

Artificial Intelligence, MS—Align (Boston)

The Master of Science in Artificial Intelligence—Align program is appropriate for students with industry experience who seek to specialize in AI through various pathways such as engineering, health sciences, and computer sciences. The Align courses seek to prepare students with an undergraduate degree from all backgrounds for the program's comprehensive framework, encompassing foundational algorithms, theory, and practical applications in the rapidly evolving field of AI. This program aims to equip students with the essential knowledge and skills to design, develop, and implement AI systems across various high-demand sectors. The core curriculum is designed to provide in-depth understanding of fundamental AI concepts, forming a solid foundation for both theoretical and practical aspects of artificial intelligence.

This program is an interdisciplinary degree offered by Khoury College of Computer [Sciences](#) and [Bouvé College of Health Sciences](#). Descriptions of the concentrations offered in this degree are as follows:

- [Health Data—Bouvé College of Health Sciences](#)
 - [This interdisciplinary concentration is designed to prepare students to tackle pressing challenges at the intersection of artificial intelligence and health. Students work directly with real-world health and wellness data, applying cutting-edge AI techniques to problems that matter. Students integrate technical skills from their core coursework with specialized health data expertise, gaining versatility to work across the entire health ecosystem, from clinical settings to public health to digital health startups. Whether building prototype AI-driven health interventions or uncovering insights from complex datasets, students engage with authentic challenges facing the field today. Throughout the concentration, students address critical questions about equitable health technology design and responsible AI deployment in high-stakes healthcare contexts.](#)
- Machine Learning—Khoury College of Computer Sciences
 - The goal of the machine learning concentration is to provide students with practical, hands-on experience in designing, implementing, and optimizing machine learning models for real-world applications. The curriculum is designed to position graduates to pursue roles that leverage AI to drive innovation and efficiency in a wide variety of industries and domains.

Students are admitted to the college associated with their concentration, and their degree is awarded by that college. Students follow all policies associated with their college of admission.

Program Requirements

Beginning with students admitted in the fall of 2026, all students pursuing on-ground master's degree programs must complete a university-level experiential learning requirement. This requirement may be fulfilled through the curriculum, co-op, or other work- or industry-integrated learning experiences.

Complete all courses and requirements listed below unless otherwise indicated.

Align Bridge Coursework

Students are required to complete two or more of the following bridge courses, to be determined by faculty mentor.

A grade of B or higher is required in each of the following:

Code	Title	Hours
Fundamentals		
CS 5001 and CS 5003	Intensive Foundations of Computer Science and Recitation for CS 5001	4
Discrete Structures		
CS 5002	Discrete Structures	4
Object-Oriented Design		
CS 5004 and CS 5005	Object-Oriented Design and Recitation for CS 5004	4
Additional Align Courses		
CS 5008 and CS 5009	Data Structures, Algorithms, and Their Applications within Computer Systems and Recitation for CS 5008	4

Core Requirements

A cumulative GPA of 3.000 or higher is required in the following:

Code	Title	Hours
CS 5100	Foundations of Artificial Intelligence	4
CS 5130 and CS 5131	Applied Programming and Data Processing for AI and Recitation for CS 5130	4
DADS 5200 or DS 5020	Mathematics for Machine Learning Introduction to Linear Algebra and Probability for Data Science	4
EECE 5644 or DADS 7275	Introduction to Machine Learning and Pattern Recognition Machine Learning and Data Analytics	4

Concentrations

Complete one of the following:

- [Health Data—Bouvé College of Health Sciences](#)
- Machine Learning (p. 2)—[Khoury College of Computer Sciences](#)

Program Credit/GPA Requirements

36-44 total semester hours required

(Additional coursework may be required for participation in optional co-op)

Minimum 3.000 GPA required

HEALTH DATA CONCENTRATION—BOUVÉ COLLEGE OF HEALTH SCIENCES

Code	Title	Hours
HLTH 5810	Survey of Health-Related Data	4
HLTH 5820	AI Project for Health Applications	4
Complete 4 semester hours from the following:		4
HLTH 6980	Capstone	
HLTH 7995	Master's Project	

Optional Co-op

Complete the following (students must complete HLTH 5101 to qualify for co-op experience):

HLTH 5101	Professional Development for Bouvé Graduate Co-op	1
HLTH 6964	Co-op Work Experience	0
or HLTH 6954	Co-op Work Experience - Half-Time	
or HLTH 6955	Co-op Work Experience Abroad - Half Time	
or HLTH 6965	Co-op Work Experience Abroad	

MACHINE LEARNING CONCENTRATION—KHOURY COLLEGE OF COMPUTER SCIENCES

Code	Title	Hours
CS 5800	Algorithms	4
Complete 4 semester hours from the following:		4
CS 5180	Reinforcement Learning and Sequential Decision Making	
CS 5330	Pattern Recognition and Computer Vision	
CS 6120	Natural Language Processing	
CS 6200	Information Retrieval	
CS 6220	Data Mining Techniques	
CS 7140	Advanced Machine Learning	
CS 7150	Deep Learning	
CS 7180	Special Topics in Artificial Intelligence	

Capstone

Complete 4 semester hours from the following:		4
CS 6170	AI Capstone	
CS 8674	Master's Project	

Optional Co-op

Complete the following:

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CS 6964	Co-op Work Experience	0
or CS 6954	Co-op Work Experience - Half-Time	
or CS 6955	Co-op Work Experience Abroad - Half-Time	
or CS 6965	Co-op Work Experience Abroad	