Master of Science – Artificial Intelligence
2025-2026

REQUIREMENTS

Admission Requirements

Candidates must satisfy all of the following:

1. **Grade point average of 3.0** (B) from all undergraduate coursework.
2. **Resume** detailing work experiences and accomplishments.
3. **Personal statement** of career goals and background experiences, including an explanation of how this program will help achieve educational and professional objectives.
4. **Recommendations:** Two professional or academic recommendations received online, addressing the candidate's potential for graduate study completion. You will provide the emails of two references, and they will be sent a link to fill out their online recommendation.
5. Candidates must possess knowledge of a **programming** language equivalent to 2 or 3 undergraduate courses.
6. Candidates must possess a knowledge of **applied statistics**.

Degree Requirements

The Artificial Intelligence (M.S.) program requires a minimum of 33 credits.

Core Courses (12 credits)

Required:
- AI 501   Introduction to Artificial Intelligence
- CIS 635   Data Mining

Choose 2 of the following courses:
- AI 502   Introduction to Generative AI
- AI 511   AI Ethics and Bias
- AI 545   Machine Learning Operations
- CIS 678   Machine Learning
- SE 511   Intro to Software Engineering (CIS 611)*

Electives Requirements (3-6 credits)

Any 500 or 600 level CIS course can be used as an elective. Students will require 3 additional elective credits if the project option of the capstone is chosen.

Capstone Requirements (3 or 6 credits)

Each candidate must complete either the project course or the thesis sequence. Please contact the graduate program director one semester prior to starting any of these.

Project course:
- CIS 693   Master's Project

Thesis sequence:
- CIS 690   Thesis Research Preparation
- CIS 695   Master's Thesis

AI TRACKS

All candidates are required to complete one of the following tracks for a total of 12 credits.

Artificial Intelligence Systems

Required:
- AI 545   Machine Learning Operations
- SE 513   Software Testing (CIS 613)*

Choose 2 of the following:
- AI 502   Introduction to Generative AI
- AI 521   Applied Computer Vision
- AI 531   Natural Language Processing
- AI 541   Edge AI
- AI 551   Reinforcement Learning
- CIS 641   Systems Analysis and Design
- SE 512   Requirements Specification (CIS 612)*
- SE 530   Software Construction and Delivery
- SE 536   Data Analytics in Software Engineering
- SE 537   Software Quality Assurance

Cybersecurity and Artificial Intelligence

Choose 4 of the following:
- AI 511   AI Ethics and Bias
- CIS 518   Secure Software Engineering
- CIS 616   Data Privacy and Security
- CIS 619   Data Analytics for Cybersecurity
- CYB 520   Trustworthy AI

Edge and Cloud Artificial Intelligence

Required:
- AI 541   Edge AI

Choose 3 of the following:
- AI 521   Applied Computer Vision
- CIS 654   Computer Networking
- CIS 655   Cloud Applications Development
- SE 531   Software Virtualization

Human-Centered Artificial Intelligence

Required:
- HCC 531   Human AI Interaction

Choose 3 of the following:
- AI 502   Introduction to Generative AI
- AI 521   Applied Computer Vision
- AI 551   Reinforcement Learning
- CIS 671   Information Visualization
- HCC 502   User Experience Research

*may be listed under a CIS designation