



Regis University



Bachelor of Science in Computer Science

STUDENT DATA:

NAME: ROADMAP 'S DEGREE

SSN: 000-00-0000

**Credit Potential
Required Credit**

Program Overview

The Computer Science degree prepares students for careers in computer programming, software engineering, or object-oriented technologies. Students will develop skills and knowledge in the areas of computer architecture, object-oriented analysis and design, software engineering, and operating systems. All course work and lab projects provide the means to achieve recognized mastery of computer science concepts and their application to real-world problems. Students will develop a solid understanding of how to plan, design, implement, manage, and maintain a broad range of computer information systems.

Principles of Speech/Public Speaking/Rhetoric (COM210) 3.00

(Provides an overview of the process of communication and introduces communication theory. Provides practical training in the fundamentals of effective presentation for individuals in both public speaking and group communication settings. Emphasizes discussion of contemporary issues and the analysis of public discourse. College credit by examination may apply.)

English Composition (EN203) 3.00

(Studies expository writing. Concentrates on critical and argumentative essays of 500-1,000 words. NOTE: Reasonable competency in basic writing and word processing required. Visit the RU website for a description of this course.)
{DANTES Code = 11.07.00}

Oral or Written Communication Requirement 3.00

(Advanced Composition, Advanced Rhetoric, or Applied Professional Writing Regis courses:

COM406; COM 437; EN325, EN370; EN/PL385; EN405; EN475; EN483

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

{DANTES Code = 11.07.00}

Literature/Humanities Requirement 6.00

(Choose courses from these areas:

Art, Art History and Theory, Film Studies, Theater, Music, Music History &

Theory, Humanities, Literature, Communication, English, or Foreign Language

Regis courses: all COM; any 300-400 EN; all HU courses. College credit by examination may apply. Visit the RU website for a description of courses available.)

{DANTES Code = 11.21.XX series or 08.06.00 or most 08.XX.XX series}

Global Issues Requirement

6.00

(Choose courses from these areas:

Non-U S History, Cultural Anthropology, Comparative Economic Systems, Cultural Geography, Comparative Political Systems, Foreign Language, Global Political Economy, Global Area Studies, Intercultural/International Communication, Social Communication in Cultural Contexts; International Economics, International Management, or International Marketing Regis courses: BA468, BA494; COM400, COM 484E-W, COM 487E-W; EC201, EC400; EC481; HS240E-W; HU225E, HU421E-W, HU435E-W; SO204, SO469E, SO472; IRSH410E-W; RC458, RC459, RC/PL402

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

{DANTES Code = 20.07.10}

Social Science Requirement

6.00

(Choose courses from these areas:

Anthropology, Criminal Justice, Communications, Current Issues, Macro-or Micro-Economics, Education, Ethnic Studies, Geography, History, Political Science, Psychology, or Sociology. Regis courses: COM courses (excluding COM210, COM406, and COM 437); EC320, 330, all EC; all ED; all HS; all PA; all PY; all SO courses. College credit by examination may apply. Visit the RU website for a description of these courses.)

{DANTES Code see 20.XX.XX series}

Mathematics Requirement - College Algebra or Higher

3.00

(College-Level Algebra or higher. Regis courses: MT 201, MT204, MT270, all 300-400 level MT courses. Visit the RU website for a description of these courses.)

{DANTES Code = 14.01.00}

Natural Science Requirement

3.00

(Choose courses from these areas:

Astronomy, Atmospheric Science, Biology, Biochemistry, Chemistry, Computer Science, Ecology, Environmental Science, Geology, Oceanography, Physical Geography, or Physics Regis courses: all Sci courses; all CS courses Visit the RU website for a description of courses available.)

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

Philosophy Requirement

6.00

(PL 300 -or 400 level courses. College credit by examination may apply. Visit the RU website for a description of these courses.)

