

BUSINESS ANALYTICS AND ARTIFICIAL INTELLIGENCE, MS

Program Director: Qiong Hu
E-mail: Qiong.Hu@ucdenver.edu

Introduction

The MS in Business Analytics and Artificial Intelligence focuses on modeling, AI, and applications, equipping you for a career as a business analytics and AI-informed professional in industry or government. Today, companies in every conceivable industry are reaping the benefits of using formal mathematical models and artificial intelligence to assist them in addressing complex business problems. Business Analytics and Artificial Intelligence graduates are prepared to apply advanced analytical methods and AI techniques to real-world business challenges, turning complex data into clear, actionable decisions.

Learn to apply quantitative methods and artificial intelligence to real-world problems using modern methodologies adopted from statistics, operations research, machine learning, and management science. The MS in Business Analytics and Artificial Intelligence prioritizes the applications of mathematical models and AI-driven solutions in the workplace rather than the development of new research techniques. The managerial emphasis of our degree is accomplished through a comprehensive set of elective and required coursework such as data analysis, decision analysis, predictive analytics, prescriptive analytics, causal analytics, AI and deep learning, supply chain management, forecasting, etc. Through hands-on coursework, students will develop proficiency in industry-relevant tools such as Python, R, Tableau, and machine learning frameworks, while building the critical skills needed to evaluate, apply, and responsibly leverage AI in today's data-driven business environment.

This degree is designed to be completed in 18 to 24 months. However, with careful planning, in consultation with an academic advisor, full-time students may be able to complete the degree in 12 months.

Program Requirements

Requirements for the MS degree in Business Analytics are met by the following courses and options:

Code	Title	Hours
Business Analytics Core		
BANA 6610	Statistics for Business Analytics	3
BANA 6620	Computing and AI for Business Analytics	3
BANA 6640	Decision Analysis	3
BANA 6660	Predictive Analytics with AI and Machine Learning	3
BANA 6670	Prescriptive Analytics with Optimization	3
BANA 6710	Causal Analytics	3
BANA 6810	Artificial Intelligence and Deep Learning for Business Analytics	3
Business Analytics Electives		
Select any three courses from the list below: ¹		9
BANA 6600	Transformative Technologies Impacting Globalization	

BANA 6630	Time-Series Forecasting
BANA 6650	Project Management
BANA 6730	Supply Chain Analytics
BANA 6760	Data Visualization
BANA 6780	AI for Business
BANA 6800	Special Topics
BANA 6770	Evaluative Analytics
BANA 6790	Global Supply Chain Management
BANA 6820	Applied Generative AI in Business Analytics
Total Hours	30

¹ Select any three courses from any BANA courses numbered 6000 or higher, ISMG 6080 Database Management Systems, ISMG 6470 Text Data Analytics, or ECON 5030 Data Analysis with SAS. (For assistance with enrollment for ECON courses, please contact Brian Duncan at brian.duncan@ucdenver.edu).

Notes and Restrictions

Courses subject to change. Please reach out to graduate advising for questions.

- Students are not required to take a comprehensive examination or complete a thesis in the major field.

Note: Business School MS degrees typically allow students to transfer in 9 semester hours from another university. However, the MS in Business Analytics and Artificial Intelligence (BAAI) allows students to petition to have a maximum of 6 semester hours transfer from another university. The transfer of *required* courses must closely reflect the educational objectives of the Master's degree in Business Analytics and Artificial Intelligence. The evaluation of substitute courses will include syllabi evaluation and the accreditation of the transferring institution.