KEY TAKEAWAYS:

01 Develop expertise in Civil Engineering, Construction Technologies, Design, Visualization, Computing, and Data Analysis

02 Build meaningful connections with leading faculty of construction technologies, civil engineering, computer & data science, AI, design, and entrepreneurship

03 Gain competitive leverage through practical experience and industry engagement

> " *The excitement of this field stems from that fact that I get challenged every day in class. It has molded me with leadership qualities and an entrepreneurial mindset.*

- Duaij AlSabah, MSCE Advanced Design & Construction Technology, '22

MSCE ADVANCED DESIGN & CONSTRUCTION TECHNOLOGY

Explore an integrative approach to design, engineering, construction, and technology in this multi-disciplinary program that prepares the next generation of leaders and innovators to harness the power of technological innovation, catalyze change, and offer advanced and sustainable solutions to global problems.

CAREER PATHS

Graduates have a variety of employment opportunities and can expect to find roles in firms that focus on civil infrastructure, smart cities, buildings, and technology. This may include general contractors, real estate developers, industrialized construction, or global architectural, engineering, and construction firms.

APPLICATION DEADLINES

Fall: January 15, 2024
Spring: September 15, 2023

Applicants who submit a complete application by the deadline will be considered for partial, merit-based scholarships.

PROGRAM SNAPSHOT

Sample Courses

- Advanced Technologies in AEC Practices
- Fundamental Concepts of Computing and Programming in Civil and Environmental Engineering
- Energy and Environment
- Data Analysis and Visualization
- Design and Innovation
- Technology Enabled Integrated Design

Industry Ties

- Graduates working at: **Stanford, Princeton, MIT, Columbia, Webcor, Swinerton, DPR, Turner, Balfour Beatty, Walt Disney Imagineering** and **Arup**

- Guest speakers from: , **Amazon, Buro Happold, SOM, Autodesk, Jacobs Engineering**, **Google, NVIDIA, Dassault Systèmes**

"One of the biggest goals for civil engineers is to make things more sustainable. That, alongside with how society is growing, expectations are ever-changing, means buildings today get to reflect the things we value."

- Nicholas Tanga,
MSCE Advanced Design & Construction Technology, '24

RESEARCH LABS & CENTERS

Innovation in Integrated Informatics Lab (iLAb)

Structures and Materials Research Lab

Center for Intelligent Environments (CENTIENTS)

▶ Scan QR code to learn more about our program, research and faculty

Meet our Faculty

Burcin Becerik

User-centered, responsive, and adaptive built environments; infrastructure information modeling & visualizations

Lucio Soibelman

Advanced data acquisition, management, visualization, and mining for construction and operations of advanced infrastructure systems

Berok Khoshnevis

Automated construction; computer-automated fabrication processes; robotics and autonomous systems; computer simulation

David Gerber

Development of innovative systems, tools, and methods for design of the built environment