



## College of Engineering, Mathematics and Science

# Computer Science

### What is Computer Science?

Computer science includes the practical areas of data processing, software engineering and general programming, as well as theoretical aspects of computers and computing. It is one of the fastest-growing areas for research and other occupational pursuits. Most importantly, it appears that it will continue to provide an abundance of high-paying jobs for the foreseeable future.

### Computer Science at UW-Platteville

Computer science is exciting and rapidly changing. Our staff includes energetic people who share a common interest in computers. The department is committed to the objective of blending the theory of computer science with the arts of programming and analysis, while providing attention to the business, ethical and moral aspects of computing in our society.

Computer science courses at UW-Platteville are designed to meet the needs of a broad range of students. The computer science program focuses on three objectives; preparation for professional and technical careers in government, industry and education; service to the community; and preparation for graduate study. The program provides for the acquisition of marketable knowledge and skills in a major with two different emphases; computer information systems and computer technology. In addition, the department offers a minor and service courses for students from other areas. Persons interested in computer science would logically be candidates for the computer science major. However, students in other majors may also find that their chosen profession will require considerable knowledge of computers since they will be involved, directly or indirectly, with computer activities. A minor in computer science, or a customized sequence of appropriate computer science courses may prove extremely beneficial to such students.

### Major in Computer Science

All computer science majors must complete at least 38 credits in computer science, plus the requirements in one of the emphasis areas of computer information systems or computer technology.

### Minor in Computer Science

The minor provides sufficient flexibility to complement any major field of study. Completion of the minor is sufficient for a certified teacher to be licensed to teach computer science in the State of Wisconsin. A computer science minor requires a minimum of 24 credits in computer science.

### Faculty and Facilities

The department has breadth and depth in practically every area of computer theory and application. Faculty experience includes programming, systems analysis, software engineering, and research in applied and theoretical computer science. Faculty members hold advanced degrees in computer science, information science, and mathematics.

All classes and labs are taught by the faculty; there are no teaching assistants. Instructors are available to assist students and to provide guidance in labs and projects. This close contact builds a camaraderie between faculty and students which makes for a more satisfying educational experience and a friendlier social environment.

Students have access to a variety of campus-wide general computing facilities and laboratories. These computers are connected to the internet, and internet connections are available in all dorm rooms on campus. In addition, a number of state-of-the-art labs provide ample opportunities to get hands-on experience. These labs are accessible to students 24-7.

### Personal Attention

The student receives a great deal of personal attention at the University of Wisconsin-Platteville. Faculty members personally develop their course content, teach the course, and grade examinations. The faculty is also available several hours each day to assist students and to provide guidance in their chosen program. Since teaching is our most important activity, far more contact with the faculty occurs than at most larger schools. The close contact we maintain builds a camaraderie between faculty and students which makes for a more satisfying educational experience and a friendlier social environment.

### Career Opportunities

There is a high demand for computer professionals. The starting salaries of our graduates have remained competitive with the national averages with starting salaries over \$45,000. Generally, graduates with a computer science major have obtained high-paying jobs within a few weeks of graduation or have secured employment even before they graduate.

A variety of employment opportunities are available for computer science graduates. These career areas include:

- applications programming
- systems analysts
- database administrators
- microprocessor system design
- research
- software engineering
- systems programming

Employers of computer science graduates include Epic Systems, Software Architects, MG&E, CUNA Mutual, American Family, Avista, Inc., Lands' End, State Farm, WPS and many more.

## ACM and AITP Student Chapters

Active Chapters of the Association for Computing Machinery (ACM) and the Association of Information Technology Professionals (AITP) provide professional, educational and social experiences beyond the classroom. Field trips, speakers, films and other activities are planned

to enhance each member's knowledge of current practices and to provide valuable contacts with the outside world and fellow students.

The AITP team placed 2nd in Visual Basic programming contest in National Collegiate Conference in Omaha, NE. The contest was held in April 2004 with 43 teams participating in the competition.

