

ARTIFICIAL INTELLIGENCE AND SOCIETY, CERTIFICATE

Requirements for an undergraduate certificate may be completed at any campus location offering the specified courses for the certificate.

Program Description

We define the field of artificial intelligence (AI) as the discipline of creating systems that can perform cognitive functions such as information processing and decision-making usually associated with human minds. AI is transforming human life as we know it and every field of study. It is changing the way we create, design, predict trends, and solve problems. Within the university, an interdisciplinary space should provide opportunities to diagnose AI's faults and limitations, to investigate and critique AI models, and prepare students from a wide variety of majors to evaluate responsible best practices in AI applications. The experience and perspective supported in this certificate foster students to become ethical leaders and thoughtful decision-makers in evaluating emerging technologies.

Students will take courses designed to educate them in areas relevant to using and evaluating AI systems. Designed to intersect multiple fields of study, the program provides multiple pathways to learn, explore, and apply new developments in this rapidly changing and diverse field. No extensive prerequisites are required, but students should have basic computer literacy, capable of managing files and interactive web resources.

The core course required of all students pursuing the certificate situates AI historically, through a cultural and moral lens. The coursework provides context on serious failures in AI and their after-effects, AI's appropriations of training material and use of data. Coursework investigates ethical methods and applications of AI, or the characteristics of ethical AI. The course develops students' observation and critical thinking skills in areas such as: critiquing AI models, identifying the limitations and strengths of AI, documenting their experiments, and working with AI in projects. This course helps to prepare students for leadership roles in evaluating AI and establishing protocols for its application.

The elective coursework in this certificate guides students to understand vital contexts for AI in our time, contexts that are necessary for students to evaluate emerging applications of AI. The coursework offers perspective on the cognitive functions that we associate with creativity and intelligence, whether in humans or machines. It also addresses the technological structures and methods that underlie AI systems. Even if AI is not directly addressed in these courses, each course educates students in the underlying concepts and technologies that support AI systems.