



Department of Mathematics & Computer Science

Computer Information Systems

About the Degree

The Computer Information Systems (CIS) degree, like the Computer Science (CS) degree focuses on problem solving, analysis, design, and implementation of software systems. However, the CIS curriculum has a strong business component with courses in Accounting, Economics, and Management. Also, the CIS program offers breadth of knowledge by requiring courses in software engineering, database, and networking. A second course in one these areas is required as well as an option to take a third course. In general, the CIS degree is more applied than the CS degree, with fewer required courses in mathematics and sciences and no foreign language requirement.

Employment Opportunities

A degree in CIS can lead to many different kinds of jobs dealing with computers and with people: computer programmer, software engineer, software architect, help-desk, networking specialist, computer-system manager, consultant, database analyst, computer training specialist, and others are all possible careers. It differs from the CS degree in that it is geared more towards software development in the business and government environment.

Computing Facilities

The CS Computer Lab consists of three areas and is open for more than 100 hours per week. The Main Lab consists of 25+ PC workstations. The Smart Lab consists of 20+ workstations that can access Linux, Solaris, or Windows servers. The Classroom Lab is a tiered room with 30+ PC workstations and overhead projection. This lab is available anytime there is no class meeting there. All instructional classrooms are equipped with a computer and projection system.

For students working on special projects, we also have the Debian Beowulf Cluster Lab which consists of 28 computers all acting simultaneously to complete given tasks by the master computer.

Research Opportunities

Opportunities are provided for students to conduct research under the guidance of faculty members. Recent and on-going research projects include emerging technologies, advanced software applications, three-dimensional computer graphics, medical image processing, scientific computing, and search algorithms using the world-wide web. Research can be presented at the annual Arts and Sciences Symposium on Undergraduate Research.

Tutoring

Tutoring is available at the Student Success Center (<http://www.valdosta.edu/ssc/>), The Center is open seven days a week, at least 50 hours per week and offers free tutoring for introductory CS classes such as CS 1010, CS 1301, CS 1302, CS 2620, and CS 3410. Tutoring is provided by select, advanced CS and CIS students.

Required CS & Math Courses

CS 1010	Algorithmic Problem Solving (optional)
CS 1301	Principles of Programming I
CS 1302	Principles of Programming II
CS 2620	Discrete Structures
CS 3101	Computer Organization
CS 3410	Data Structures
CS 4121	Network Theory
CS 4321	Software Engineering
CS 4345	Operating Systems
CS 4721	Database

choose 1: Unix Programming, C-Programming, Web Programming

choose 1: Network Theory II, Software Engineering II, Database II

choose 2: Unix Programming, C-Programming, Web Programming, E-Commerce I, Algorithms

choose 1: Programming Languages, E-Commerce II, Foundations of Computer Science, Artificial Intelligence, Graphics, Senior Seminar, Systems Programming

Math 1111	College Algebra
Math 1261	Survey of Calculus I
Math 1262	Survey of Calculus II
Math 2620	Statistical Methods

Co-op Program

The university provides many opportunities for cooperative education, which integrates classroom instruction with practical work experience. Students who participate can gain valuable experience in their chosen area prior to graduation, while also earning income to help pay for educational expenses. The department encourages students to co-op and has a faculty co-op coordinator to aid in the process. The program is very successful.

Sample Program

First Year	
Fall (15)	Spring (15)
CS 1010 (3)	CS 1301 (4)
Math 1111 (3)	Math 1261 (3)
Engl 1101 (3)	Engl 1102 (3)
Pols 1101 (3)	Hist 2xxx (3)
Area C Elec (3)	Pers 2xxx (2)

Second Year	
Fall (16)	Spring (15)
CS 1302 (4)	CS 2620 (3)
Math 1262 (3)	CS 3410 (3)
Engl 2xxx (3)	Acct 2102 (3)
Econ 2106 (3)	CS 3xxx (3)
Acct 2101 (3)	Math 2620 (3)

Third Year	
Fall (15)	Spring (16)
CS 3101 (3)	CS 4xxx (3)
CS 3xxx (3)	CS 4721 (3)
CS 4121 (3)	Area E Elec (3)
Science (4)	Mgmt 3250 (3)
Pers 2xxx (2)	Science (4)

Fourth Year	
Fall (15)	Spring (13)
CS 4xxx (3)	CS 3xxx (3)
CS 4321 (3)	CS 4345 (3)
Mgmt 3300 (3)	Mktg 3050 (3)
Area E Elec (3)	Elective (3)
Elective (3)	Elective (1)

For More Information Call or Write:

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