

TABLE OF CONTENTS

Community College Programs

Northeast Iowa Community College	2
Highland Community College.....	4

Technical College Programs

Southwest Tech	5
----------------------	---

Four Year College Programs

Clarke College	9
Loras College.....	11
University of Dubuque	13
University of Wisconsin-Platteville.....	15

Why a career in Information Technology?

Are you considering a career in the Information Technology (IT) industry? There are many occupations to choose from within this industry, and you will find a variety of educational options in this booklet. The Dubuque area is beginning to become a technology hub with companies such as IBM, Dubuque Data Services, Eagle Point Software, McKesson, and Cartegraph.

Information Technology careers are not only found at large computer companies, but many are found in small and medium sized business all over town. We rely on technology everyday and in so many aspects of our lives. The IT industry has suffered from a shortage of qualified IT workers with flexible skills who can adapt and respond to the ever-changing demands and processes of the IT industry.

Technology skills and computer proficiency are essential assets for workers in all industries. Even if the career you choose does not focus solely on IT, the job will most likely require the use of computers and technology to accomplish tasks and process information. 92% of all IT workers are in non-IT companies, 80% of which are in small companies (Information Technology Association of America).

Northeast Iowa Community College

Computer Analyst - Business & Web Programming or Networking Administration & Tech Support

The Computer Analyst program offers two options: Business and Web Programming and Networking Administration and Tech Support. The common core provides you with the flexibility of changing options at the conclusion of your third semester. Combining robust technical skills with strong communication skills is important to successfully prepare you for employment in today's computer industry. The program is designed to prepare you for a position as an application programmer, maintenance programmer, web designer or web developer, technical support person, microcomputer consultant, trainer, networking administrator, or network support person

ENTRANCE REQUIREMENTS

You must complete a basic skills assessment prior to being accepted into the program.

AWARD

AAS

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.

Northeast Iowa Community College

Management Information Systems

The AA degree in Management Information Systems will prepare you to enter the workforce or transfer to a computer-related major at a four-year college or university. If you plan to transfer to a four-year college, select courses to satisfy the requirements of the specific institution to which you intend to transfer, and consult with your advisor there with questions about course selection.

ENTRANCE REQUIREMENTS

You must be a high school graduate or equivalent and complete a basic skills assessment prior to being accepted into the program.

AWARD

AA

LENGTH

The length of the program will depend upon your educational preparation and the course load you carry.



Highland Community College

Computer Science - AS or Computer Technician - Certificate

Degrees:

Associate of Science
Certificate

Computer Science

Associate of Science

This program is intended to provide the first two years of a baccalaureate program. Majors in this program study the theory, design, development, and application of computer technology for storing and manipulating data and managing information.

Computer Technician

The computer technician program will prepare the student to install, upgrade, or repair computer equipment typically found in the home or on the office desktop. The scope of the curriculum includes microcomputers, peripheral devices, and technical support. The certificate competencies parallel those of the computer industry's A+ credential requirements.

Information Systems - AAS

Degrees:

Associate of Applied Science

Information Systems

Associate of Applied Science

This program is intended to provide the graduate with the entry-level job skills necessary in an information technology field. Candidates for the degree must choose an Emphasis area for their specialty.

Southwest Tech

Computer Support Specialist

Computer support specialists are able to think logically, enjoy being challenged by troubleshooting hardware and software, are able to work with people, and are self-directed and detail-oriented.

This associate degree program prepares you in the highly technical aspects of computer support techniques that businesses need to assist and train users. You learn to administer local area networks (LANs) as well as how to evaluate, select, and maintain computer hardware and software. This program will prepare you to install, troubleshoot, and maintain hardware and software components while solving computer-related problems. You will also develop web-based programming skills using JavaScript, PHP, and MySQL open source database management software (DBMS).

