year college or university. Note: 30 semester hours for a Bachelor's Degree must be taken through TU, including 12 semester hours in the concentration. 50% of this degree must be from a 4-year source.

Students must complete a 6 semester hour sequence in Literature or History.

A total of 6 semester hours selected from either Humanities or Social Science must be international in scope.

Students should complete at least 36 semester hours of the General Studies Program before registering as a junior.

Contact your advisor if you have questions about whether a course you have taken at another university or through the military is comparable to a course required for your chosen degree. You should receive an "Official Degree Plan" from your advisor within two terms after admission to the university. However, the timeliness of this process is dependent on the speed at which TROY receives transcripts and course descriptions from any other institutions attended. Until you receive your Official Degree Plan, you can use the Unofficial Degree Plan to determine which course to take.

This college is rated as one of the nation's best in U.S. News & World Report's "America's Best Colleges" issue.

Evaluation completed by: Charles Morrison

On: 07 June 2007