

# BUSINESS ANALYTICS MINOR

**Program Director:** Kazim Ruhi, 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

Course	Title	Credits
Required Courses (9 credits)		
BMGT402	Database Systems <sup>1</sup>	3
BMGT430	Data Modeling in Business <sup>2</sup>	3
BMGT431	Data Analytics	3
Electives (6 credits)		6
Minimum 3-6 credits from this list		
BMGT302	Essential Programming Skills for Business Analytics <sup>3</sup>	
BMGT332	Quantitative Models for Management Decisions	
BMGT385	Operations Management	
BMGT404	Essential Data Skills for Business Analytics <sup>4</sup>	
BMGT408	Emerging Topics in Information Systems (BMGT408E Big Data and AI using Cloud Computing and BMGT408V Data Visualization and Web Analytics)	
Maximum 3 credits from this list		
BMGT484	Digital Marketing	
BMGT347	Quantitative Financial Analysis	
BMGT447	Computational Finance	
BMGT438	Special Topics in Operations Management (BMGT438A Applied Quantitative Analysis - QUEST only)	
CMSC422	Introduction to Machine Learning <sup>5</sup>	
ECON414	Game Theory <sup>6</sup>	
ENCE402	Simulation and Design of Experiments for Engineers <sup>7</sup>	
ENEE436	Foundations of Machine Learning (Formerly ENEE439M) <sup>8</sup>	
INST414	Data Science Techniques <sup>9</sup>	
STAT430	Introduction to Statistical Computing with SAS	
<b>Total Credits</b>		<b>15</b>

<sup>5</sup> Computer Science Majors only.

<sup>6</sup> Economics Majors only

<sup>7</sup> Civil & Environmental Engineering only

<sup>8</sup> Electrical and Computer Engineering Majors only

<sup>9</sup> Information Science Majors only

<sup>1</sup> CMSC424 or INST327 can be used as a substitute

<sup>2</sup> ECON422 or ECON424 can be used as a substitute for Economics Majors only

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

<sup>4</sup> CMSC320 Introduction to Data Science is an approved substitute for Computer Science Majors