{DANTES Code = 17.12.00 or 17.07.00}

Religious Studies Requirement	6.00
(RS or RC level courses. College credit by examination may apply. Visit the RU website for a description of these courses.)	
{DANTES Code = 17.03.00 or 17.13.00}	
Foundational / Lower Division Major Courses	
Computer Science Fundamentals (CS 208)	3.00
(Provides an introduction for Computer Science/Computer Information Systems majors/minors. Includes hardware and software systems, numbering systems, mathematical and logical binary operations, basic concepts of computer organization and operating systems. Introduces program development environments using PASCAL.)	
{DANTES Code = 05.XX.XX series}	
Control Structures (CS 241) [CS011B]	3.00
(Discusses basic concepts of computer organization. Develops a precise and logical methodology in reducing complex and unformatted data to algorithmic format. Introduces the concepts and methodologies of structured programming and design. Explains the uses and abuses of control structures.)	
{DANTES Code = 05.03.01 or 05.03.05}	
C Programming (CS 324) [CS063B]	3.00
(Visit the RU website for a description of this course.)	
{DANTES Code = 05.02.05}	
Data Structures (CS 341)	3.00
(Combines concepts discussed in CS 241, computer organization with structural programming and design, control structures, data structures, file organization and file processing. Emphasizes sound programming practices. Presents algorithms used in problem-solving.)	
Assembly Language (CS 370) [CS004B]	3.00
(Describes the elements and techniques of assembly language programming for microprocessors used in the IBM compatible family of microcomputers. Introduces computer architectures, and discusses the concepts of data representations, processing instructions, addressing modes, macros, functions and procedures, and file I/O.)	
{DANTES Code = 05.02.03}	
Computation Theory (CS 375)	3.00
(Provides the concepts of languages and language analysis including lexical analysis, syntax analysis and regular expression. Introduces automata theory including deterministic and non deterministic finite state machines and parsing techniques.)	
Introduction to Discrete Mathematics (MT 320)	3.00
(Visit the RU website for a description of this course.)	
{DANTES Code = 14.14.00}	

Geometry and Calculus I (MT 360A) [MH055B]	4.00
(Treats standard topics of single variable calculus including limits, continuity, derivatives, applications of derivatives, and elements of integration. RC Prerequisite(s): MT 231 or placement by Department.) {DANTES Code = 14.04.00 or 14.04.01}	
Geometry and Calculus II (MT 360B) [MH056B]	4.00
(Continues treatment of single variable calculus including definite and indefinite integrals, applications of integrals, transcendental functions, techniques of integration and infinite series.) {DANTES Code = 14.04.00 or 14.04.01}	
Ethical Decision Making in Business (BA 495E) [BU063B]	3.00
(Focuses on ethical problems that arise in the business setting. Emphasizes the individual decision maker in the entry-level position, as opposed to the managerial level. Studies the various philosophical and social/psychological decision systems which can be used to resolve ethical problems. Includes case studies, role playing and guest speakers from the business community. RC Prerequisite(s): BA 250 and Junior standing. {DANTES Code = 17.05.01}	
Operating Systems (CS 430) [CS002B]	3.00
(Visit the RU website for a description of this course.)	
Object - Oriented Analysis and Design (CS 432) [CS048B]	3.00
(Introduces the Object Oriented paradigm for systems analysis and design. Develops an Object Model for use in Object Oriented Programming Using C++. Topics include OMT object modeling, object oriented analysis and object oriented design.)	
Java™ Programming or Object-Oriented Programming Using C++ (CS 434,436)	3.00
(Provides the concepts and terminology of data communications and network design. Includes transmission techniques, network topologies, protocols, security, network control and network architectures.)	
Computer Organization and Architecture (CS 440) [CS031B]	3.00
(Introduces machine architecture through the traditional Von Neumann architectural schemes. Features traditional register-to-register transfer logic, ALU design and BUS architectures. Examines disk drive performance analysis, virtual storage, cache memory, pipelining, micro-code and bit-slicing. Examines several systolic architectures and their corresponding parallel processing environments.)	
Software Engineering (CS 444) [CS010B]	3.00
(Studies the different ways and techniques used for software development, testing and the methods to manage software projects. Introduces conventional methods for software engineering and object-oriented software engineering.)	
Data Networks (CS 450) [CS017B]	3.00
(Provides the concepts and terminology of data communications and network design. Includes transmission techniques, network topologies, protocols,	

security, network control and network architectures.)

