

# ARCHITECTURAL ENGINEERING AND DESIGN MINOR

The Minor in Architectural Engineering and Design trains students in the fundamental principles and practice of architectural and engineering design. Students completing this program will learn architectural conceptualization, programming, and design implementation in conjunction with analysis of the engineering materials and systems used in the construction of buildings and other structures. A key element of the program is aesthetic skills, which will be honed through the creative iterations of design. Students completing this program will be uniquely prepared for advanced study in either architecture or engineering, and regardless of their ultimate career track, will be prepared as leaders of the building design profession.

Course	Title
<b>Minor Requirements (8 units)</b>	
<i>Architectural Seminar - 0 unit</i> <sup>1</sup>	
CIV_ENV 280-1	Architectural Engineering & Design Seminar I
CIV_ENV 280-2	Architectural Engineering & Design Seminar II
CIV_ENV 280-3	Architectural Engineering & Design Seminar III
<i>Core courses - 3 required units</i> <sup>2</sup>	
CIV_ENV 385-1	Architectural Engineering and Design 1: Fundamentals
CIV_ENV 385-2	Architectural Engineering & Design 2: Intermediate
CIV_ENV 385-3	Architectural Engineering & Design 3: Advanced Studio
<i>Architecture History - 2 units</i> <sup>3</sup>	
CIV_ENV 220-0	Structural Art (required)
Choose 1 unit from the list of courses below	
ART_HIST 232-0	Introduction to the History of Architecture: 1400 to Present
ART_HIST 370-1	Modern Architecture and Design
ART_HIST 370-2	Contemporary Architecture and Design
ART_HIST 378-0	The Global City
<i>Design and Analysis Techniques - choose 3 units</i>	
CIV_ENV 323-0	Structural Steel Design
CIV_ENV 325-0	Reinforced Concrete
CIV_ENV 352-0	Foundation Engineering
CIV_ENV 353-0	Energy Geostuctures & Geosystems
CIV_ENV 368-0	Sustainability: The City
CIV_ENV 386-0	High Performance Architectural Design
CIV_ENV 387-0	Design of Sustainable Urban Developments
CIV_ENV 388-1	Building Science I: Fundamentals for Sustainable Buildings
CIV_ENV 388-2	Building Science II: Application for Sustainable Buildings
CIV_ENV 395-0	Special Topics in Civil and Environmental Engrg (Indoor Air Quality or Building Enclosure Design)

## Additional Conditions for Awarding Minor in AED

- Course with grades lower than a "C" or taken P/N will not be acceptable for this minor.

- For McCormick BS degrees, at least 4 courses used to meet the AED Minor requirements must not be counted towards the 16 units of major program requirements.
- To declare the AED minor, students should submit the minor declaration form in **MAS (McCormick Advising System)** no later than the end of their junior year.

- <sup>1</sup> The AED seminar sequence spans the Fall, Winter, and Spring Quarters. It includes lectures from architects, engineers, and construction managers from renowned firms in the Chicago area and beyond, focusing on the large topic of sustainability in the built environment. The AED seminar is intended to be taken sequentially. It is strongly suggested to take the sequence in the senior year.
- <sup>2</sup> The Design Studio courses are intended as a sequence and must be taken as such. It is strongly suggested to attend the sequence in the junior year.
- <sup>3</sup> The Architecture History courses can be attended starting from the Sophomore year.