# ARTIFICIAL INTELLIGENCE IN BUSINESS (M.S.)

### **Overview**

The M.S. in artificial intelligence in business (MSAIB) is designed for a diverse group of forward-thinking professionals who range from those interested in being early adopters of AI across business operations within their companies, organizations or consulting practices, to those who seek to gain deeper technical expertise in AI to enhance their already established IT knowledge base. The program emphasizes the integration of real-world applications, leveraging the transformative capacity of AI in augmenting the speed and effectiveness of business roles and functions. Its innovative curriculum has been developed to provide the utmost flexibility in accommodating those who possess a basic understanding of AI, as well as those who have been working with it for years.

Ideal candidates for this program are ready to harness the power of AI to greatly enhance business operations through technological advancement —from aspiring financial analysts who seek to refine their expertise with AI capabilities and consultants who need to take on the latest technological challenges for their clients, to members of innovation teams who must keep their companies at the forefront of technological integration and product managers who seek to leverage AI for R&D and/or market strategy. If you aspire to play a leadership role at the intersection of business and technological innovation, the Gabelli School's M.S. in artificial intelligence in business will ready you for the exciting opportunities ahead.

## **Learning Goals**

- To prepare the student to understand challenges posed by Al and how Al is transforming and revolutionizing business applications and decision-making across many business disciplines.
- To prepare the student to design, implement, manage, and lead the practical applications of AI inside a business and across businesses.
- To offer foundational and advanced knowledge in AI to the future leaders of business, industry, and government.

#### **CIP Code**

11.0102 - Artificial Intelligence.

You can use the CIP code to learn more about career paths associated with this field of study and, for international students, possible post-graduation visa extensions. Learn more about CIP codes and other information resources.

## **Admissions Python Prerequisite**

Students must demonstrate competency in Python by one of these four options:

- Extensive prior academic and professional experience; students in this category will be pre-registered for, and awarded a grade of "P" in, AIGB 6200 Python Proficiency.
- 2. Passing a waiver exam (AIGB 6200 Python Proficiency).

- Enrolling in a 1-credit Python for Al Bootcamp (AIGB 6201) prior to the first term of enrollment; this course does not count towards program requirements.
- Enrolling in a 3-credit Programming with Python (ISGB 7943) course during the first term of enrollment; this course does not count towards program requirements.

## **Admissions Requirements**

- · Completed online application and submitted video/written essay
- · Professional Resume
- Academic Transcripts: for international students, the academic transcript must be translated to English for review, a transcript evaluation may be needed later to complete enrollment if the degree has been completed outside of the U.S., U.K., Canada, and/or Australia.
- English proficiency exam score for applicants who had studied within a country in which English is not the main language.
- · (If invited by the Admissions Committee) Admissions Zoom interview

#### **Optional Application Materials**

- GMAT/GRE exam scores
- · Academic and/or Professional Letters of Recommendation

## Requirements

The MSAIB requires completion of 30 credits, as follows:

Course	Title	Credits	
Foundational Courses			
AIGB 6205	Artificial Intelligence	3	
AIGB 6206	Machine Learning for Business	3	
AIGB 6207	Quantitative Foundations for Al	3	
AIGB 6208	Law and Ethics of AI	3	
Electives			
Choose 15 credits from the list below; optionally, students can choose their electives from one or more elective tracks. <sup>1</sup>			
Capstone Course			
AIGB 7299	Capstone Project	3	
Total Credits		30	

<sup>&</sup>lt;sup>1</sup> See the Tracks section (p. 2) for the different track options.

## **Electives**

Courses in this group have the AIEL attribute.

Course	Title	Credits
AIGB 7240	Computational Finance	3
AIGB 7241	Machine Learning for Finance	3
AIGB 7242	Fintech and Disruption in the Finance Industry	3
AIGB 7243	Investment Analysis with Data Visualization and Gen Al	3
AIGB 7244	Artificial Intelligence in Asset Management	3
AIGB 724A	Econtech: Econ and Data Mining	3
AIGB 7260	Generative AI for Managers	3
AIGB 7261	Judgment and Decision Making	3

AIGB 7262	Al Implementation Strategies	3
AIGB 7263	Blockchain: Industry Disruptor & Creator	3
AIGB 7264	Strategies for Technological Innovation and Change	3
AIGB 7290	Deep Learning	3
AIGB 7291	Cloud Computing for Analytics	3
AIGB 7292	NLP and Applications	3
AIGB 7293	Data Visualization	3
AIGB 7294	Large Language Models and Generative Al	3
AIGB 7295	Robotic Process Automation	3
AIGB 7296	Optimization Models for Business	3
AIGB 7297	Data Management with SQL	3

## **Tracks**

Optionally, students can choose their MSAIB electives by taking courses drawn from one or more of the following elective tracks. It is recommended that students interested in a track take 3-4 courses drawn from the course options for that track.

## **Finance Industry Track**

Courses in this group have the AIFI attribute.

Course	Title	Credits
AIGB 7240	Computational Finance	3
AIGB 7241	Machine Learning for Finance	3
AIGB 7242	Fintech and Disruption in the Finance Industry	3
AIGB 7243	Investment Analysis with Data Visualization and Gen Al	3
AIGB 7244	Artificial Intelligence in Asset Management	3
AIGB 724A	Econtech: Econ and Data Mining	3

The Finance Area faculty regularly offer new, cutting-edge courses to respond to the changing nature of business; MSAIB students pursuing the Finance Industry Track can enroll in Al-related courses from the M.B.A. and M.S. in Finance programs offered by the Finance Area faculty, even if they are not not listed above.

## **Technical Track**

Courses in this group have the AITE attribute.

Course	Title	Credits
AIGB 7290	Deep Learning	3
AIGB 7291	Cloud Computing for Analytics	3
AIGB 7292	NLP and Applications	3
AIGB 7293	Data Visualization	3
AIGB 7294	Large Language Models and Generative AI	3
AIGB 7295	Robotic Process Automation	3
AIGB 7296	Optimization Models for Business	3
AIGB 7297	Data Management with SQL	3