

Information Systems Major

General Information

The Information Systems program prepares students for many different challenges facing professionals in the information and technology field. Students in the Information Systems program of study will gain the hands-on skills and knowledge they need to succeed in their careers. Courses include such areas as computer network installation and maintenance, routing and switching technology, and network security and intrusion detection, to name a few.

Coursework emphasizes hands-on skills using the latest networking labs that include Cisco routers and switches, Microsoft and other leading network operating systems, and various other state of the art hardware and software. Students complete courses that help prepare them for various industry certifications such as:

- Cisco Certified Network Associate (CCNA)
- Cisco Certified Network Professional (CCNP)
- Red Hat Certified Technician (RHCT)
- Red Hat Certified Engineer (RHCE)
- Network+
- Security+
- A+
- Microsoft Certified Professional (MCP)

Work experience is another area of emphasis in the Information Systems program. Students are presented with and encouraged to participate in various intern opportunities at local businesses. Several organizations work closely with MSU to provide short and long-term opportunities for students.

Skills Associated with this Major

- Ability to trace problems to their sources
- Analyzing communication situations
- Analyzing community needs
- Anticipating problems before they arise
- Computer skills
- Networking
- Perceiving/defining cause and effect relationship
- Problem solving
- Recognizing elements, relationships, structures and organizing principles
- Reviewing/evaluating
- Reviewing large amounts of material and extracting essence
- Skilled at clarifying problems

Typical Work Activities

- Administrative duties
- Analysis
- Collecting and organizing data
- Designing new products

- Network maintenance
- Testing new products
- Troubleshooting
- Working independently

Sample Occupations

(Please ask a career advisor for help in identifying resources for the following occupations. Note that some of these occupations require an advanced degree.)

- Business Process Design Manager
- Business Analyst
- Business Analyst/Process Design Analyst
- Controller
- Controller, Compensation Strategy
- Demand Forecasting Analyst
- Design Consultants
- Finance Director
- Finance Business Manager
- Finance Business System Analyst
- Firewall Administrator
- Leasing Account Manager
- Mergers & Acquisitions Finance Manager
- Information Technology
- International Stock Plan Services Manger
- IS Business Liaison Manager
- LAN/WAN Engineer
- Network Architect
- Network Consulting Engineer
- Network Engineer
- Pricing Analytics Finance Manager
- Program Manager
- Product Line Manager
- Project Manager-IT
- Product Marketing Manager
- Optical Engineer
- Sales Associates and Engineer
- Software Test Engineer
- Systems Engineer
- Technical Analyst
- Technical Managers
- Treasury Analyst
- Treasury Program Manager
- Trial Engineer
- Validation Engineer
- Verification Engineer
- Wireless Engineer

Sample Occupational Settings

- Business Corporations
- Colleges/Universities
- Computer Hardware Industry
- Computer Networking Companies
- Computer Software Industry
- Government, Federal
- Government, State
- Government, Local
- Insurance Companies
- Investment Firms
- Management and Budget Office

Job & Internship Search Sites

Association for Computing Machinery (ACM)

http://www.acm.org/member_services/career/careerline.html

Career Marketplace - Technical Jobs and Job Sites

<http://www.careermarketplace.com>

CISCO

http://www.cisco.com/web/about/ac40/about_cisco_careers_home.html

Computer Jobs

www.computerjobs.com

Computerwork.com

<http://www.computerwork.com>

High Tech Jobs Online

<http://www.dice.com>

Internet Jobs

<http://www.internetjobs.com>

Just Tech Jobs

www.justtechjobs.com

MonsterTRAK

<http://www.monstertrak.com>

Red Hat

<http://www.redhat.com/about/careers/>

RTP Preferred Jobs

<http://rtp.preferredjobs.com/index2.asp>

Society for Technical Communication

<http://www.stc.org/index.asp>

Tech-Centric

<http://www.tech-centric.net/>

Career Planning Link

Association for Computing Machinery (ACM)

http://www.acm.org/member_services/career/careerline.html

Career Fields

<http://career.berkeley.edu/Infolab/CareerFields.stm>

Careers in Science & Engineering- A Student Planning Guide to Grad School and Beyond
<http://www.nap.edu/readingroom/books/careers/>

Occupational Outlook Handbook (computer programmers)
www.bls.gov/oco/ocos110.htm

Occupational Outlook Handbook (system analysts, computer scientists, database administrators)
<http://stats.bls.gov/oco/ocos042.htm>

Vocational Information Center
www.khake.com/page17.html

Professional Associations Links

American Mathematical Society
<http://www.ams.org>

Association for Women in Computing
www.awc-hq.org

Corning
<http://www.corning.com/careers>

IBM
<http://www-1.ibm.com/employment>

IEEE Computer Society
<http://www.computer.org/pubs/computer/career/career.htm>

Independent Computer Consultants Association
www.icca.org

Internet Society
www.isoc.org

Intelligent Information Systems (IIS)
<http://www2.renewal-iis.com>

Lucent Technologies
<http://www.lucent.com>

Microsoft
www.microsoft.com

Progress Energy

www.progress-energy.com/aboutus

SAS

<http://www.sas.com>

Society for Industrial and Applied Mathematics

<http://www.siam.org>

The System Administrators Guild

<http://sageweb.sage.org>