First Year

Fall Semester - 14 Semester Credit Hours

ARCH 1301 Introduction to Architecture and Interior Design Creative Arts Elective

AREN 1205 Intro to Architectural Engineering

ENGR 1101 Entrance to Engineering for Transfer Students or UNIV 1131

MATH 1426 Calculus I

CHEM 1465 Chemistry for Engineers

<u>Spring Semester – 15 Semester Credit Hours</u>

AREN 1152 Introduction to Construction Drafting ENGL 1301 Rhetoric and Composition I
AREN 2315 Construction Materials & Methods
MATH 2425 Calculus II
PHYS 1443 General Technical Physics

Second Year

Fall Semester - 15 Semester Credit Hours

COMS 2302 Professional & Technical Communications for Scientists & Engineers AREN 2312 Statics & Dynamics MATH 2326 Calculus III AREN 2213 Building Science PHYS 1444 General Technical Physics II

Spring Semester – 15 Semester Credit Hours

ARCH 3357 Design Technologies – BIM for Engineers
AREN 2313 Mechanics of Materials
GEOL 3340 Geology for Engineers
MATH 3319 Differential Equations & Linear Algebra
IE 2308 Engineering Economy
Social & Behavioral Sciences Elective

Third Year

<u> Fall Semester – 15 Semester Credit Hours</u>

HIST 13XX U.S. History Elective

AREN 3346 Electrical Systems & Lighting for AREN

AREN 3305 Basic Fluid Mechanics

AREN 3311 Construction Engineering

AREN 3341 Structural Analysis

<u>Spring Semester – 16 Semester Credit Hours</u>

AREN 3330 App. of Bldg. Codes in Arch
AREN 3301 Stochastic Models
AREN 3343 Soil Mechanics
AREN 3143 Properties & Behavior of Soils
AREN 3315/AREN 3291 Bldg. Hydraulic Serv. Syst
HIST 1302 U.S. History Elective

Fourth Year

Fall Semester - 15 Semester Credit Hours

AREN 4331 Bldg. HVAC Systems Design AREN 4347 Reinforced Concrete Design AREN 43XX AREN 4318 or AREN 4320 AREN 4352 Professional Practice POLS 2311 Government of the United States

<u>Spring Semester – 15 Semester Credit Hours</u>

Language, Philosophy, and Culture Elective AREN 4316 Bldg. Struct. Syst. AREN 4383 Senior Project AREN 4314 Tech. for High Perf. Bldgs. POLS 2312 State and Local Government

Architectural Engineering Course Information

- A course number shown with an asterisk (HIST 1311*) is a General Education course. These courses are neither pre-professional nor
 professional program Architectural Engineering courses.
- A course number shown with normal weight and without an asterisk (AREN 1205) is an Architectural Engineering pre-professional course. A grade of C or better must be earned in each Architectural Engineering pre-professional course.
- A course number shown in bold (AREN 3341) is an Architectural Engineering professional program course. Enrollment in a 3000 or 4000
 level Architectural Engineering professional program course requires admission to the Architectural Engineering professional program or
 written permission from the department academic advisor.
- Requisite courses are shown in parentheses (MATH 1323). A requisite course designated ^{co} (MATH 1421^{co}) may be taken concurrently at UTA. A requisite course designated ^{cr} (AREN 3143^{cr}) must be taken concurrently at UTA. All other requisite course are prerequisites. Architectural Engineering majors (AREN, AREN Intended, and AREN UCOL) may not attempt a course before earning a grade of C or better in all prerequisite courses.

General Core Requirements

- Students majoring in Architectural Engineering must take **ARCH 1301**, which is a <u>Creative Arts</u> elective option. If a student has taken a different course from the 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 <u>Social & Behavioral Sciences</u> elective option. If a student has taken a different course from the 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>U.S. History</u> 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 HIST 1332 Technology and Science in American Society

The UTA Architectural Engineering Program requires one (three SCH) Language, Philosophy & Culture elective.

Senior Elective

Architectural Engineering majors must select one 3-hour course from the following list of Senior Electives. AREN 4318 Machine Learning in Civil Engineering AREN 4320 System Resilience, Reliability and Performance in AREN