Career Opportunities

The Computer Support Specialist program prepares graduates for positions in a wide variety of organizations and businesses. While the job title may vary with each business, job expectations will include skills required for computer management, programming, network administration, and operator training. Opportunities exist for employment in accounting firms, banks, schools, hospitals, insurance companies, manufacturing firms, and government agencies.

Southwest Tech

Information Technology - Network Communication Specialist

Network communication specialists are organized, stay up-to-date with technology trends, enjoy working with people, and like the challenge of problem-solving activities.

The IT – Network Communications Specialist program prepares students to maintain and support local and wide area networks, computer communications systems including router and switch configurations, hardware & software infrastructure management/design, voice and video over IP, private telephone systems (PBX), voicemail systems, and video production. Potential students should enjoy hands-on activities, working with people, and problem solving activities. Prior computer experience is beneficial, but not required. Network Communication Specialists are needed in almost any business using local and/or wide area networks, the Internet or Intranets, and telephony systems.

Career Opportunities

- **Network Administrator:** Designs, implements, and maintains local area and wide area computer networks needed for the efficient functioning of the firm.
- **Network Assistant:** Assists the network administrator with all aspects of the firm's information network(s).
- **Information Technology Support:** Works directly with end users to maintain and troubleshoot information systems.

Southwest Tech

IT - Web Analyst/Programmer

Web analyst/programmers possess an analytical and creative ability, like to solve problems and are persistent, are able to think logically, have good basic reading and math skills, and have good oral and written communication skills.

The Web-Analyst/Programmer degree prepares you to become a computer programmer who will maintain and develop a variety of Web applications including client, server side and e-commerce web applications. The program provides training using XHTML, JavaScript, PHP, Java, and Visual C++. Students will develop web pages using database management software (DBMS). Students will gain experience using both Linux/Apache and Windows/IIS platforms. Web Analyst/Programmers are needed in almost every kind of business today.

Career Opportunities

- **Webmaster:** Webmasters are responsible for designing, developing, marketing, or maintaining Web site(s).
- **Web Designer:** A Web designer designs and prepares content for the World Wide Web, including text, images, site architecture, and multimedia.
- **Software Engineer:** A software engineer designs and programs software such as database management systems (DBMSs) and embedded systems. This career is listed in the top 25 of the fastest growing occupations on the Wisconsin Worknet website.

Southwest Tech

Information Security Professional Certificate

The Information Security Professional Certificate is designed for persons who are in managerial positions and are in charge of information security within an organization. The three courses for this certificate will prepare an individual for principles, management, ethics, and policies of information security.

Information Security Specialist Certificate

The Information Security Specialist Certificate is designed for IT professionals who administer a network and must ensure the information traveling on that network is secure. The three courses for this certificate will prepare an individual for principles of information security, as well as administration of information security using Unix/Linux and Windows platforms.

Both of the certificates are offered each semester in an online format, increasing flexibility so industry professionals can take the courses on their own time.

Attending Southwest Tech is very affordable. Course fees for Wisconsin residents attending Southwest Tech are \$101.40 per credit and out-of-state residents invest \$152.10 per credit. In fact, some programs qualify for a complete remission of out-of-state tuition costs for qualified students.



Clarke College

Computer Information Systems

Technology is the foundation of today's business operations and the US Department of Labor predicts a 35 percent increase in high-skill IT jobs between 2002 and 2012. This means that as a Clarke College Computer Information Systems major, you'll be in demand in a fast-paced and exciting industry.

In fact, the Bureau of Labor Statistics "Occupational Outlook Handbook, 2006-2007 Edition," reports that for bachelor's degree graduates, five of the top 12 fastest growing occupations between 2004 and 2014 include network systems and data communications analysts; computer software engineers (applications); computer software engineers (systems software); network and computer systems administrators; and database administrators.

When you study Computer Information Systems at Clarke, you will benefit from a solid, market-savvy curriculum designed within Clarke's reputation as one of the oldest small college computer science programs in the world.

