



Nova Southeastern University



**Bachelor of Science in Computer Information Systems**

**STUDENT DATA:**

**NAME:** ROADMAP'S DEGREE

**SSN:** 000-00-0000

**Credit Potential  
Required Credit**

**College Writing (COMP 1500)**

**3.00**

(A writing workshop with instruction in the principles and skills of argumentation and critical reading. Students will receive instruction in basic methods of research and documentation of sources and in computer use. Pre-requisite: placement examination or WRIT 1000 with a C- or higher. College credit by examination may apply.)  
{DANTES Code = 11.07.00}

**Advanced College Writing (COMP 2000)**

**3.00**

(A writing workshop with advanced instruction in argumentation as it applies in various professional settings. The course also includes additional instruction in critical reading, research, and writing. Prerequisite: COMP 1500.)  
{DANTES Code = 11.07.00}

**Public Communication (SPCH 1010)**

**3.00**

(Training and practice in the fundamentals of public speaking, including audience analysis, topic development, research, organization, language use, and delivery.)  
{DANTES Code = 04.10.00}

**Applied Calculus (MATH 2080) [MH072B]**

**3.00**

(This course covers functions, graphs, and derivatives of algebraic functions; introduction to derivatives of trigonometric functions; exponential and logarithmic functions; application of derivative to business problems; related rates and maximum/minimum problems. College credit by examination may apply.)  
{DANTES Code = 14.04.00 or 14.04.01}

**Applied Statistics (MATH 3020) [MH053B]**

**3.00**

(An introductory course in the use of descriptive and inferential statistics. Topics to include graphical and numerical descriptive measures, probability, common random variables and their distributions, sampling procedures, confidence intervals, and hypothesis testing, including tests for independence and goodness of fit,. College credit by examination may apply.)  
{DANTES Code = 14.09.00 or 14.09.06}

<b>Humanities Electives</b>	<b>6.00</b>
(Choose from the following courses:	
Any ARTS, HIST, HUMN, LITR, PHIL, or foreign language course (including SPAN)	
Advanced Writing Courses:	
COMM 3050 Advanced Performance Studies	
WRIT 3020 Creative Writing: Poetry	
WRIT 3030 Creative Writing: Fiction	
WRIT 3110 Writing for the Professions	
The following first-year experience courses may be substituted for any of the other general humanities courses:	
EDUC 1100 Exploration of the Education Profession	
HUMN 1410 Explorations in the Humanities	
Visit the NSU website for a description of courses available.)	
{DANTES Code = 08.06.00 or most 08.XX.XX series}	
<b>Social Sciences Electives</b>	<b>6.00</b>
(Visit the NOVA website for a complete listing and description of available courses.	
{DANTES Code any 20.XX.XX series}	
<b>Natural Sciences Electives</b>	<b>6.00</b>
(College credit by examination may apply. Visit the NSU website for a description of courses available.)	
{DANTES Code = 16.13.00 or 16.99.00 or most 16.XX.XX series}	
<b>Discrete Mathematics (CSIS 1400) [MH064B]</b>	<b>3.00</b>
(Discrete Mathematics: An introduction to the concepts and techniques of discrete mathematical structures that are used in the theory and application of computer science and computer information systems. Topics covered include logic, set theory, relations, functions, recurrence relations, matrices, algebraic structures, graph theory, trees, and Boolean algebra.)	
<b>Introduction to Computer &amp; Information Science (CSIS 1800)</b>	<b>3.00</b>
(An introductory course to study computer systems layer by layer. The material covers Information Layer, Hardware Layer, Programming Layer, Operating Systems Layer, Application Layer, and Communication Layer. Each layer is covered in great detail and the concepts are supplemented by real examples. Prerequisites: TECH 1110 and MATH 2080 or MATH 2100.)	
<b>Computer Programming I (CSIS 1900) [CS011B]</b>	<b>4.00</b>
(Computer Programming I: This course provides an introduction to the principles of computer science by program development in the context of C/C++ environments. Major topics to cover in this class are: tokens, syntax, semantics, compiling, linking, executing, debugging, variables, types, assignments, inputs, outputs, function definitions, function	

applications conditionals, selection statements, iteration statements, arrays, files, classes, methods, and pointers through the program development.)

