

Artificial Intelligence Minor (for non-DS and non-CS Majors)

The Minor in AI is an academic program designed to provide students with foundational knowledge and practical skills in Artificial Intelligence. The program includes courses in machine learning, neural networks, data science, AI ethics, and applications of AI in other fields. Its goals are: 1) Equip students with fundamental AI concepts and techniques; 2) Develop problem-solving skills using AI methodologies; 3) Provide hands-on experience with AI tools and frameworks; 4) Explore ethical and societal implications of AI; and 5) Complement students' major disciplines with AI-driven insights.

Requirements:

This AI Minor for non-DS and non-CS Majors consists of three core courses and two technical electives.

Code	Title	Credits
Core Courses: Three Courses		
CS 115 or CS 113	Introduction to Computer Science I in C++ Introduction to Computer Science I	3
MATH 333 or MATH 341	Probability and Statistics Statistical Methods II	3
CS 375	Introduction to Machine Learning	3
Elective Courses: Select at least two among the following elective courses:		
1. Data Science (at least one course)		
DS 340	Fundamentals and Principles of Data Science	3
DS 400	Scientific Foundation of Machine Learning	3
DS 410	Federated Machine Learning and Applications	3
CS 444	Big Data Systems	3
DS 450	Data Visualization	3
DS 480	Fundamentals and Applications of Graph Neural Networks	3
CS 482	Data Mining	3
2. Informatics-Applied AI (at most one course)		
IS 392	AI-Driven Text Analytics	3
IS 465	Data Analytics for Business Information Systems	3
3. Robotics (at most one course)		
ECE 432	Advanced Control Systems and Robotics	3
CS 440	Computer Vision	3
IE 455	Robotics and Programmable Logic Controllers	3
4. Fintech (at most one course)		
FIN 310	Data-Driven Financial Modeling	3
FIN 320	Fin Data Analytics	3
MGMT 416	Artificial Intelligence for Business Decisions	3

Students in DS and CS Majors should NOT take this minor, they should take AI Minor for DS and CS Majors instead.