

# ARCHITECTURAL ENGINEERING CURRICULUM EFFECTIVE FALL 2016

## FIRST YEAR

|                                |                                |
|--------------------------------|--------------------------------|
| ARCH 1301 <sup>C</sup> ..... 3 | CE 1252 ..... 2                |
| ARCH 1341 ..... 3              | ENGL 1301 <sup>C</sup> ..... 3 |
| CE 1105 ..... 1                | IE 2308 <sup>C</sup> ..... 3   |
| ENGR 1300 ..... 3              | MATH 2425 <sup>C</sup> ..... 4 |
| MATH 1426 <sup>C</sup> ..... 4 | PHYS 1443 ..... 4              |
| <u>14</u>                      | <u>16</u>                      |

## SECOND YEAR

|                                |                                |
|--------------------------------|--------------------------------|
| ARCH 2553 ..... 5              | CE 2221 ..... 2                |
| CE 2153 ..... 1                | CE 2313 ..... 3                |
| CE 2311 ..... 3                | CHEM 1465 ..... 4              |
| MATH 2326 <sup>C</sup> ..... 3 | COMS 2302 <sup>C</sup> ..... 3 |
| PHYS 1444 <sup>C</sup> ..... 4 | EE 2320 ..... 3                |
| <u>16</u>                      | <u>15</u>                      |

**See "Civil Engineering Course Sequence" on reverse side for frequency of CE course offerings.**

## THIRD YEAR

|                   |                           |
|-------------------|---------------------------|
| ARCH 4357 ..... 3 | CE 3305 ..... 3           |
| CE 3110 ..... 1   | CE 3341 ..... 3           |
| CE 3301 ..... 3   | CE 3343 + CE 3143 ..... 4 |
| CE 3311 ..... 3   | MAE 3309 ..... 3          |
| MATH 3319 ..... 3 | POLS 2312 ..... 3         |
| POLS 2311 ..... 3 |                           |
| <u>16</u>         | <u>16</u>                 |

## FOURTH YEAR

|                                |                                |
|--------------------------------|--------------------------------|
| ARCH 4325 ..... 3              | ARCH 4326 ..... 3              |
| CE 4348 ..... 3                | CE 4347 ..... 3                |
| CE 4352 ..... 3                | CE 4383 ..... 3                |
| HIST 1311 <sup>C</sup> ..... 3 | HIST 1312 <sup>C</sup> ..... 3 |
| PHIL 2300 <sup>C</sup> ..... 3 |                                |
| <u>15</u>                      | <u>12</u>                      |

**Six (6) hours of Foreign Language are required for students who have not had 2 units of high school foreign language.**

## REQUIRED COURSE TITLES

### COMMUNICATIONS

|                        |  |
|------------------------|--|
| ENGL 1301 <sup>C</sup> | Rhetoric & Composition I   |
| COMS 2302 <sup>C</sup> | Professional & Technical Communication for Science & Engineering |

### HISTORY

|                        |                                    |
|------------------------|------------------------------------|
| HIST 1311 <sup>C</sup> | History of the US to 1865          |
| HIST 1312 <sup>C</sup> | History of the US, 1865 to Present |

### GOVERNMENT/POLITICAL SCIENCE

|                        |                                 |
|------------------------|---------------------------------|
| POLS 2311 <sup>C</sup> | Government of the United States |
| POLS 2312 <sup>C</sup> | State and Local Government      |

### MATHEMATICS

|                          |   |
|--------------------------|---|
| MATH 1426 <sup>C</sup>   | Calculus I                                |
| MATH 2425 <sup>C</sup>   | Calculus II                               |
| MATH 2326 <sup>C,1</sup> | Calculus III                              |
| MATH 3319                | Differential Equations and Linear Algebra |

### LIFE AND PHYSICAL SCIENCE

|                        |                              |
|------------------------|------------------------------|
| CHEM 1465              | Chemistry for Engineers      |
| PHYS 1443 <sup>C</sup> | General Technical Physics I  |
| PHYS 1444 <sup>C</sup> | General Technical Physics II |

### LANGUAGE, PHILOSOPHY, & CULTURE

|                        |                            |
|------------------------|----------------------------|
| PHIL 2300 <sup>C</sup> | Introduction to Philosophy |
|------------------------|----------------------------|

### ARCHITECTURE

|                        |  |
|------------------------|--|
| ARCH 1301 <sup>C</sup> | Introduction to Architecture and Interior Design |
| ARCH 1341              | Design Communications                            |
| ARCH 2553              | Basic Design and Drawing for Engineers           |
| ARCH 4325              | Environmental Control Systems I                  |
| ARCH 4326              | Environmental Control Systems II                 |
| ARCH 4357              | Building Information Modeling & Visualization    |

### CIVIL ENGINEERING

|         |   |
|---------|---|
| CE 1105 | Introduction to Civil Engineering       |
| CE 1252 | Computer Tools - AutoCAD                |
| CE 2153 | Computer Tools - Civil 3D               |
| CE 2221 | Dynamics                                |
| CE 2311 | Statics                                 |
| CE 2313 | Mechanics of Materials I                |
| CE 3110 | Civil Engineering Communications        |
| CE 3301 | Stochastic Models for Civil Engineering |
| CE 3305 | Basic Fluid Mechanics                   |
| CE 3311 | Construction Engineering                |
| CE 3341 | Structural Analysis                     |
| CE 3343 | Soil Mechanics                          |
| CE 3143 | Properties and Behavior of Soils        |
| CE 4347 | Reinforced Concrete Design              |
| CE 4348 | Structural Design in Steel              |
| CE 4352 | Professional Practice                   |
| CE 4383 | Senior Project                          |

### OTHER ENGINEERING

|                      |                             |
|----------------------|-----------------------------|
| ENGR 1300            | Engineering Problem Solving |
| EE 2320              | Circuit Analysis            |
| IE 2308 <sup>C</sup> | Economics for Engineers     |
| MAE 3309             | Thermal Engineering         |

<sup>C</sup> Indicates Core Curriculum Requirement

<sup>1</sup> Required as the Foundational Component Area core course.

## PREREQUISITES AND COURSE SEQUENCE

Information provided here and on the Architectural Engineering Advising and Course Selection Guide is to assist students in planning the sequence of courses required for an undergraduate degree in Architectural Engineering. Requirements for the degree are listed in the current University of Texas at Arlington Undergraduate Catalog. Students should refer to the catalog to confirm prerequisite requirements and consult with the Civil Engineering Department if additional clarification is required.

### CIVIL ENGINEERING PREREQUISITES

Students may not attempt a course until they have earned a grade of C or better in the prerequisite course(s).

### CIVIL ENGINEERING COURSE SEQUENCE

The sequence of courses shown on the front side of this form will satisfy the required prerequisites and allow a student to graduate in four years. However, it may be necessary to modify this course sequence for a number of reasons. A Civil Engineering Undergraduate Advisor will help select the sequence of courses suitable for each student.

Architecture courses are offered on a schedule determined by the School of Architecture. The Civil Engineering Department intends to offer CE 1000, CE 2000, CE 3000, CE 4347, CE 4352, and CE 4383 each fall and spring semester. CE 4348 will be offered in the fall.

Certain CE courses will also be offered in the summer 11-week semester. The courses selected will depend on anticipated need, faculty availability, and budget. **At this time, students should not plan their long term schedules assuming that particular courses will be offered in summer.**