

Career Focus on...

Computer Information Systems

Introduction

- Do you want to learn about computers, and the ways that information technology systems communicate?
- Are you methodical, persistent, and creative?
- Would you like to create, maintain, and even secure critical information systems that support and drive the organizations of today, as well as those of tomorrow?
- Do you want a career in one of the fastest growing occupations in Massachusetts?

If you answered “yes” to these questions, you may want to consider a career in Computer Information Systems (CIS).

Did You Know... ?

- Employment is expected to grow faster than average for all CIS-related occupations. In fact, employment of database administrators is expected to grow 20% by 2018; and employment of network systems and data communications analysts is expected to grow by 53%.
- Computer network, systems, and database administrators held about 961,200 jobs in 2008.
- CIS-related jobs exist across virtually all industries, and within most workplaces.

QCC Alumni Success Story

Yvonne Aponte is a 2011 graduate of the Computer Information Systems program at Quinsigamond Community College, where she was also named Outstanding Student of the Year. Yvonne started out as an accounts receivable clerk at TransCore in 2000 and decided to go back to school to advance her career. She chose QCC because of its convenient location, affordable education, and a large selection of online classes that suited her busy schedule.

With the knowledge she gained at QCC, as well as her drive for continued improvement, she was promoted to Commercial Supervisor and then to Quality Assurance/Quality Control Manager at TransCore.

For Yvonne, a typical day at TransCore consists of ensuring that Quality Assurance methods are in place and followed. She examines positions, departments and work flows for improvements. Some of her other responsibilities include creating new and modifying existing SQL scripts to streamline processes or extract data, and evaluating and testing system upgrades.

When asked for words of wisdom for current QCC students, she advised “when taking a course that has an introductory class and an intermediate class (for example, Visual Basic I & II), choose a class where the instructor teaches both courses. That way, you are accustomed to the teaching style and expectations. For students seeking to transfer, she advises “choose a transfer school early on. Work with the transfer department and the transfer school to ensure you maximize your time and choose courses that will transfer. Most of all—enjoy your time at QCC. Make friends and maybe even find a mentor. Those things will last a lifetime.”

Career Options

DATABASE ADMINISTRATOR

Median Annual Salary: \$69,740

Recommended Education: Bachelor Degree (B.S.)

www.bls.gov/oco/ocos305.htm

NETWORK ARCHITECT

Median Annual Salary: \$71,100

Recommended Education: B.S.

www.bls.gov/oco/ocos305.htm

COMMUNICATIONS ANALYST

Median Annual Salary: \$71,100

Recommended Education: B.S. or Associate

Degree (A.S.) with professional certifications

www.bls.gov/oco/ocos305.htm

DATA SECURITY ADMINISTRATOR

Median Annual Salary: \$75,660

Recommended Education: B.S.

www.onetonline.org/link/summary/15-1122.00

WEB ADMINISTRATOR

Median Annual Salary: \$79,240

Recommended Education: B.S. or A.S. with professional certifications

www.onetonline.org/link/summary/15-1199.03

APPLICATION INTEGRATION SPECIALIST

Median Annual Salary: \$87,790

Recommended Education: B.S.

www.onetonline.org/link/summary/15-1132.00

INFORMATION SYSTEM MANAGER

Median Annual Salary: \$112,210

Recommended Education: B.S.

www.bls.gov/oco/ocos258.htm

Worcester Area Employers

- ACS – A Xerox Company
- AmComm Wireless
- Bose Corporation
- Charter Communications
- Checkerboard
- EMC Corporation
- Iron Mountain
- Monster.com
- Staples, Inc.
- The TJX Companies
- UMass Memorial Medical Center
- Vision Government Solutions

QCC Alumni Success Story

Mary Ellen Lepore is a 2010 graduate of the Computer Information Systems Database Certificate program at Quinsigamond Community College. After a period of unemployment, she wanted to find a program to enhance her skills, specifically SQL. She chose QCC because it met her criteria and was close to home.

A job opened at Tyco for a Business Systems Analyst and they were looking for someone with strong business analyst skills and a proven ability to learn. Mary Ellen believes that her completion of the Database Certificate program was a huge factor in landing this position. In her position at Tyco, Mary Ellen is responsible for researching existing fire protection devices. She also collaborates with the systems engineer to write detailed functional specifications that will allow partner companies to integrate their products into Tyco's network.

When asked for words of wisdom for current QCC students, she advised "Enjoy school, but work hard. QCC is committed to helping you succeed. Take advantage of networking, including with other students. Form study groups...what you find difficult, someone else will find easy, and vice versa. Don't be afraid to ask for help from the professors. Do your homework...it may seem like a lot, but that prepares you to use your skills in a professional environment. Take advantage of the on-campus labs to do homework. That aids in forming study groups, and there are often tutors available when you get stuck. When it's time to get your resume together, be sure you visit the terrific folks in the Career Center."

Next Steps

Wondering if computer information systems (CIS) is right for you?

- Take a Career Assessment to match your interests with potential careers: www.qcc.mass.edu/t3/ort/sites.html#careerassess
- Research the web links on this page and more: www.qcc.mass.edu/t3/ort/sites.html#careerinfo
- Conduct an Informational Interview. Speak with a live person employed in this field: www.qcc.mass.edu/t3/ort/sites.html#infointerview
- Attend a Career Planning Session: www.QCC.edu/images/capssession.pdf
- Speak with an Advisor: www2.qcc.mass.edu/advising/adVCalladvCallasp
- Speak with QCC Faculty who teach CIS courses.

Sources Used

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2010-11 Edition*:

- Computer Network, Systems, and Database Administrators: www.bls.gov/oco/ocos305.htm
- Computer and Information Systems Managers: www.bls.gov/oco/ocos258.htm

Employment & Training Administration, U.S. Department of Labor, O*NET Online, Summary Reports for:

- Web Administrators: www.onetonline.org/link/summary/15-1199.03
- Information Security Analysts: www.onetonline.org/link/summary/15-1122.00
- Software Developers, Applications: www.onetonline.org/link/summary/15-1132.00

Quinsigamond Community College, *Academic Program Review 2006-2008 for Computer Information Systems*, 2009.

Professional Associations

- International Association for Computer Information Systems: www.iacis.org
- The IEEE Computer Society: www.ieee.org
- Information Systems Security Association: www.isa.org
- Professional Association for SQL Server: www.sqlpass.org
- Computer Professionals for Social Responsibility: cpsr.org

Positions Entered by QCC Graduates

- Quality Assurance Manager
- Business Systems Analyst
- Database Administrator
- Systems Integrator
- Application Programmer
- Help Desk Specialist
- Web Developer

Looking for employment, co-op, internship, or service learning opportunities?

Contact the Career Placement Office:

www.QCC.edu/pages/Career_Placement.html

Possible Transfer Schools

- Assumption College
- Fitchburg State University
- Framingham State University
- UMass Lowell
- Worcester Polytechnic Institute (WPI)
- Worcester State University

Looking for Specific Transfer Information?

- Start at the QCC Transfer web site: www.qcc.mass.edu/transfer
- Make an appointment online with the Transfer Advisor: www.qcc.mass.edu/transfer/calendar
- Email questions to: transfer@qcc.mass.edu