

AI ETHICS, MINOR

This interdisciplinary minor in AI Ethics is jointly administered by the Computer Science and Philosophy Departments. It combines technical computing skills with the ability to critically reflect on the nature, significance, and ethical implications of artificial intelligence. No course can satisfy more than one requirement in the minor. No more than two classes can count toward both this minor and a major. When combining this minor with a B.A. or B.S. in Computer Science or Data Science, the Philosophy Recommendation becomes a requirement. When combining this minor with a B.A. in Philosophy, students must take a second Computing Elective.

Required Credit Hours:

22-23 credits; when the minor is combined with a major in Computer Science, Data Science, or Philosophy: 18-22 credits

Computing Component:

The computing component is four classes of at least three credits, for a total of 13 credits. This component consists of the foundational computing courses that AI is based upon.

Computing Requirements:

Take all three

CSCI 141 Modern Programming Fundamentals covers the foundational principles of programming on which AI is based and is a prerequisite to any computing-related course. CSCI 243 Logic and Discrete Structures provides the mathematical foundations needed for AI, most importantly logic. CSCI 356 Large Language Models and DATA 305 Designing AI Agents provide background in the basic interface or applied design of AI-based systems, respectively.

Computing Electives:

Take at least one.

These courses provide depth in various areas of computing that are affected by or interact heavily with AI.

Code	Title	Hours
CSCI 241	Data Structures	3
CSCI 303	Algorithms	3
CSCI 356	Large Language Models	3
CSCI 416	Fundamentals of Artificial Intelligence/Machine Learning	3
CSCI 417	Computer Animation	3
CSCI 447	Human-Computer Interaction	3
DATA 201	Introduction to Data Science & AI	3
DATA 305	Designing AI Agents	3

Special topics courses—such as CSCI 220, 320, 420 and DATA 440 — may count toward the elective when the topic is appropriate, e.g., has an explicit focus on cybersecurity or AI. Please consult with the Computer Science department to determine whether a given CSCI special topic is suitable as an elective. Please consult with the Data Science department whether a given DATA special topic is suitable as an elective.

Note: when combining this minor with a B.A. in Philosophy, students must take a second

Computing Elective.

Philosophy Component:

The philosophy component is three classes of at least three credits, for a total of 9 or 10 credits

Data/AI Ethics Requirement

Take at least one

These courses concern the ethical, political, and/or legal implications of AI and/or data.

Code	Title	Hours
PHIL 330	Ethics and Data Science	3
PHIL 333	Philosophy of AI: Capabilities, Risks and Governance	3

Normative Theory Requirement

Take at least one

These courses provide a deeper philosophical grounding in ethical, political, and/or legal theorizing.

Code	Title	Hours
PHIL 215	Right and Wrong in the Contemporary World	3
PHIL 303	Ethics	3
PHIL 305	Social and Political Philosophy	3
PHIL 310	Philosophy of Law	3
PHIL 315	Biomedical Ethics	3

Philosophy Elective

Take at least one

Discussions of artificial intelligence often go beyond its ethical implications. These courses provide philosophical background that reinforce reflection on, e.g., whether AI can be conscious or intelligent, the nature of its programming or its linguistic outputs, what science can or does know about AI, etc.

Code	Title	Hours
PHIL 150	First-Year Seminar (Philosophy of Technology)	4
PHIL 313	Philosophy of Science	3
PHIL 335	Philosophy of Language	3
PHIL 345	Philosophy of Mind	3
PHIL 460	Advanced Logic	3

Philosophy Recommendation (optional):

While the minor does not require a fourth philosophy class, we generally recommend that AI

Ethics minors take a fourth PHIL class to improve their ability to write and think more precisely about philosophical, including ethical, content. Almost any philosophy course will contribute to this end, except 210, 301, and 460. We especially recommend:

Code	Title	Hours
PHIL 220	Philosophy of Race: Identity, Racism, and Justice	3
PHIL 303	Ethics	3
PHIL 305	Social and Political Philosophy	3
PHIL 310	Philosophy of Law	3
PHIL 313	Philosophy of Science	3
PHIL 325	Neuroscience and Ethics	3
PHIL 335	Philosophy of Language	3
PHIL 345	Philosophy of Mind	3
PHIL 350	Theory of Knowledge	3
PHIL 360	Feminist Metaphysics	3

Note: when combining this minor with a B.A. or a B.S. in Computer Science or Data Science, the Philosophy Recommendation becomes a requirement.