

BUSINESS ANALYTICS (MS)

Through our Master of Science in Business Analytics program, you'll gain the necessary techniques to turn complex data into solutions that drive business decisions for a wide range of industries. In addition, you'll have the opportunity to specialize in growth industries and occupations including:

- Economics
- Finance
- Health care
- Hospitality
- Human Resources
- Marketing
- Supply Chain Management

All courses for this program are offered in the evening on the Loop Campus. The program can be completed in two years.

Program Features

Program Requirements	Quarter Hours
Degree Requirements	48
Total hours required	48

Learning Outcomes

Students will be able to:

- Acquire data necessary to make data-driven business decisions using appropriate emerging technologies.
- Apply data preparation and cleaning techniques in accordance with business rules and practices.
- Analyze business problems through the use of statistical analyses and techniques.
- Design business reports that effectively communicate business results within in the management decision-making process.
- Develop skills necessary to quickly perform exploratory data analysis using a variety of analysis tools.
- Leverage data analyses to drive business strategy and ethical practices throughout an organization that generate business value.

Degree Requirements

The curriculum for the Master of Science in Business Analytics requires a minimum of 12 courses (48 credit hours), consisting of:

- Nine core courses (36 credit hours total)
- Three electives (12 credit hours total)

Course	Title	Quarter Hours
Core Courses		
<i>Foundational</i>		
MGT 567	STATISTICAL TOOLS FOR BUSINESS ANALYTICS	4
MGT 585	FUNDAMENTALS OF BUSINESS ANALYTICS	4
<i>Analytics</i>		
MGT 506	DECISION MAKING FOR MANAGERS	4

MGT 586	DATA VISUALIZATION	4
MGT 588	DATABASE MANAGEMENT SYSTEMS	4
MGT 594	MACHINE LEARNING FOR MANAGERS	4

Business

MGT 587	BUSINESS PERFORMANCE ANALYSIS	4
MGT 598	PROJECT MANAGEMENT	4

Capstone

MGT 599	ANALYSIS OF BUSINESS STRATEGY & CAPSTONE	4
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Career Path Electives

Students may choose any three electives at the 500- or 700-level from the Kellstadt Graduate School of Business or the College of Computing and Digital Media. However, they are encouraged to select meaningful course groupings that support career and academic objectives. The career paths below provide several groupings for your consideration. MGT 793 Management Internship may also be taken for one of the three elective courses. Please note some course prerequisites.

Computer Science

CSEC 440	INFORMATION SECURITY MANAGEMENT
CSC 401	INTRODUCTION TO PROGRAMMING
NET 411	INTRODUCTION TO COMPUTER AND NETWORK SYSTEMS

Data Science

DSC 480	SOCIAL NETWORK ANALYSIS
IS 452	BIG DATA & THE INTERNET OF THINGS (IOT)
DSC 441	FUNDAMENTALS OF DATA SCIENCE

Economic Analysis

ECO 511	BUSINESS AND ECONOMIC FORECASTING
ECO 525	GAME THEORY AND STRATEGY
ECO 541	HEALTHCARE DATA ANALYTICS
ECO 555	MANAGERIAL ECONOMICS

Enterprise Risk Management

ACC 500	FINANCIAL ACCOUNTING
or ACC 502	FINANCIAL ACCOUNTING FOR MANAGERIAL DECISION MAKING
ACC 637	DATA MINING AND ANALYTICS
ACC 639	AUDIT ANALYTICS
FIN 555	FINANCIAL MANAGEMENT
FIN 562	RISK MANAGEMENT
FIN 798	SPECIAL TOPICS (FINANCIAL ANALYTICS)

Geographic Information Systems

To be taken in order listed:	
GEO 441	GEOGRAPHIC INFORMATION SYSTEMS (GIS) FOR COMMUNITY DEVELOPMENT
GEO 442	GEOGRAPHICAL INFORMATION SYSTEMS (GIS) FOR SUSTAINABLE URBAN DEVELOPMENT
GEO 446	GIS ANALYSIS OF ENVIRONMENTAL AND PUBLIC HEALTH

Healthcare

DSC 510	HEALTH DATA SCIENCE
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MGT 559	HEALTH SECTOR MANAGEMENT
MGT 566	HEALTH INSURANCE & BENEFITS
<i>Human Resources</i>	
MGT 523	TALENT ACQUISITION
MGT 526	TOTAL REWARDS
MGT 535	CHANGE MANAGEMENT AND CONSULTING
MGT 555	HUMAN CAPITAL STRATEGY AND SCIENCE
MGT 584	CONSULTING SKILLS
MGT 591	FUNDAMENTALS OF PEOPLE ANALYTICS
MGT 592	ADVANCED PEOPLE ANALYTICS
<i>Marketing</i>	
MKT 525	MARKET RESEARCH
MKT 530	CUSTOMER RELATIONSHIP MANAGEMENT
MKT 534	ANALYTICAL TOOLS FOR MARKETERS
MKT 555	MARKETING MANAGEMENT
MKT 576	EFFECTIVE BUSINESS COMMUNICATION
<i>Supply Chain Management</i>	
MGT 501	STRATEGIC SUPPLY CHAIN MANAGEMENT
MGT 502	OPERATIONS MANAGEMENT
MGT 507	GLOBAL SOURCING AND PROCUREMENT
MGT 509	PRODUCTION AND INVENTORY MANAGEMENT
MGT 511	TRANSPORTATION AND LOGISTICS