## For More Information

For more information, write to the Department of Computer Science and Software Engineering, University of Wisconsin-Platteville, 1 University Plaza, Platteville, Wisconsin 53818-3099, e-mail: gill@uwplatt.edu or call 608.342.1625. www.uwplatt.edu/csse

For general information on UW-Platteville and its programs, write to the Office of Admissions and Enrollment Management, University of Wisconsin-Platteville, 1 University Plaza, Platteville, Wisconsin 53818-3099, or call 1.800.362.5515 or 608.342.1125.

## Suggested Course of Study

### First Year

#### First Semester

CS 1010	Intro to Computer Science	1
CS 1430	Programming in C++	3
Math 1630	Finite Math w/Appl (CIS)	3
Math 2640	Cal & Anal Geometry I (CT)	4
Eng 1130	Freshman Composition	3
Econ 2130	Principles of Macroeconomics	3
PE	Physical Education	1
	Humanities (CIS)	3
	(CIS)	17
	(CT)	15

#### Second Semester

CS 2230	Comp. Prog. In COBOL	3
CS 2430	Obj.-Oriented Prog & Data Structure	3
Math 2630	Calculus w/Appl. (CIS)	3
	Domain Elective	4
Engl 1230	Freshman Composition	3
Econ 2230	Principles of Microeconomics (CIS)	3
PE	Physical Education (CIS)	1
	Elective (CT)	3
	(CIS)	16
	(CT)	16

### Second Year

#### First Semester

CS 2630	Obj-Orient Prog/Data Struct II (CT)	3
CS	Elective (CIS)	3
	Domain Elective	3
Acct 2010	Financial Accounting (CIS)	3
BSAD2330	Leadership & Management	3
Econ 2410	Interpretation of Bus/Econ Data (CIS)	3

PE	Physical Education (CT)	1
Art	Fine Arts (CIS)	3
	(CT)	15

#### Second Semester

CS 3230	Comp Architecture/Operating Sys	3
CS	Elective (CIS)	3
SE 2730	Intro to Software Engineering (CT)	3
Math 2730	Discrete Math	3
Acct 2020	Management Accounting (CIS)	3
BSAD 1300	Global Business (CIS)	3
	Elective (CT)	3
	Domain Elective (CT)	3
	(CIS)	15
	(CT)	15

### Third Year

#### First Semester

CS 3130	Systems Analyst & Design (CIS)	3
CS 3520	Programming Languages Structure (CT)	3
CS 3430	Obj-Oriented Analysis & Design (CT)	3
CS	Elective (CIS)	3
Acct 3000	Accounting Issues for Managers	3
	Lab Science	5
	Humanities (CT)	3
	Speech	2
	(CIS)	16
	(CT)	16

### Second Semester

CS 3530	Systems Develop & Implementation (CIS)	3
CS 3630	Database Design & Implementation	3
	Lab Science	4
HIST	History	3
	Social Sciences (CT)	3
Engl 3000	Technical Writing	3
	(CIS)	16
	(CT)	16

### Fourth Year

#### First Semester

CS 4230	Appl in Information Systems (CIS)	3
CS	Domain Elective/Elective (CT)	3
CS 4110	Seminar	1
BSAD4100	Supply Chain Mgmt. (CIS)	3
	Ethnic Studies	3
	Elective (CT)	3
	Elective	3
	FA/Hum/His 2nd Course	3
	(CIS)	16
	(CT)	16

#### Second Semester

CS	Elective	3
CS	Elective (CIS)	3
	Elective	3
	International Education	3
	Social Science	3
	(CIS)	12
	(CT)	12

CIS = Computer Information Systems  
CT = Computer Technology

The University of Wisconsin-Platteville does not discriminate on the basis of age, race, creed, color, handicap, sex, sexual orientation, developmental disability, national origin, ancestry, marital status, arrest record or conviction record.