Artificial Intelligence Minor

Overview

The **Minor in Artificial Intelligence** (AI), offered by the Department of Computer and Information Sciences, gives students in computing and other STEM disciplines a structured pathway into the theory and practice of AI. The minor covers mathematical and computational foundations through machine learning and core AI methods, while allowing students to pursue upper-level work in areas such as deep learning, intelligent agents, or data mining.

For students majoring in Computer Science, Data Science, or Information Science and Technology, the minor provides a skillset in an area of growing importance. For students in other STEM fields, it adds technical skills that can support research, technical work, and domain-specific applications. Students complete the minor with a stronger understanding of modern AI systems and practical programming experience implementing AI methods.

Campus Locations: Main, Japan

Undergraduate Contact Information

Main Campus

Yu Wang, Chair
Science Education and Research Center, Room 304
215-204-8450

John Fiore, Vice Chair
Science Education and Research Center, Room 304
215-204-8450

Andrew Rosen, Faculty Advisor
Science Education and Research Center, Room 349
215-204-3193
andrew.rosen@temple.edu

Temple Japan Campus

Students interested in more information or declaring this minor should contact the TUJ Academic Advising Center (AAC), aac@tuj.temple.edu, Room 102, TUJ Building.

Minor Requirements

Prerequisites

Students desiring a Minor in Artificial Intelligence must have already completed the following or have equivalent industry experience:

Code	Title	Credit Hours
MATH 1041	Calculus I	4
or MATH 1941	Honors Calculus I	
MATH 1042	Calculus II	4
or MATH 1942	Honors Calculus II	
CIS 1068	Program Design and Abstraction	4
Total Credit Hours		**12**

Required Courses

Students desiring a Minor in Artificial Intelligence must complete the following courses:

Code	Title	Credit Hours
CIS 2033	Computational Probability and Statistics [1]	3
or MATH 3031	Probability Theory	
or BIOL 3312	Biostatistics	
CIS 2166	Mathematical Concepts in Computing II [2]	3-4
or MATH 2101	Linear Algebra	

or MATH 2045	Differential Equations with Linear Algebra	
CIS 2168	Data Structures	4
CIS 3203	Introduction to Artificial Intelligence	4
CIS 4526	Foundations of Machine Learning	3
Select one of the following:		3
CIS 3655	Human and Artificial Intelligence Interaction	
CIS 4203	Artificial General Intelligence	
CIS 4523	Knowledge Discovery and Data Mining [3]	
CIS 4524	Analysis and Modeling of Social and Information Networks [3]	
CIS 4626	Introduction to Deep Learning and Large Language Models	
CIS 4726	Intelligent Agent Systems Development	
Total Credit Hours		**20-21**

1 The CIS 2033 / MATH 3031 / BIOL 3312 requirement can be substituted with ECE 3522 Stochastic Processes in Signals and Systems or STAT 2103 Statistical Business Analytics for students not from the College of Science & Technology.

2 This course has a prerequisite of CIS 1166 Mathematical Concepts in Computing I.

3 This course has a prerequisite of MATH 2043 Calculus III, which is not part of the minor.

Residency Requirements: At least 3 courses required for the minor must be completed at Temple. At least 3 CIS courses must be completed at Temple.