

ARTIFICIAL INTELLIGENCE IN ARCHITECTURE MINOR

Program Director: Hooman Koliji Ph.D.

The AI in Architecture minor explores how artificial intelligence is transforming building design as well the larger built environment. Students engage with methods of design that incorporate generative AI while developing an ethical foundation for integrating AI into design thinking. With an emphasis on the many ways that AI is being integrated into design workflows in the academy and in practice, the Minor prepares students to apply AI creatively, critically, and responsibly in advancing sustainable and human-centered architectural practice. The AI in Architecture minor is restricted to students in the ARCH BA and BS degree programs.

Program Learning Outcomes

1. AI and the Built Environment: Students will analyze and apply AI technologies to understand their increasing influence on the design, planning, and management of the built environment and the public realm.
2. AI, Ethics, and Societal Impact: Students will critically assess the ethical implications and societal consequences of deploying AI in architecture, including issues of equity, privacy, and social responsibility.
3. AI and Architectural Design Workflows: Students will integrate AI-driven tools and methods into architectural design processes to enhance efficiency, innovation, and design decision-making.
4. AI and Sustainability Strategies: Students will leverage AI to develop and evaluate sustainable design strategies, optimizing environmental performance and resource efficiency in architectural projects.
5. AI and Representational Techniques: Students will utilize AI-based techniques for architectural representation, including generative visualization, parametric modeling, and immersive media, to communicate complex design concepts effectively.

REQUIREMENTS

Course	Title	Credits
ARCH230	AI and the Built Environment (AI and the Built Environment)	3
PHIL211	AI & ETHICS	3
ARCH418	Selected Topics in Architectural Technology (ARCH418J: AI and Architecture)	3
ARCH418	Selected Topics in Architectural Technology (ARCH418D: AI and Sustainability)	3
ARCH470	Computer Applications in Architecture	3
Total Credits		15