

# BUSINESS ANALYTICS AND ARTIFICIAL INTELLIGENCE, MASTER OF SCIENCE

For more than 140 years, Johns Hopkins University research and initiatives have helped society navigate uncertain times. This legacy underpins the full-time Master of Science in Business Analytics and Artificial Intelligence. With a curriculum focused on machine learning and artificial intelligence, you will gain the AI technical and leadership skills to translate business problems to analytical problems in order to make smart, informed decisions, and manage and lead businesses in the age of AI.

- Gain the tools and knowledge to analyze data, improve decision making in business strategy, and lead in volatile environments.
- Take advantage of being in the governmental and political epicenter of the U.S. at our Washington D.C. location.
- Complete your degree in as little as one year and harness the skills taught in the classroom to take a professional leap forward.
- Translate business problems to analytics problems and utilize artificial intelligence methodologies to develop business solutions.
- Leverage the resources, reputation, and expert faculty at Johns Hopkins, as we are becoming the leading university center for analytics and data science.

*International students in F-1 status who complete this program and obtain post-completion Optional Practical Training (OPT) (<https://ois.jhu.edu/students/current-f-1-students/f-1-training-and-employment/optional-practical-training/>) may be eligible for the STEM OPT Extension (<https://ois.jhu.edu/students/current-f-1-students/f-1-training-and-employment/opt-stem-extension/>). Students should consult the Office of International Services (<https://ois.jhu.edu/contact-ois/announcements/>) if they have questions about this benefit.*

## Program Requirements

The program requires 36 credits. Full-time MS students must complete the program in 3 semesters: fall, spring, and summer. Course waivers are not granted in this program.

## Curriculum

The MS in Business Analytics and Artificial Intelligence program curriculum includes the following courses: The course sequence and availability of specific electives may vary. Students must consult with their academic advisor to ensure they take courses in the approved sequence. All courses are 2 credits.

Code	Title	Credits
<b>Business Foundations</b>		
BU.120.601	Business Communication	2
BU.131.601	Business Leadership and Human Values	2
BU.510.601	Statistical Analysis	2
<b>Functional Core</b>		
BU.520.601	Business Analytics	2
BU.510.650	Data Analytics	2
BU.520.650	Data Visualization	2
BU.680.620	Operations Management	2

<b>STEM Courses</b>		
BU.520.620	Advanced Business Analytics	2
BU.520.690	Analytics Consulting Project	2
BU.520.775	Practical Machine Learning	2
BU.510.615	Python for Data Analysis	2
<b>Elective Courses</b>		
Students must complete 7 elective courses. At least 4 of these courses must be from the Quantitative Electives section.		
<i>Quantitative Electives</i>		8
Select at least four of the following:		
BU.330.785	Advanced Database Management	
BU.520.750	AI-Driven Sequential Decision Making	
BU.520.710	AI Essentials for Business	
BU.420.750	AI in Marketing	
BU.232.650	Continuous Time Finance	
BU.450.760	Customer Analytics	
BU.330.780	Data Science and Business Intelligence	
BU.330.770	Database Management	
BU.520.720	Financial Decisions and Investment Analysis	
BU.610.740	Forecasting Models for Business Intelligence	
BU.330.760	Generative AI	
BU.330.740	Large Scale Computing on the Cloud	
BU.450.740	Retail Analytics	
BU.610.615	Simulation for Business Applications	
BU.610.760	Supply Chain Analytics	
BU.610.710	Sustainable Supply Chains	
<i>General Electives</i>		6
BU.231.620	Corporate Finance	
BU.231.720	Corporate Governance	
BU.610.705	Crisis Management	
BU.520.701	Enterprise Risk Management Frameworks	
BU.230.750	Financial Crises and Contagion	
BU.300.620	Managing Complex Projects	
BU.230.730	Managing Financial Risk	
BU.410.620	Marketing Management	
BU.330.735	Responsible AI	
Carey Elective - Students may fulfill ONE general elective with a Carey course for which they meet the prerequisites and enrollment criteria.		
<b>Total Credits</b>		<b>36</b>