**Introduction to Database Systems (CSIS 2000) 3.00**

(Introduction to Database Systems: This course will give students an introduction to structured query language (SQL), object definition language (ODL) and Object query language (OQL). The course surveys relational, object-oriented, distributed, and multimedia database systems. This course also covers concepts and structures necessary to design and implement a database system, including logical and physical file organization and data organization techniques. Students will build, populate, query, and write transactions for a relational database.)

**Assemblers and Assembly Language Programming (CSIS 2410 ) [CS004B] 4.00**

(Assemblers and Assembly Language Programming: A detailed analysis of the operation of assemblers. Assembler features, assemble language programming, and macro facilities. Assembly language programs will be written as part of this course.)

{DANTES Code = 05.02.03}

**Computer Programming II (CSIS 2950) 4.00**

(Computer Programming II: Computer Programming II continues to focus on the main topics of computer science including the design and implementation of algorithms and data structures. Intermediate and advanced concepts of computer programming using the JAVA programming language are covered.)

**Web Programming and Design (CSIS 3020) [CS052B] 3.00**

(Web Programming and Design: This course will introduce the essentials of Internet programming. Students will design and write WWW pages in HTML, JavaScript, and shell scripting languages. Programs will manipulate many forms of data including hypertext, graphics, audio, and video. Students will develop interactive/executable Web pages. Other topics covered will include clickable image maps, cgi-bin scripting, and security.)

**Data Structures (CSIS 3400) [CS009B] 4.00**

(Data Structures: A course in fundamental data structures and their application. Advanced data structure concepts are developed including binary trees, B and B++ trees, hashing, directed graphs, matrices, set manipulation, and finite state machines. Quantitative analysis of algorithms are employed. Advanced sorts and string search are developed for data files like multimedia. Advanced concepts of abstraction with bags and polymorphism are investigated. )

**Networks and Data Communication (CSIS 3500) 3.00**

(Networks and Data Communication: An introduction to basic computer-driven data communications. The protocols, services, interfaces and platforms for the transmission of data on networks are investigated. The integration of homogeneous and heterogeneous networks is developed: bridges, routers, and gateways. The OSI architecture is defined. The topology of network architecture is covered and the details of connection and connection-less service, dedicated and switched circuits, access, error detection, and

correction are explained.)

**Software Engineering (CSIS 3750) [CS010B] 4.00**

(Software Engineering: An introduction to the process of developing software system. Topics include software life-cycle models, quality factors, requirements analysis and specification, software design (functional design and object-oriented design), implementation, testing, management of large software projects.)

**Survey of Operating Systems (CSIS 3800) [CS002B] 3.00**

(Survey of Operating Systems: The material for comparing and contrasting the different design and implementation aspects used in contemporary operating systems is the main topic of this course. History of operating systems, operating system concept, system calls operating system structure, processes, input/output, memory management, file systems, protection mechanics, and security be discussed. Six of the operating systems that had great importance in the 1990s, namely UNIX systems, MS-DOS, OS/2, Windows NT, the Apple Macintosh, MVS, and VM will be surveyed. )

**Distributed Data Processing (CSIS 4310 ) 4.00**

(Distributed Data Processing: Concepts and mechanisms in the design of distributed system: process synchronization, reliability, distributed selected distributed systems are covered.)

**Database Management (CSIS 4530) 3.00**

(Database Management: Concepts and structures necessary to design and implement a database system, including logical and physical file organization and data organization techniques, data models, networks, data integrity, and file security. Topics covered include logical and user's viewpoint, theoretical foundations, and physical system implementation.)  
{DANTES Code = 05.03.00}

**Computer Information Systems Major Electives 9.00**  
**[CS060B,OF033B,CS055B,CS054B,CS017B]**

(Select three courses from the below list:

CSIS 4650 Computer Graphics  
CSIS 4840 Unix Operating System Environment  
TECH 2000 Computer Tech: The Impact & Implications  
TECH 2130 Business Applications of Microcomputers  
TECH 2150 Introduction to Internet Resources  
TECH 3000 Multimedia Design  
TECH 4050 Business Data Communication