Senior Capstone (CS 493) 3.00

(Provides the culminating experience of the major, focusing on integration and application of theory through research.)

Linear Algebra (MT 415) [MH059B] 3.00

(Studies vector spaces, linear transformations, matrices, determinants, systems of equations, eigenvalues and characteristic matrices. Required for students preparing to teach secondary mathematics.)

{DANTES Code = 14.01.01}

Computer Science Electives 6.00

(Choose from the list of courses below:

- Graphics (CS 424)
- Systems Analysis and Design (CS 425)
- Compiler Theory (CS 428)
- Advanced Data and File Structures (CS 437)
- Database Programming (CS 442)
- Database Management (CS 445)
- UNIX Operating System (CS 465)
- Algorithms Analysis (CS 472)
- Artificial Intelligence (CS 473)

Visit the RU website for a description of this course.)

{DANTES Code = 05.03.00 or 05.02.06}

General Electives / Free Electives 21.00

(College credit by examination may apply.)

Excess or Duplicate Credit

TOTAL 128.00 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.

Regis University General Information:

Since 1877, Regis University has been meeting the needs of students through innovative programs centered in academic excellence. Commitment to the individual student is fostered through the heritage of their values-centered Jesuit education. Today more than 15,000 students call Regis University home. The University is comprised of three schools that provide quality programs for each of our student populations: Regis College, Rueckert-Hartman School for Health Professions and the School for Professional Studies.

Regis University has designed its academic offerings to honor the values of Jesuit higher education, which calls for coherent and challenging fields of study, the examination of values, freedom of academic inquiry, and regular exchange of ideas between faculty and scholarship. Our curricula, our faculty, and our learning formats demonstrate these commitments.

The School for Professional Studies (SPS), established specifically by Regis University to offer programs designed for working professionals serves more than 13,000 students a year. SPS offers you a variety of flexible, convenient options to accommodate your educational goals, learning preferences and lifestyle. Depending upon your preferences, you may attend classroom-based courses, work independently outside the classroom or take courses online. Classes are small, averaging 15 students per course. You may pursue undergraduate or graduate degrees, academic certificates or noncredit corporate education programs.

Regis University academic programs are offered in a variety of learning formats - traditional semester-based programs, accelerated evening programs, guided independent study programs, and online learning programs - offered at both the undergraduate and graduate levels.

As an adult, you've learned a great deal through your work, job training, community, family, and other sources such as the military. You may also have transferable credit hours from colleges or universities you have previously attended. Save both time and money by capitalizing on your prior learning experiences, and significantly reduce the time needed to complete your degree through transfer credit, prior learning assessment or testing options. You can earn up to half of the college credit you need to graduate, and avoid classes in areas you have already mastered.

The average cost for Classroom-Based Courses is \$265.00 per credit hour, Guided Independent Study \$295.00 per credit hour and distance learning courses, \$310.00 per credit hour subject to terms of contract.

FOR MORE INFORMATION

Please contact us at 800.944.7667 or
online_ed@regis.edu or visit us online at
www.regisonline.org.

POLICY NOTES:

ADMISSION REQUIREMENTS

- o Completed application
- o Application fee
- o A minimum of 30 semester hours of transferable credit from a regionally accredited college/university OR enroll in ED205*
- o At least three years of full-time work experience OR submit Admissions Appeal and enroll in ED205*
- o Official copies of transcripts
- o Writing sample, submitted within 10 days of application
- o Additional requirements may apply for students with international backgrounds

General Requirements:

- A minimum grade point average of 2.0.
- 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