

# BUSINESS ANALYTICS / MASTER OF SCIENCE

Please see College of Business (<https://catalog.lewisu.edu/graduate/business/>) for additional policy and procedure information.

The M.S. in Business Analytics degree seeks to provide students with quantitative and data analytics skills to solve complex business problems and develop corporate strategy by exploring relationships in an organization's "big data" and predictive decision modeling. Through hands-on experiences with the tools and technologies, the curriculum seeks to provide a student with a foundation in technology, management, marketing, finance, and analytics. The coursework is specifically designed to encompass both managerial functions and technical details in a number of areas such as:

- Quantitative methods as they apply to the problems of business management, marketing, finance, and economics.
- Design, deployment, management, and security of database systems.
- Data mining and business intelligence tools for informed decision making using scenarios from finance, CRM, operations, social media marketing, information systems, and other disciplines.
- Business decision-making techniques such as decision trees, classification, clustering, segmentation, and decision support systems.
- Procedural and substantive areas of law, regulation, and compliance requirements that impact business.
- Business requirements, feasibility analysis, and development of logical data warehouse models for business data.
- Marketing strategies creation and implementation.
- Corporate finance theory from a management perspective.
- Analysis of financial statements, mergers and acquisitions and leasing.

## Program Outcomes

- Analyze and use several quantitative models for developing business decisions.
- Evaluate a business solution and build a database application that is used to store and retrieve data.
- Analyze and use several data analysis techniques for advanced business intelligence
- Attain a working knowledge of data mining tools used for business decisions.
- Develop the data architecture for the implementation and administration of the data warehouse.
- Understand and use marketing concepts to develop a data-driven marketing strategy.
- Understand the core financial concepts, including: Corporate Governance, the Capital Budgeting process, and evaluation methodologies.
- Manipulate controllable variables for a desired financial purpose.

## Graduation Requirements

Upon completion of the following eight requirements, students will be awarded the MS degree:

1. The degree candidacy admission standard.
2. Phase I - Foundation Course requirements.
3. Phase II - Core Course requirements.
4. Phase III - Elective requirements
5. Phase IV - Capstone Course
6. A minimum 3.0 GPA.
7. An Application for Graduation completed and submitted to the Office of the Registrar before the published deadline.

## Requirements

**Degree Offered:** Master of Science

**Total Credit Hours:** 33-36

## Degree Requirements

Code	Title	Hours
<b>Foundation Courses</b>		
Students who have not completed a business undergraduate degree will be required:		
BGEN 52000	Fundamentals of the Business Enterprise	3
<b>Core Courses</b>		
BSAN 50400	Quantitative Methods of Business	3
BSAN 50500	Business Forecasting & Visualization	3
BSAN 53600	Business Data Warehousing	3
BSAN 53800	Visualizing Information	3
BSAN 54000	Data Mining for Business Decisions	3
BSAN 59400	Database Management	3
BSAN 67900	Business Intelligence and Data Analysis	3
<b>Electives</b>		
Select three of the following:		9
MKTG 60400	Digital Marketing Strategies	
MKTG 60500	Digital Marketing Analytics	
FINA 57000	Quantitative Techniques for Financial Markets	
FINA 57200	Managerial Finance	
FINA 57900	Investment Analysis	
BSAN 51500	Business Process Automation and Programming	
BSAN 67500	Introduction to Healthcare Informatics	
BSAN 67600	Healthcare Data Security, Privacy and Confidentiality	
BSAN 67700	Healthcare Data Analysis and Design	
BSAN 56200	Operations Management	
BSAN 56400	Coordinating and Managing Supply Chains	
BSAN 56900	Supply Chain Management Analytics	
<b>Capstone</b>		
BSAN 69500	Business Analytics Capstone	3
<b>Total Hours</b>		<b>36</b>