

Course Description**PHI2680 | Artificial Intelligence and Ethics | 3 credits**

This course acquaints students with ethics as relevant to the design, implementation, and administration of artificial intelligence and emerging technologies. It will explore issues such as the biases of algorithms, autonomous warfare, the risks of surveillance technologies, and the effects of technologies on employment.

Course Competencies:**Competency 1:**

The student will demonstrate an understanding of ethics as relevant to AI by:

- Identifying the major ethical theories in Western philosophical ethics as relevant to AI ethics
- Identifying and articulating values conflicts at issue in ethical and policy arguments about AI, such as the conflicts between rights-based and risk-based evaluative approaches.
- Articulating major issues of ethical concern in the development of AI, such as algorithms' biases, the programming of ethical decision-making capacity into AI devices, the risks to privacy of information of quantum computers, the social ramifications of AI, such as unemployment, and even the eventual moral status of AI systems.
- Articulating major issues of ethical concern in the implementation and administration of AI, such as concerns about who makes decisions about how AI is implemented, whether AI is used in ways that perpetuate or diminish social inequalities, and who has ownership of and access to information generated by AI.
- Evaluating political and business policy decisions, as well as the decisions of individual actors, regarding the development, administration, and implementation of AI from an ethical perspective.
- Creating ethical arguments relevant to political and/or business policy and individual choice regarding the development, administration, and implementation of AI.

Learning Outcomes:

- Numbers / Data: Understanding
- Critical Thinking
- Social Responsibility
- Ethical Issues
- Computer / Technology Usage

Competency 2:

The student will demonstrate an understanding of basic ideas of critical thinking and an ability to employ tools of critical thinking in reference to issues in AI and ethics by:

- Distinguishing an argument and an assertion
- Identifying the major parts of arguments
- Identifying the difference between valid and sound arguments
- Paraphrasing arguments about ethics and AI
- Evaluating arguments about the potentials for AI, for example, regarding singularity and transhumanism
- Assessing arguments about proposed business and public policies relevant to AI from an ethical perspective
- Synthesizing perspectives on AI and ethics

- Constructing arguments on ethical and/or political issues relevant to AI.

Learning Outcomes

- Numbers / Data: Understanding
- Critical Thinking
- Social Responsibility
- Ethical Issues
- Computer / Technology Usage

Competency 3:

The student will demonstrate an ability to communicate about issues in AI and ethics by:

- Summarizing views of major ethical theories in presentations and/or writing assignments.
- Summarizing arguments from readings, lectures, and/or videos about ethical issues in the development, implementation, and administration of AI in writing assignments and/or class presentations.
- Synthesizing readings and/or information from lectures and other media on issues of ethics and AI in writing assignments and/or presentations.
- Evaluating arguments about ethical issues in the development, implementation, and administration of AI, as well as issues of individual choices, in writing assignments and/or class presentations.
- Creating arguments on issues in ethics and AI in writing assignments and/or class presentations.

Learning Outcomes:

- Numbers / Data: Understanding
- Critical Thinking
- Social Responsibility
- Ethical Issues
- Computer / Technology Usage