The excellence of the department's founder, Sister Mary Kenneth Keller (the first woman to ever receive a Ph.D. in computer science) continues today.

During your preparation, you'll work hand-in-hand with expert faculty who are not only experienced educators with diverse business and research experience, but who are seasoned computer professionals with advanced degrees in computer science. Combine this with state-of-the-industry hardware/software and the results can be astonishing.

As a CIS major, you'll benefit from internship opportunities at highly respected national corporations like IBM, McGraw-Hill Publishing, McKesson, and John Deere. And with today's demand for computer specialists far outweighing the number of trained professionals in the field, graduates of Clarke College are taking advantage of the demand!

Clarke's computer students frequently accept high-paying positions long before they graduate. CIS majors typically work in the information technology field as network administrators, Web developers, database administrators, software developers and help desk experts for a wide array of businesses and organizations.

timesaver

Clarke College

The TimeSaver Program allows adults to earn a degree while having a life outside the classroom.

Degree programs offered in:

- Accounting
- Business Administration
- Communication
- Computer Information Systems
- Nursing
- Psychology
- Religious Studies
- Supervision and Leadership (Applied Studies)

E-mail timesaver@clarke.edu or call (563)588-6354 for more information.

Apply today!



Clarke College

www.clarke.edu/timesaver

Loras College

Computing and Information Technology

Loras' commitment to technology provides every student with a laptop, making it that much easier for students to have consistent access to the most important tool of their trade.

The Loras College Division of Mathematics, Engineering and Computer science (MECS) has collaborated with the Division of Business Administration in combining the management information systems and computer science courses into a new major, Computing and Information Technology (CIT).

The 27-credit CIT major requires a common core of classes plus two tracks of upper-level courses. Students choose either: the CIT-Management track or the CIT-Science track by the time they are juniors. The CIT major will offer both the broad introduction to the fields of computing and information as well as an opportunity for in-depth work in either the theoretical or applied areas.

Graduates go on to work in the following fields:

Insurance software development; Avionics software development; Back-office to point-of-sale hardware; Software development; Systems analysts; Network administrators; Computer programmers; Database analysts; Project managers; Web designers; IT Consultants

Fast Facts

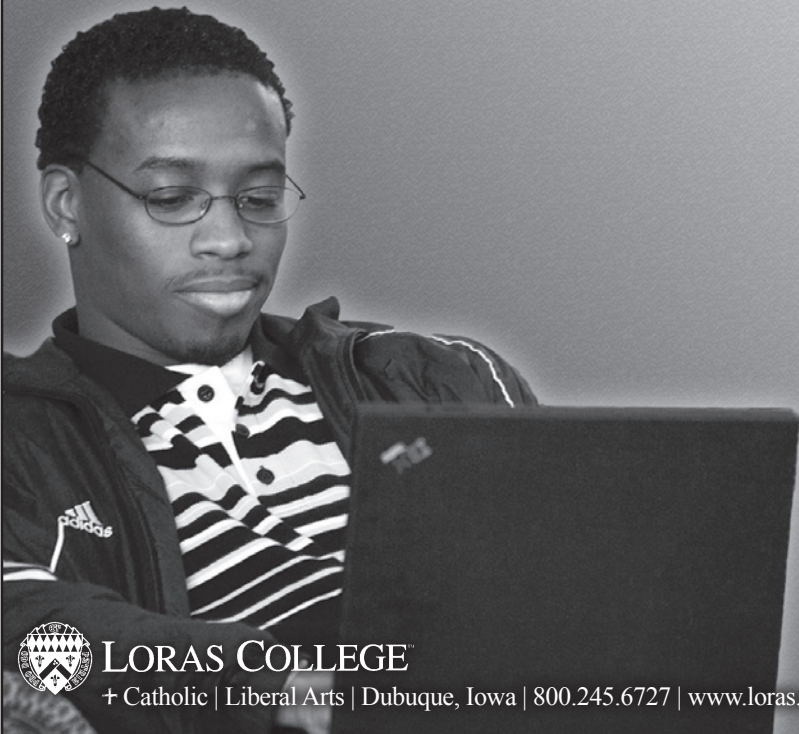
- Within the last decade, nearly 100% of those who graduated from the Loras College Computer Science program reported obtaining employment or entry into graduate school within one year after graduation.
- Students have presented papers and won awards before graduation at conferences of national professional organizations.
- The Loras College Mathematics and Computing and Information Technology areas offer several awards and scholarships yearly to students. Also offered, is support to students who wish to grade student papers, work in the Loras College Mathematics Lab or work as peer assistants.
- Loras College faculty are extremely active in the academic and civic communities. Faculty members are volunteers for several local organizations including different churches and scouting organizations. All Computing and Information Technology faculty members regularly attend and present at local, regional, and national professional conferences.

