

First Year

Fall Semester – 13 Semester Credit Hours

ARCH 1301 Introduction to Architecture and Interior Design
Creative Arts Elective

ENGL 1301 Rhetoric and Composition I

AREN 1205 Intro to Architectural Engineering

ENGR 1101 Entrance to Engineering for Transfer Students
or UNIV 1131

MATH 1426 Calculus I

Second Year

Fall Semester – 16 Semester Credit Hours

ARCH 2341 Design Communications for Engineers

AREN 2311 Statics

HIST 13XX U.S. History Elective

MATH 2326 Calculus III

PHYS 1444 General Technical Physics II

Third Year

Fall Semester – 16 Semester Credit Hours

ARCH 3551 Basic Design for Engineers

AREN 3213 Building Science I

AREN 3341 Structural Analysis

MATH 3319 Differential Equations & Linear Algebra

HIST 13XX U.S. History Elective

Fourth Year

Fall Semester – 15 Semester Credit Hours

AREN 4309 Thermodynamics for AREN

AREN 4346 Electrical Systems & Lighting for AREN

AREN 4348 Structural Design in Steel

AREN 4352 Professional Practice

POLS 2311 Government of the United States

Spring Semester – 16 Semester Credit Hours

AREN 2252 Introduction to Construction Drafting

IE 2308 Engineering Economy
Social & Behavioral Sciences Elective

MATH 2425 Calculus II

PHYS 1443 General Technical Physics I

Language, Philosophy, and Culture Elective

Spring Semester – 16 Semester Credit Hours

ARCH 3357 Design Technologies – BIM for Engineers

AREN 2313 Mechanics of Materials

AREN 2315 Construction Materials & Methods

CHEM 1465 Chemistry for Engineers

COMS 2302 Professional & Technical Communications for Scientists & Engineers

Spring Semester – 16 Semester Credit Hours

ARCH 3336 Structural Systems for Buildings

AREN 3311 Construction Engineering

AREN 3331 Mechanical & Electrical Systems

AREN 3343 Soil Mechanics

AREN 3143 Properties & Behavior of Soils

AREN 3347 Reinforced Concrete Design

Spring Semester – 12 Semester Credit Hours

AREN 43XX ARCH/AREN Senior Elective

AREN 3301 Stochastic Models

AREN 4383 Senior Project

POLS 2312 State and Local Government

COE Foreign Language Requirement: Two years of same foreign language in high school or six semester credit hours of the same foreign language.

General Core Requirements

- Students majoring in Architectural Engineering must take **ARCH 1301**, which is a *Creative Arts* elective option. If a student has taken a different course from the university's approved Creative Arts elective list, it will be counted as part of your core curriculum. However, ARCH 1301 will also need to be completed to satisfy the course requirement for the Architectural Engineering degree plan.
- Students majoring in Architectural Engineering must take **IE 2308**, which is a *Social & Behavioral Sciences* elective option. If a student has taken a different course from the university's approved Social & Behavioral Sciences elective list, it will be counted as part of your core curriculum. However, IE 2308 will also need to be completed to satisfy the course requirement for the Architectural Engineering degree plan.
- The UTA Architectural Engineering Program requires two (six SCH) *U.S. History* courses. The two courses can be chosen from the following list of courses offered at UTA.

HIST 1301	History of the United States to 1865
HIST 1302	History of the United States, 1865 to Present
HIST 1331	Technology and Science in American Society, I
HIST 1332	Technology and Science in American Society, II
- The UTA Architectural Engineering Program requires one (three SCH) *Language, Philosophy & Culture* elective. This elective can be chosen from the following list of courses offered at UTA.

ANTH 2322	Global Cultures	HIST 2377	Flight Culture and the Human Experience
ARAB 2310	Arabic Culture in the World	INTS 1310	Introduction to Popular Culture
ARAB 2314	Intermediate Arabic II	KORE 2310	Korean Culture in the World
ARCH 2300	Masterworks of Western Architecture	KORE 2314	Intermediate Korean II
ART 1317	The Art of Non-Western Traditions	LATN 2314	Latin Level IV
CHIN 2310	Chinese Culture in the World	LING 2371	Language in a Multicultural USA
CHIN 2314	Intermediate Chinese II	MAS 2300	Intro to Mexican American Studies
CLAS 1300	Introduction to Classical Mythology	PHIL 1304	Contemporary Moral Problems
ENGL 2303	Topics in Literature	PHIL 2300	Introduction to Philosophy
ENGL 2309	World Literature	PORT 2314	Intermediate Portuguese II
ENGL 2319	British Literature	RUSS 2310	Russian Culture in the World
ENGL 2329	American Literature	RUSS 2314	Intermediate Russian II
FREN 2310	French and Francophone Cultures in the World	SOCI 1310	Introduction to Popular Culture (proposed)
FREN 2314	Intermediate French II	SPAN 2310	Hispanic Culture in the World
GERM 2310	German Culture in the World	SPAN 2314	Intermediate Spanish II
GERM 2314	Intermediate German II	WOMS 2310	Intro to Women's & Gender Studies
GLOBAL 2301	Introduction to Global Studies		
GREK 2314	Greek Level IV		

Senior Elective

Architectural Engineering majors must select one 3-hour course from the following list of Senior Electives.

