



## Computer Information Systems Technology

### ■ What Is Computer Information Systems?

Computer information systems is information technology. This degree concentrates specifically on computer programming.

Computer programmers write, test, and maintain the detailed instructions that computers must follow to perform their functions. Programmers also conceive, design, and test logical structures for solving problems by computer.

Programmers write programs according to the specifications determined by computer software engineers and systems analysts. After the design process is complete, the programmer converts that design into a logical series of instructions that the computer can follow. The programmer codes these instructions in a programming language such as COBOL; an artificial intelligence language such as Prolog; or one of the advanced object-oriented languages, such as Java, C++, or ACTOR. Different programming languages are used depending on the purpose of the program.

In practice, programmers often are referred to by the language they know, such as Java programmers, or by the type of function they perform or environment in which they work—for example, database programmers, mainframe programmers, or Web programmers.

### ■ Success Factors

You must think logically and pay close attention to detail. The job calls for patience, persistence, and the ability to work on exacting analytical work, especially under pressure. Ingenuity and creativity are particularly important. The ability to work with abstract concepts and to do technical analysis is especially important. Because you are expected to work in teams and interact directly with computer users, you must be able to communicate well with non-technical personnel.

### ■ Career Possibilities

You may pursue many different careers. Some of your opportunities for employment include the following:

|                              |                                  |
|------------------------------|----------------------------------|
| programmer                   | software applications specialist |
| I/S operator/analyst         | software/application support     |
| operating systems specialist | database software technician     |
| software designer            | webmaster                        |

### ■ Majoring In Computer Information Systems

The computer revolution and subsequent information revolution over the past two decades has generated a need for highly skilled, trained, and versatile professionals in information technology (IT). The growing importance of information as a company asset requires IT professionals who have a competency in general business. They must be able to achieve business' goals in today's competitive market place, have a solid base in the general concepts of information technology, and have an expertise in an area of concentration within IT.

You will enter a hands-on environment with small classes and flexible, staffed laboratory hours to help you progress from introductory courses through high-level computer programming languages and current database systems. Your laboratory time will help you master associated methodologies such as data modeling and normalization. You will study contemporary programming languages using an object-oriented methodology, and you will have the opportunity to refine your programming skills through implementation of client-side and server-side Web technologies. Your studies will include the latest visual productivity software, and you will learn to use top-down program design with structured techniques—the industry standard for problem solving.

You will also develop technological skills in problem solving and critical reasoning; learn the concepts and application of systems analysis and design; become proficient in technical writing; and deepen your knowledge of the Internet.

Your competency in general business will grow as you study accounting, business communications, business ethics, theory of design, and the implications of computer technology in today's complex but shrinking world.

You should be able to complete this program in 2 years, attending full-time fall, winter and spring quarters. If you graduated in computer information technology from a tech prep high school program, you may be granted college credits and advanced standing. This program is career specific and does not generally transition into a bachelor's degree.

If you prefer a shorter term, skill-specific, non-degree option, we also offer a computer information systems certificate.

**■ Program Requirements**

You should check with your academic advisor every quarter *before* you register for classes. Two years is really a short time to squeeze in all of your degree requirements. We cannot offer every course every quarter. If you miss taking a prerequisite for a required course, or don't take a particular course the only quarter it is offered during the year, you can jeopardize your ability to complete your degree on time.

| <b>CORE COURSES</b>  | <b>Cr. Hrs.</b> |
|--|-----------------|
| Financial Accounting I .....                                 | 3               |
| Business Ethics.....   | 3               |
| Problem Solving: Logic and Methods.....                      | 3               |
| IT Fundamentals for Computer Majors .....                    | 3               |
| First Year Experience .....                                  | 3               |
| Client Side Web Development.....                             | 3               |
| Web Publishing.....  | 3               |
| Web Administration.....                                      | 3               |
| Server Side Web Development I, II.....                       | 6               |
| Object Oriented Programming I, II .....                      | 6               |
| Computer Programming I, II, III .....                        | 9               |
| Systems Analysis and Design.....                             | 3               |
| LAN Administration.....                                      | 3               |
| Operating Systems Administration.....                        | 3               |
| CIS Capstone Course .....                                    | 3               |
| Implications of Computer Technology.....                     | 3               |
| Data Base Management II, III.....                            | 6               |
| Effective Public Speaking .....                              | 3               |
| English Composition I, II.....                               | 6               |
| Intermediate Composition.....                                | 3               |
| Technical Writing .....                                      | 3               |
| Two Dimensional Design .....                                 | 3               |
| Mathematics for the Behavioral Sciences and Computers I..... | 3               |
| Natural Science elective .....                               | 3               |
| Quality Management elective .....                            | 3               |
| Social Science elective.....                                 | 3               |
| TOTAL.....   | 96              |



**■ Advantages & Special Opportunities**

The Clermont campus is on 92 wooded acres located in Batavia, Ohio, in the heart of Clermont County. We are relatively small and our faculty to student ratio is low. You will find our small class size and personal interaction with your instructors create the ideal learning environment. Parking is convenient and at no additional charge. Plus, our tuition is the lowest of the UC colleges.

Studies are oriented toward business settings and solutions to business problems. Our state-of-the-art computer laboratories and software provide an ideal setting for learning.

You will learn the latest visual productivity software. You will also learn to use top-down program design with structured techniques—the industry standard for problem solving, and the way to best prepare you for a future of growth.

**■ Admissions**

UC Clermont College is an open admissions campus. If you have your high school diploma, GED, or its equivalent, we will admit you. We accept applications all year long and you may start any quarter. Financial aid takes 6-8 weeks to process. We recommend that you apply at least 10 weeks prior to your desired attendance.

**■ For More Information, Contact:**

Enrollment & Student Services  
 4200 Clermont College Drive  
 Batavia OH 45103

513.732.5300  
 1.866.446.2822  
[www.ucclermont.edu](http://www.ucclermont.edu)  
[Clermont.Information@uc.edu](mailto:Clermont.Information@uc.edu)

