COLLEGE OF
ENGINEERING, ARCHITECTURE
AND TECHNOLOGY

ARCHITECTURAL ENGINEERING

WHAT IS ARCHITECTURAL ENGINEERING?

Architectural Engineering is a profession that combines the art and science of design in the creation of buildings. A detailed understanding of fundamental and applied engineering principles supports the work of the architectural engineer. Architectural engineering differs from architecture primarily in its focus upon the design of the structural elements, systems and procedures for buildings, rather than the overall design.

WHY ARCHITECTURAL ENGINEERING AT OSU?

Dedicated faculty, state-of-the-art facilities, and a community of like-minded students create a learning environment that is unmatched. Architectural Engineering and Architecture students at OSU share much of the same coursework. The ArcE program, situated within the School of Architecture, provides OSU architectural engineering graduates with a highly desirable understanding of the overall production of architecture rarely found in other programs. ArcE students graduate with an understanding of the myriad of issues that come to bear on the creation of architecture in contemporary society, and thus gain a deep appreciation of the cooperative nature of the professional practice of Architecture.

HIGHLIGHTS

- The ABET accredited curriculum offers students a studio based education where they can explore their creativity as well as further their abilities in math and science.
- Two options are available within the major of Architectural Engineering: Structural Design and Construction Project Management. Both options are concerned with the technical nature of bringing a building to fruition.
- Graduates with a degree in Architectural Engineering must pass the Fundamentals of Engineering (FE) exam, and the Professional Engineering (PE) and/or Structural Engineering (SE) exams to become a licensed professional.
- A twelve credit hour Graduate Certificate is available, focused upon the Integrative Design of the Building Envelope, which concerns a specific technical aspect of building design of interest to the student.

FOCUS AREAS

OPTIONS

- Structural (STR)
- Construction Project Management (CNPM)

CAREER OPPORTUNITIES

- Structural Designer or Consultant
- Project Engineer
- Construction or Project Manager

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BACHELOR OF SCIENCE

ARCHITECTURAL ENGINEERING
(STRUCTURES OPTION)

Typical Five-Year Curriculum

FIRST YEAR

Fall Semester

ARCH	1112	Intro to Arch
MATH	2144	Calc I
CHEM	1414	Gen Chemistry
ENGL	1113	Fresh Comp I
POLS	1113	American Govt

Spring Semester

ARCH	1216	Arch Design I
PHYS	2014	Gen Physics
MATH	2153	Calc II
ENGL	1213	Comp II

SECOND YEAR

Fall Semester

ARCH	2116	Arch Design II
ENSC	2113	Statics
ENGR	1412	Engr. Computer
HIST	1103	American Hist
XXXX	XXXX	"S"/ "D" Elective

Spring Semester

ARCH	2216	Arch Design III
ARCH	2263	Arch Systems
ENSC	2143	Strength of Materials
ARCH	2003	Arch & Society

THIRD YEAR

Fall Semester

ARCH	3323	Steel I
MATH	2136	Calc III
PHYS	2114	Gen Physics
ENSC	2213	Thermodynamics
ARCH	3143	Arch Analysis I

Spring Semester

ARCH	3223	Timbers
MATH	2233	Diff Eq
ARCH	3262	Computer II
ENSC	2123	Dynamics
ARCH	3224	Steel II

FOURTH YEAR

Fall Semester

ENSC	3313	Material Science
ARCH	4123	Concrete I
ARCH	4444	Analysis II
ENSC	2613	Electrical Science
XXXX	XXXX	Basic Science Elective

Spring Semester

ARCH	4143	Foundations
ARCH	4134	Arch Science I
ARCH	4224	Concrete II
ARCH	XXXX	ARCH "H" Elective

FIFTH YEAR

Fall Semester

IEM	3503	Eng Econ Anaylsis
ARCH	4433	Arch Science II
STAT	4033	Engr Statistics
CIVE	4711	Soils Lab
XXXX	XXXX	Controlled Elective
XXXX	XXXX	Controlled Elective

Spring Semester

ARCH	5226	Comp Engr Design
ARCH	4263	Seminar
ENSC	4093	Proj Mgmt
XXXX	XXXX	Controlled Elective

TOTAL HOURS: 157

Accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

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This course plan is for general guidance only. An official course plan will be provided upon enrollment.

Contact | ceat.recruitment@okstate.edu | (405)-744-5279