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

**Management Electives [EC009B,EC008B,MG001B,MG002B,BU005B,AC022B,BU002B] 6.00**

(Select two courses from the below list:

ACCT 2200 Financial Accounting I  
BUSS 2150 Business Law I

ECON 2020 Principles of Microeconomics  
 ECON 2025 Principles of Macroeconomics  
 MGMT 2050 Principles of Management  
 MGMT 4160 Human Resource Management  
 MRKT 3050 Marketing Principles and Applications

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

**Technology in the Information Age (TECH 1110) 3.00**

(The course covers technology survival skills needed for school, work, and life in our Information Age. Students work for mastery of computer skills needed today for success in academic coursework and tomorrow for the lifelong learning required in the profession. Students use today's popular software packages to create real-world documents in word processing, spreadsheets, charting, multimedia presentations, and Web authoring. They customize hands-on work to expand knowledge in their own field as they master Web navigation and research and create Web products with value for other classes. Students acquire a deeper understanding of technology use, abuse, and its impact on humans living in the ever-changing electronic environment.)

**Business Electives 6.00**

(Select a maximum of six credits from courses with the following prefixes: ACCT, BUSS, FINC, MGMT, MRKT  
 Visit the NSU website for a description of courses available.)

**Free Electives / Open Electives 18.00**

(College credit by examination may apply.)

**Excess 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](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.

#### Nova Southeastern University General Information:

Nova Southeastern University is a dynamic, not-for-profit independent institution dedicated to providing high-quality educational programs of distinction from pre-school through the professional and doctoral levels, as well as service to the community. Nova Southeastern University prepares students for lifelong learning and leadership roles in business and the professions. It offers academic programs at times convenient to students, employing innovative delivery systems and rich learning resources on campus and at distant sites. The university fosters inquiry, research, and creative professional activity, by uniting faculty and students in acquiring and applying knowledge in clinical, community, and professional settings.

Nova Southeastern University (NSU) is now ranked the 10th largest independent, not-for-profit, post-secondary institution in the United States, based on enrollment of 21,619 students for fall term 2002. NSU ranks behind 9th place University of Pennsylvania and in front of 11th place Columbia University, New York.

Synchronous and asynchronous Web tools are used for the delivery of distance education. Electronic classrooms and microcomputer labs provide hands-on technology support for students and faculty members. Multimedia technology training labs support technology-training opportunities for faculty and staff members.

Videoconferencing using Integrated Services Digital Network (ISDN) is provided for distance education. Through a videoconferencing bridge located on campus, up to 36 sites can be linked to form a global classroom. Forty-three videoconferencing rooms, located throughout Florida, and 50 student desktop videoconferencing systems, located at clinical sites and in students' homes, are provided by the university. Training for faculty members and students in the use of videoconferencing is also provided.

The university's 16 academic centers, colleges, and schools offer programs in osteopathic medicine, pharmacy, optometry, allied health, medical sciences, dental medicine, law, marine biology, business and entrepreneurship, computer and information sciences, humanities, conflict resolution, family therapy, interdisciplinary studies, education, psychology and counseling, and family programs. The university also offers 16 undergraduate majors through the Farquhar College of Arts and Sciences.

Since 1971, NSU has enjoyed full accreditation by the Commission on Colleges of Southern Association of Colleges and Schools.

The average cost for tuition per course is \$370.00 per credit hour undergraduate resident and distance learning courses, subject to change

For more information regarding the BGS degree, please contact:

Ric Burn  
Nova Southeastern University  
3301 College Avenue  
Fort Lauderdale, FL 33314  
Phone (954) 801-2876  
Email [military@nova.edu](mailto:military@nova.edu)  
<http://www.nova.edu>

POLICY NOTES:

General Requirements:

- A minimum grade point average of 2.0.
- A minimum of 30 semester hours of upper division course work required for this degree.
- 90 semester hours nontraditional or transfer credit may be applied to this degree.
- A grade of "D" is NOT accepted in transfer.

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