HOW DO I KNOW WHICH TO CHOOSE?

COMPARING BUSINESS ANALYTICS, MANAGEMENT INFORMATION SYSTEMS AND COMPUTER SCIENCE

BUSINESS ANALYTICS	MANAGEMENT INFORMATION SYSTEMS	COMPUTER SCIENCE
Knowledge – *Students will learn…* about the scientific process of using data to make better business decisions in various areas of organization, non-profit and government entities	**Knowledge** – *Students will learn…* about hardware and software components of various IT systems, networks, databases and how to manage them to help support different business functions in organization, non-profit and government entities	**Knowledge** – *Students will learn…* about the design, development and analysis of algorithms used to solve problems in a variety of business, scientific or social contexts and study the performance of computer software and hardware
Skills – *Students will be able to…* • Collect, clean, visualize and analyze data • Use statistical and analytics tools to solve business problems and generate business insights • Analyze business information to facilitate evaluation of strategic alternatives • Effectively work in a team environment	**Skills** – *Students will be able to…* • Understand the role, design and plan for the development of information system to address the needs of an organization • Understand how different computer systems could be applied to produce information both for managing day-to-day operations and assist in strategic planning of a business • Construct a plan to verify that the regulations, compliance and security issues within an organization are addressed • Develop and supervise implementation of a project, meeting professional standards to effectively work in a team environment	**Skills** – *Students will be able to…* • Master new programming languages on their own • Model and analyze problems, designing and verifying computing solutions • Understand operating systems and computer architecture • Understand data structures and algorithms • Develop and test software • Identify security vulnerabilities in programs • Clearly communicate ideas to non-programmers
Application – *Students will practice…* • Required internship provides practice opportunity • Required integration project, which is part of a senior capstone seminar	**Application** – *Students will practice…* • Required internship provides practice opportunity • Required integration project, which is part of a senior capstone seminar	**Application** – *Students will practice…* • Required internship provides practice opportunity • Required research and development projects which are part of a senior capstone seminar
Admission and Special Requirements • 3.0 GPA required for major • 59 semester credits • Completion of internship and capstone project	**Admission and Special Requirements** • 2.2 GPA required for major • 60 credit hours • Completion of internship and capstone project	**Admission and Special Requirements** • 2.5 GPA required for major • 48 semester credits • Completion of internship and capstone project
Employment Consulting firms, financial institutions, consumer product companies, health care, government agencies, large retailers, start-ups and non-profits are actively seeking employees who can help them harness the predictive power of data.	**Employment** Financial institutions, health care, government agencies, manufacturing facilities, warehouses, large retailers, educational institutions, foundations and restaurant chains are actively seeking employees who can help them manage different IT systems, databases and networks as well as provide information security, project management and web development services.	**Employment** • Computer science professionals will find opportunities in every sector, including technology, manufacturing, education, banking, retail, government, agriculture, healthcare and video game development.
Graduate School Many graduates seeking to acquire additional statistical and data analytics skills or those considering an academic career, typically continue further graduate study along data science track.	**Graduate School** Many graduates seeking to acquire additional programming IT and/or project management skills and qualifications acquire industry certifications. Some graduates pursue further study by acquiring subject-specific graduate degrees (in Accounting, Public Administration, Law, Public Health, Business or MIS).	**Graduate School** Many graduates seeing specialized skills in one or more areas of technology, including network security, software development or artificial intelligence pursue a master's degree. Continuing on to the Ph.D. prepares graduates for technology research and development careers.

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