ARCHITECTURAL ENGINEERING

Kansas State University
College of Engineering
“I chose architectural engineering because I have always enjoyed buildings and the effect they have on society. An added bonus to being a student in this department is the opportunity, through challenging classes, to build friendships that last beyond that semester.”

— Katherine Benton, architectural engineering student
The architectural engineering curriculum prepares entry-level engineers for the building engineering field. Architectural engineers have an understanding of how buildings are designed and built, and how engineering systems fit into them.

In the program, students will complete extensive coursework in mathematics and engineering, as well as take courses in architectural design, materials, graphics and building systems. They will learn to apply these principles to structural, mechanical, electrical, lighting and acoustical requirements of building design. A focus on the way buildings impact the world is prevalent throughout the curriculum, including sustainability, energy and building systems’ technology advancements.

As an important member of the building design team, the engineer must be able to create designs that will answer the economic, safety, environmental and aesthetic requirements of a project.

You will learn from the best with our teaching-focused faculty members who average 17 years of full-time industry experience.

**DESIGN PATHWAYS**

**ELECTRICAL SYSTEMS**
The pathway in electrical systems includes power distribution, utilities and lighting design.

**MECHANICAL SYSTEMS**
HVAC, plumbing and fire protection are part of the mechanical systems pathway.

**STRUCTURAL SYSTEMS**
A focus on structural systems requires knowledge about concrete, steel and timber.

**KEY ACADEMIC AREAS***

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*General education electives not included
DESIGN THE FUTURE

Architectural engineering and its partner program, construction science and management, prepare students to work effectively in an integrated architecture-engineering-constructor team, producing sustainable solutions for new and existing buildings.

Architectural engineers stand at the forefront to —
• design unique solutions to building challenges.
• create buildings with minimal environmental impact.
• increase energy efficiency.
• implement new technologies and equipment.
• revitalize existing construction.

MAKE AN IMPACT
CREATIVE INQUIRY DESIGN TEAMS
ARCHITECTURAL ENGINEERING INSTITUTE (AEI) AND ASHRAE DESIGN COMPETITION TEAMS
AEI and ASHRAE design competitions highlight the collaboration of student teams who engage in a real-world building design scenario.

STUDENT ORGANIZATIONS
ARCHITECTURAL ENGINEERING INSTITUTE (AEI)
AEI offers many opportunities for leadership development and conference attendance across the country, and coordinates events to encourage academic and professional growth.

ASHRAE
ASHRAE is known globally for its focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability in the built environment.

ILLUMINATING ENGINEERING SOCIETY (IES)
The K-State chapter of IES engages students interested in lighting, and exposes the fusion of the art and science of quality lighting design.

STRUCTURAL ENGINEERS ASSOCIATION OF KANSAS AND MISSOURI-KSU (SEAKM-KSU)
SEAKM-KSU introduces students to the art and science of structural engineering through education with an expanding vision.
CAREERS

A wide range of career possibilities are available for architectural engineers in building- and construction-related industries including healthcare, education, sports and entertainment, and more.

Architectural engineering graduates pursue careers as —

• structural systems design engineers
• project managers
• consultants
• structural engineers
• renewable energy design engineers
• design-build engineers
• manufacturer sales engineers
• mechanical and electrical systems design engineers

The architectural engineering program encourages students to take and pass the Fundamentals of Engineering (FE) exam prior to graduation from K-State to have the option of pursuing professional licensure during their career.

$60,201

IS THE AVERAGE STARTING SALARY FOR A K-STATE ARCHITECTURAL ENGINEERING GRADUATE.*

INTERNSHIPS

The architectural engineering department coordinates internship placement opportunities within a vast range of high-paying design specialties for students. Companies recruit interested students through a networking process directly managed by the department.
“The faculty members’ willingness to listen, make time, keep an open door and truly care about each student taught me an important lesson — it is all about the people.”

— Damian Buessing ’01, architectural engineering
Program Accreditation
The Bachelor of Science in architectural engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

Notice of Nondiscrimination
Kansas State University is committed to nondiscrimination in admissions, programs and employment. Inquiries and complaints: Contact Director of Institutional Equity, Kansas State University, 103 Edwards Hall, Manhattan, KS 66506-4801, (Phone) 785-532-6220; (TTY) 785-532-4807.