

# Information Systems

## Degree: Bachelor of Science in Information Systems

In this new interdisciplinary program at Marietta College, you'll learn how to program in high-level computer languages, use object-oriented design principles, master modern software tools, understand hardware components, communicate ideas and project results orally and in written form, and use analytical and technical skills to design, develop and implement information systems to solve business problems. Marietta College graduates hold fulfilling career positions as systems analysts, computer programmers/developers, database designers/administrators, web and mobile application developers, IT consultants, project leaders, IS managers, and information center support personnel.

### Full-time faculty:

Dr. Robert Van Camp, Associate Professor

Dr. Jeremy Wang, Associate Professor

### Facilities:

A Multimedia classroom with seating for 32 students

A computer classroom with 16 workstations and seating for 30 students

A public computer lab/classroom with 9 workstations and seating for 16 students

An advanced computer lab used primarily by CSci and CIS majors/minors for work in their upper level courses.

This lab has 6 workstations as well as dedicated Windows and Linux servers.

### Sample Courses:

Computer Programming I & II

Introduction to Management Information Systems

Network Infrastructure & Architecture

Mobile Application Development

Data Warehousing and Data Mining

Artificial Intelligence

E-Commerce and E-Business

Information Security

Commercial Website Development



### NSF Grant:

Our program recently received a National Science Foundation Grant called CPATH to promote Computational Thinking. This concept emphasizes the employment of computer science concepts like modeling, abstraction and recursion to other disciplines. We have used this grant to promote computing to area middle and high school students with our Adventures in Programming with Alice and Computational Thinking Camp. Marietta College students and area teachers have been involved with instruction in this camp.

### Clubs & Organizations:

Marietta sponsors a chapter of the Association of Computing Machinery (ACM), which is open to any student interested in computers and their applications. ACM hosts national and international student research and programming competitions, and provides you with a network of nearly 75,000 information technology professionals.

<http://mcis.marietta.edu>

**Internships:**

While at Marietta, you can get valuable hands-on experience by working as an intern in local and national companies. It has also been common for these internships to lead to full time positions upon graduation. Students have also volunteered at organizations such as Habitat for Humanity and the West Virginia Department of Natural Resources to lend their expertise, resulting in a rewarding experience for both the employer and the student. In addition, students are required to take our Senior Capstone course where they work with real businesses to develop an information system from requirements gathering to actual implementation.

**Careers in Computer Information Systems:**

According to the U.S. Bureau of Labor Statistics in 2010-11, Occupational Outlook Handbook, employment of information systems professionals is expected to grow 16% over the next decade, which is faster than the average for all occupations. The report indicates that prospects for qualified computer and information systems professionals should be excellent. Fast-paced occupational growth and the limited supply of technical workers will lead to a wealth of opportunities for qualified individuals. While technical workers remain relatively scarce in the United States, the demand for them continues to rise. Studies show that the most highly sought after graduates are those that possess both computing and business skills. The employer demand is far exceeding the supply of qualified college graduates with this combination of skills. The Department of Commerce projects suggest that the gap in supply and demand will continue to increase through 2015, which means that both current and future career opportunities and earning potential will continue to be very favorable for Information Systems majors. Here's a sample of the kinds of Information Systems jobs:

- Computer programmers/developers
- Database designers/administrators
- Web and mobile application developers
- Information center support personnel
- IT consultants
- Project leaders
- IS Managers
- Chief Technology Officers (CTO's)
- Chief Information Officers (CIO's)