be Connected

A continued demand for computer information professionals in a variety of industries keeps the program thriving and up-to-date with the latest technology. Loras' commitment to technology provides every student with a laptop, making it that much easier for students to have consistent access to the most important tool of their trade.

Majors & Programs

Computing and Information Technology (CIT)
Integrated Visual Arts (IVA)
Media Studies



be more. be LORAS.



LORAS COLLEGE

+ Catholic | Liberal Arts | Dubuque, Iowa | 800.245.6727 | www.loras.edu

University of Dubuque

Computer Information System

The technical challenges of the 21st century require the ability to continually acquire new skills. The Computer Information Systems degree has five foci: Database, Programming Languages, Network Systems and Design, Information Security, and Web Tools and Applications.

The programs stress skill development in the technical areas of computer programming, database management systems, data communications and security, systems analysis and design, and information technology management. In addition, students gain an understanding of the role of information technology in businesses and other organizations, and how to deploy information technology to increase efficiency, increase effectiveness, and gain a competitive advantage.

These programs are based on recommendations from business community leaders and provide students with an up-to-date and well-rounded curriculum. In addition, students are provided with a high-tech learning environment that utilizes current hardware and software.

There is an aggressive internship program in partnership with the business community.

The CIS programs prepare graduates for positions as computer programmers, systems analysts, database specialists, information security and information technology specialists within organizational functional areas. With the appropriate experience, graduates may become network administrators, database administrators, project managers, and information systems managers, just to name a few occupations.

Programs in CIS include:

- Bachelor of Business Administration in Computer Information Systems
- Bachelor of Science in Computer Information Technology
- Bachelor of Science in Computer Information Systems
- Minor in Computer Information Systems
- Minor in Computer Information Technology

University of Dubuque

Computer Graphics and Interactive Media

The Computer Graphics/Interactive Media (CG/IM) program is not just a handful of computer graphics courses embedded in another major. It is a free-standing program that deals with the major aspects of computer graphics: desk-top publishing, paint systems issues, computer-aided design, the Web, and two- and three-dimensional animation. It is supported by an exemplary laboratory with the very latest hardware and software. The Program's motto, "The Edge Is the Center," recognizes that what is "cutting edge" today will become commonplace tomorrow. Thus students learn not only how to use the latest software, but also how to master the new programs that will soon take its place.

With nearly every business already communicating by computer – both internally and with clients – today's market for CG/IM specialists is almost unlimited. University of Dubuque graduates are eagerly sought after in such traditional fields as advertising, print media, and desk-top publishing. They have their choice of companies that need web designers, webmasters, web managers, digital creators, and people in other internet-related functions. Almost every firm offers potential employment.

The University of Dubuque's CG/IM program specifically prepares students for high-level careers working for established companies. However, creative graduates often prefer an entrepreneurial path – either working as individual consultants or forming small companies with talented peers. Given the widespread need for CG/IM expertise, earning potentials are phenomenal.

