

# Management Science - Business Analytics, MS

For additional information about graduate programs within the College of Business, please contact graduate advisor Jennifer Pettitt at GradBiz@uah.edu ( gradbiz@uah.edu). Information about the application process may be found in the Graduate Studies section of the catalog.

## Purpose

The Master of Science in Management Science-Business Analytics (MS-MSBA) program is designed as a specialized management graduate degree to serve working professionals who are interested in developing and/or enhancing their knowledge and skills in Management Science with a specific focus in Business Analytics.

The MS-MSBA program aims to graduate candidates who will use business analytic theories and methods to make significant contributions in solving managerial and technical problems. Students learn about business analytical theories and methods # including (big) data management, business intelligence, data mining, predictive modeling, machine learning, descriptive analytics and other quantitative methods # to solve business problems, focusing on problems faced in technology-oriented, government, and government contractor organizations in the northern Alabama region. Students are introduced to such issues as translating business problems into analytical problems, developing analytical models, managing big volumes of data, analyzing data for providing solutions across business functional areas, interpreting analytical solutions for managerial decision-making, and communicating analytical results to novice and advanced technical audiences in a business environment.

The MS-MSBA program is designed to meet the highest standards of curriculum quality, faculty excellence, and program relevance in accordance with the College of Business' accreditation by AACSB International-The Association to Advance Collegiate Schools of Business.

## Degree Requirements

### Prerequisites

The program is designed to meet the needs of students with a wide variety of educational backgrounds. Program prerequisites include a bachelor's degree in any field and demonstration of competency in basic skills in statistical analysis and computer usage must be achieved either by prior experience and education or as part of the MS-MSBA curriculum.

The MS-MSBA program consists of 30 semester hours of graduate coursework divided into four (4) 3-credit-hour required management science core courses (12 credit hours), four (4) 3-credit-hour required business analytics core courses (12 credit hours), and two (2) elective courses to be selected from several possible areas.

MSC 692, Business Analytics Practicum, is the capstone course and should be taken toward the end of the student's program. A student must earn a grade of B or better in MSC 692.

#### Management Science Core Course (12 credit hours)

ACC 600	FOUNDATIONS ACC MANAGERS & ENG	3
MSC 600	QUANTITATIVE METHODS	3
MOD 501	SVY MODELING & SIMULATION	3
MSC 615	DECISION MODELING	3

#### Business Analytics Core (12 credit hours)

IS 571	BUSINESS INTELLIGENCE & ANALYT	3
IS 640	DATA MGT AND DATA MINING	3
MSC 641	ADVANCED ANALYTICS	3
MSC 692	BUSINESS ANALYTICS PRACTICUM	3

#### Program Electives (6 credit hours)

ACC 607	ADV ACC INFORMAT SYSTEMS	
ECN 545	GAMES & NETWORKS	
ECN 580	INTRODUCTION TO ECONOMETRICS	
IS 522	SUPPLY CHAIN MANAGEMENT SYS	
IS 680	ENTERPRISE RESOURCE PLNG SYS	
MSC 605	OPERATIONS MANAGEMENT	

## **Additional Information**

### **Thesis Option**

A thesis option is available. Students interested in this option should contact both the faculty member who the student wants to serve as the thesis advisor and the College of Business Director of Graduate Programs before completing 12 hours of graduate study. If selected, the student will register for the MSC 699 Master's Thesis course for 6 credit hours in lieu of 6 credit hours of electives.

### **Transfer Credit**

Up to 12 semester hours of graduate credit taken at other universities may be transferred to meet MS-MSBA degree requirements. Inquiries about the transferability of specific courses should be directed to the College of Business Director of Graduate Programs, who will consult with the Business Analytics faculty to determine whether the content of the class will be accepted for transfer credit.