ARCH 4330	Energy Use and Conservation in Architecture
ARCH 4346	Construction Drawings
AREN 4307	Construction Sustainability
AREN 4326	GIS/Hydrologic & Hydraulic Modeling
AREN 4360	Design of Structural Masonry
AREN 4365	Structural Wood Design

Architectural Engineering Curriculum & Requisites – 2021

Freshman Year, Fall Semester

13 Semester Credit Hours

Pre-Professional Courses:

UNIV 1131 or ENGR 1101 Entrance to Engineering for Transfer Students

ARCH 1301 Introduction to Architecture and Interior Design

AREN 1205 Introduction to Architectural Engineering

ENGL 1301 Rhetoric and Composition I

MATH 1426 Calculus I

Freshman Year, Spring Semester

16 Semester Credit Hours

Pre-Professional Courses:

AREN 2252 Introduction to Construction Drafting – Prerequisite: MATH 1421

IE 2308 Engineering Economy – Corequisite: MATH 1426

MATH 2425 Calculus II – Prerequisite: MATH 1426

PHYS 1443 General Technical Physics I – Prerequisite: MATH 1426

General Education Courses:

Language, Philosophy, and Culture Elective

Sophomore Year, Fall Semester

16 Semester Credit Hours

Pre-Professional Courses:

ARCH 2341 Design Communications for Engineers

AREN 2311 Statics – Prerequisite: PHYS 1443

MATH 2326 Calculus III – Prerequisite: MATH 2425

PHYS 1444 General Technical Physics II – Prerequisite: PHYS 1443, Corequisite: MATH 2425

General Education Courses:

US History Elective

Sophomore Year, Spring Semester

16 Semester Credit Hours

Pre-Professional Courses:

AREN 2313 Mechanics of Materials – Prerequisites: AREN 2311 & MATH 2425

AREN 2315 Construction Materials & Methods – Prerequisite: AREN 1205

CHEM 1465 Chemistry for Engineers – Corequisite: MATH 1421

COMS 2302 Professional & Technical Communication for Scientists & Engineers – Prerequisites: 30 Semester Credit hours completed and ENGL 1301

Professional Courses:

ARCH 3357 Design Technologies – Building Information Modeling for Architects & Engineers – Prerequisite: AREN 2252

Architectural Engineering Curriculum & Requisites – 2021

Junior Year, Fall Semester

16 Semester Credit Hours

Professional Courses:

ARCH 3551 Basic Design for Engineers – Prerequisite: ARCH 1301 & ARCH 2341

AREN 3213 Building Science – Prerequisite: CHEM 1465 & PHYS 1444

AREN 3341 Structural Analysis – Prerequisite: AREN 2313

MATH 3319 Differential Equations & Linear Algebra – Corequisite: MATH 2326

General Education Courses:

US History Elective

Junior Year, Spring Semester

16 Semester Credit Hours

Professional Courses:

ARCH 3336 Structural Systems for Buildings

AREN 3311 Construction Engineering – Prerequisite: IE 2308

AREN 3331 Mechanical and Electrical Systems – Prerequisite: PHYS 1444

AREN 3343 Soil Mechanics – Corequisite: AREN 3143, Prerequisite: AREN 2313

AREN 3143 Properties and Behavior of Soils – Corequisite: AREN 3343

AREN 3347 Reinforced Concrete Design – Prerequisite: AREN 3341

Senior Year, Fall Semester

15 Semester Credit Hours

Professional Courses:

AREN 4309 Thermodynamics for Architectural Engineers – Prerequisites: CHEM 1465, MATH 2425, and PHYS 1444

AREN 4346 Electrical Systems & Lighting for Architectural Engineers – Prerequisites: MATH 2425 and PHYS 1444

AREN 4348 Structural Design in Steel – Prerequisite: AREN 3341

AREN 4352 Professional Practice

General Education Courses:

POLS 2311 Government of the US

Senior Year, Spring Semester

12 Semester Credit Hours

Professional Courses:

ARCH/AREN Senior Elective

AREN 3301 Stochastic Models – Prerequisite: MATH 2425

AREN 4383 Senior Elective – Prerequisites: AREN 4348, AREN 4352, and All 3000 level courses except AREN 3301

General Education Courses:

POLS 2312 State and Local Government