Curriculum

The Computer Graphics/Interactive Media degree is a Bachelor of Science Degree offered for students who will integrate studies in fine arts, graphic design, communication, computer science, the Web, and Animation. Students will learn fundamentals and advanced concepts in such areas as drawing, illustration, graphic design, 2D and 3D animation, storyboarding, multimedia authoring, web design, web imaging and animation, and team-based projects. The curriculum is designed with flexibility and innovation in both content and delivery.

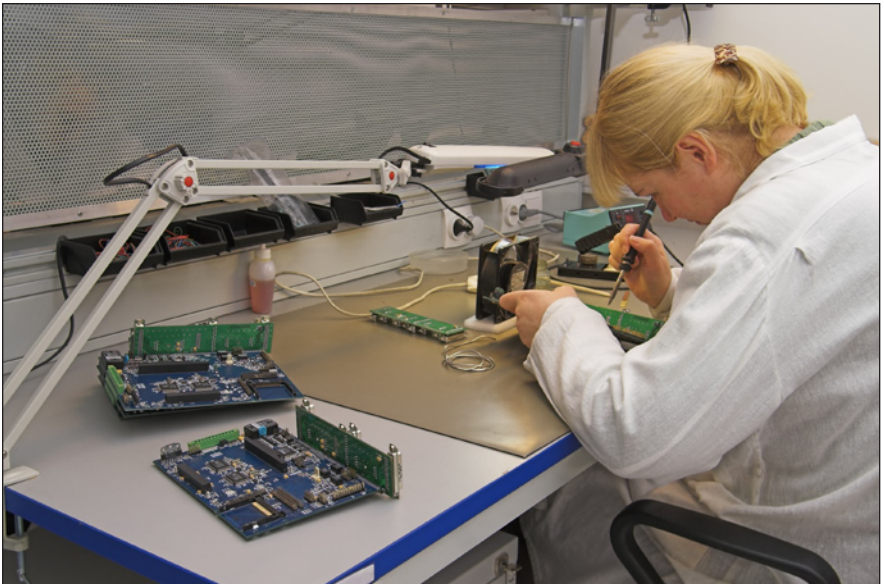
University of Wisconsin-Platteville

Computer Science

Computer Science is concerned with the theory and practice involved in the feasibility, design, implementation and evaluation of every aspect of computing. In addition to the valuable practical skills acquired in the study of computer science, the concepts and theories in the field provide exposure to some of the most imaginative and challenging ideas in the history of human intellectual development.

The program 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. Graduates are prepared for such positions as systems and applications programmers, analysts, software engineers and various computer specialist positions.

The Computer Science major leads to a bachelor of arts or bachelor of science degree in two emphases: Computer Information Systems, and Computer Technology. The department offers a general minor. In addition, selected course sequences form emphases in computer science for a variety of other majors in the university.



University of Wisconsin-Platteville

Software Engineering

Welcome to the software engineering program at UW-Platteville. Our program emphasizes application of theoretical concepts toward practical software engineering design and development.

Software Engineering Program at UWP:

The SE curriculum at UWP starts with a solid foundation in math, computer science, and additional science. Integrated throughout the curriculum are courses that cover process, practice, and the entire range of development tasks from gathering requirements to ensuring quality to basic project management. Thus students receive extensive practical experience in the design and development of software systems. In addition, students take a few electrical engineering courses. These and other courses support the curriculum's focus on the development of real-time embedded systems such as those which control appliances, security systems, automobiles, aircraft, and many other types of engineered systems. However, the grounding in software engineering fundamentals also prepares the graduate to succeed in any area of software development.

The program provides opportunities for students to work with faculty and other students in engineering and computer science disciplines. Outstanding aspects of the Software Engineering program at UW-Platteville include:

- interdisciplinary education,
- excellent student-faculty contact,
- excellent facilities,
- emphasis on teaching rather than research, and
- emphasis on hands-on experience