

BUSINESS ANALYTICS MINOR

Program Director: Joseph Bailey, Ph.D.

The Minor in Business Analytics integrates technology with statistical and quantitative modeling techniques to provide students with the foundation needed for data driven decision making, as well as for graduate study in the field of Business Analytics. Students with these skills are in high demand in a variety of industries and sectors including marketing, finance, information systems, operations, health care and energy.

For more information about this minor visit <http://rhsmith.umd.edu/programs/undergraduate/academics/academic-minors/>.

REQUIREMENTS

Prerequisite Courses

Course	Title	Credits
BMGT110	Introduction to the Business Value Chain	3
BMGT230	Business Statistics (must have minimum grade of B-) ¹	3
MATH120 or MATH140	Elementary Calculus I ¹ Calculus I	3

¹ Or equivalent

Required Courses

Course	Title	Credits
Required Courses (9 credits)		
BMGT402	AI Augmented Database Systems ¹	3
BMGT430	Data Modeling in Business ²	3
BMGT431	Data Analytics and AI for Business	3
Electives (6 credits)		
Minimum 3-6 credits from this list		
BMGT302	Essential Programming and AI Skills for Business Analytics ³	
BMGT332	Quantitative Models for Management Decisions	
BMGT385	Operations Analytics	
BMGT400	Storytelling with AI and Data Visualization	
BMGT401	Big Data and AI Infrastructure	
BMGT404	Essential Data and AI Skills for Business Analytics ⁴	
Maximum 3 credits from this list		
BMGT347	Quantitative Financial Analysis	
BMGT394	Applied Quantitative Analysis	
BMGT447		
BMGT484	Digital Marketing	
CMSC422	Introduction to Machine Learning ⁵	
ECON414	Game Theory ⁶	
ENCE402	Simulation and Design of Experiments for Engineers ⁷	
ENEE436	Foundations of Machine Learning (Formerly ENEE439M) ⁸	

INST414	Data Science Techniques ⁹
STAT430	Introduction to Statistical Computing with SAS
Total Credits	15

¹ CMSC424 or INST327 can be used as a substitute

² ECON422 or ECON424 can be used as a substitute for Economics Majors only

³ CMSC132 Object-Oriented Programming II or INST326 Object-Oriented Programming for Information Science can be used as a substitute

⁴ CMSC320 Introduction to Data Science is an approved substitute for Computer Science Majors

⁵ Computer Science Majors only.

⁶ Economics Majors only

⁷ Civil & Environmental Engineering only

⁸ Electrical and Computer Engineering Majors only

⁹ Information Science Majors only