OUEEN CITY CAREERS MANAGEMENT INFORMATION SYSTEMS

Belk College of Business Robert A. Niblock Student Center for Professional Development

WHAT IS MANAGEMENT INFORMATION SYSTEMS?

UTILIZING TECHNOLOGY TO SOLVE BUSINESS PROBLEMS. Businesses use data and information to make forecasts, manage day-to-day operations, schedule personnel and equipment, monitor quality, manage inventory, work with suppliers, and coordinate projects. MIS practitioners collect and analyze information using the latest computer technology so businesses operate effectively and efficiently.

MIS INDUSTRIES

DATA ANALYTICS. Gather stored information using statistics and predictive models to recognize trends and opportunities; Provide customized intelligence in order to make sound business decisions; May analyze vast amounts of data available online or in storage (commonly referred to as "big data" or "data mining").

DESIGN. Create methods for collecting, storing, and communicating information to serve both internal and external constituents of a business; May develop software, databases, websites, and other operational support systems.

SECURITY. Verify effectiveness of an organization's information security practices; Detect and prevent e-crimes like illegal transactions, theft of company or customer information, malware, or other types of computer hacking; Ensure disaster recovery processes in the event of a natural disaster, power failure, or equipment malfunction.

SUPPORT. Apply technology that allows businesses to communicate, access the Internet, transmit and print documents, and share data effectively and quickly; Maintain computer networks, hardware and software systems, and assess technology needs for employees.

EMPLOYMENT SKILLS NEEDED

AS CITED BY TOP AREA RECRUITERS

- Knowledge of computer hardware and software, applications and programming; strong mathematical ability using statistics and Excel for data analytics industry
- Use logic and deductive reasoning to analyze information and creatively seek innovative solutions to problems
- Actively listen and effectively communicate technical information
- Engage in continuous life-long learning to understand and apply latest technology
- Able to work in a fast-paced and rapidly changing environment

SAMPLE Job Titles

SYSTEMS ANALYST DATABASE ADMINISTRATOR SYSTEMS ARCHITECT BUSINESS ANALYST SECURITY ADMINISTRATOR WEB DEVELOPER SYSTEMS CONSULTANT SECURITY ANALYST PROJECT MANAGER IT MANAGER ANALYTICS CONSULTANT STATISTICAL CONSULTANT CUSTOMER ANALYTICS MANAGER

You might enjoy MIS if you're computer savvy; you're a problem-solver by nature; you're always thinking of better ways to do things; you're the resident expert for anything technical; you enjoy web design and computer software; you're very organized

JOB TRENDS 2016 GRADS

- Ranked #9 among the 20 college majors with the highest starting salaries in 2016 (the highest among business majors)
- 80% of graduates employed at graduation, 89% employed within 6 months of graduation
- \$114,092 average IT manager's salary for Charlotte area (higher than national average \$98,552).
- May be at risk for outsourcing
- Additional technology certifications may be needed
- May work overtime to mitigate problems

¹Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook. ³National Association of Colleges and Employers, Salary Survey.³ Temple University, What is MIS web article, 2014, ⁴Information Systems Job Index, AIS 2015, Forbes.com. Glassdoor Salaries. TIP: BANK OF AMERICA'S APPLIED TECHNOLOGY PROGRAM IS A UNIQUE OPPORTUNITY TO INTERN AND GET COLLEGE CREDIT.

WHO HIRES MIS MAJORS?

COMPANIES THAT RECRUIT THIS MAJOR FOR FULL TIME JOBS OR INTERNSHIPS AT UNC CHARLOTTE:

<mark>Salary</mark> Potential STARTING SALARY FOR AN MIS MAJOR \$62,100 *National average

INFORMATION SYSTEMS MANAGERS: National median May 2013: \$123,950; NC Median: \$121,000; Projected growth for computer and information systems managers is 15% from 2012-2022

DATABASE ADMINISTRATORS: National median May 2012: \$77,100; NC Median: \$83,200; Projected growth for database administrators in NC is 26% from 2012-2022

INFORMATION SECURITY ANALYSTS: National median May 2013: \$88,590; NC Median: \$84,400; Projected growth for security analysts is 22% from 2012-2022

SYSTEMS ANALYSTS: National median May 2013: \$81,190; NC Median: \$80,600; Projected growth for systems analysts is 25% from 2010-2020

DATA ANALYTICS: It is estimated that by 2015, 1.9 Million jobs will be created in "Big Data." Only a third of the job demand can be met with existing talent.

Source: NC Works, 2016

GET INVOLVED PROFESSIONAL & STUDENT ORGANIZATIONS

- Association for Information Systems Student Chapter
- Association of Information Technology Professionals
- Charlotte Information Technology Quality Assurance Association
- Data Management International
- Digital Analytics Association
- Information Systems Security Association
- IEEE Computer Society



HOW IS MIS DIFFERENT FROM COMPUTER SCIENCE?

MIS professionals are business-oriented and technology proficient; are motivated by using the computer as a tool to analyze problems. Computer Science personnel build the technology and are motivated by how the computer works; are specifically trained in programming languages and coding.

MIS CERTIFICATIONS

Certificates are available for both Entry-Level positions and Professional-Level positions. New grads should seek Entry-Level as no experience is required to obtain the credential.

- ACP Associate Computing Professional
- ISA Information Systems Analyst
- CCP Certified Computing Professional
 <u>www.iccp.org/certification</u>