

**BACHELOR OF SCIENCE IN ARCHITECTURAL ENGINEERING (BS ARCE)**  
**THE UNIVERSITY OF KANSAS (KU)**  
For Fall 2015 and Later Matriculations

Fall Semesters

Spring Semesters

FIRST YEAR

|                       |   |          |                       |   |          |
|-----------------------|---|----------|-----------------------|---|----------|
| ARCE 101              | Intro. to Architectural Engineering         | 2        | ARCE 217              | Computer Assisted Building Design             | 3        |
| ENGL 101 <sup>H</sup> | Composition ( <i>KU Core: GE2.1</i> )       | 3        | ENGL 102 <sup>H</sup> | Critical Reading and Writing ( <i>GE2.1</i> ) | 3        |
| MATH 125 <sup>H</sup> | Calculus I ( <i>GE1.2</i> )                 | 4        | MATH 126 <sup>H</sup> | Calculus II                                   | 4        |
| CHEM 130 <sup>H</sup> | General Chemistry I ( <i>GE3N</i> )         | 5        | PHSX 211 <sup>H</sup> | General Physics I ( <i>GE1.1</i> )            | 4        |
| Elective <sup>H</sup> | Social Science ( <i>GE3S</i> ) <sup>1</sup> | <u>3</u> | PHSX 216 <sup>H</sup> | General Physics I Laboratory                  | <u>1</u> |
|                       |   | 17       |                       |   | 15       |

SECOND YEAR

|                       |                                  |          |                       |   |          |
|-----------------------|----------------------------------|----------|-----------------------|---|----------|
| PHSX 212 <sup>H</sup> | General Physics II               | 3        | Elective <sup>H</sup> | Oral Communications ( <i>GE2.2</i> ) <sup>1</sup> | 3        |
| PHSX 236 <sup>H</sup> | General Physics II Laboratory    | 1        | ARCE 350 <sup>S</sup> | Building Materials Science                        | 3        |
| CE 301                | Statics and Dynamics             | 5        | CE 310                | Strength of Materials                             | 4        |
| ME 312                | Basic Engineering Thermodynamics | 3        | MATH 220 <sup>H</sup> | Applied Differential Equations                    | 3        |
| MATH 127 <sup>H</sup> | Calculus III                     | 4        | MATH 526              | Applied Mathematical Statistics                   | <u>3</u> |
| MATH 290 <sup>H</sup> | Elementary Linear Algebra        | <u>2</u> |                       |   | 16       |
|                       |                                  | 18       |                       |   |          |

THIRD YEAR

|                             |                                      |          |                       |   |          |
|-----------------------------|--------------------------------------|----------|-----------------------|---|----------|
| ARCH 626                    | Building Tech: Const. Sys. & Assemb. | 3        | CE 461                | Structural Analysis                           | 4        |
| CE 330 <sup>F</sup> /ME 510 | Fluid Mechanics                      | 3        | ARCE 650 <sup>S</sup> | Illumination Engineering I                    | 3        |
| EECS 315                    | Electric Circuits & Machines         | 3        | ARCE 661 <sup>S</sup> | HVAC&R Systems Design                         | 3        |
| ARCE 660 <sup>F</sup>       | Building Thermal Science             | 3        | CMGT 500 <sup>S</sup> | Construction Engineering                      | 3        |
| CMGT 457 <sup>F</sup>       | Construction Project Management      | <u>3</u> | Elective <sup>H</sup> | Human Diversity ( <i>AE4.1</i> ) <sup>1</sup> | <u>3</u> |
|                             |                                      | 15       |                       |   | 16       |

FOURTH YEAR

|                       |   |          |                       |  |          |
|-----------------------|---|----------|-----------------------|--|----------|
| ARCH 509              | Architectural Design IV                     | 6        | Elective              | Architectural or Engineering <sup>2</sup>                | 3        |
| CE 562                | Design of Steel Structures ( <i>AE6.1</i> ) |          | CE 562                | Design of Steel Structures ( <i>AE6.1</i> )              |          |
| or                    |   | 3        | or                    |  | 3        |
| CE 563                | Design of Reinf. Concrete Structures        |          | CE 563                | Design of Reinf. Concrete Structures                     |          |
| ARCE 640 <sup>F</sup> | Power Systems Engineering I                 | 3        | ARCE 699 <sup>F</sup> | Comprehensive Design Studio                              | 4        |
| ARCH 540              | Global History of Arch. I ( <i>GE3H</i> )   | 3        | ARCH 541              | Global History of Arch. II ( <i>AE4.2</i> )              | 3        |
| Required <sup>3</sup> | Fundamentals of Engineering Exam            | <u>0</u> | Elective <sup>H</sup> | Ethics/Social Responsibil. ( <i>AE5.1</i> ) <sup>1</sup> | <u>3</u> |
|                       |   | 15       |                       |  | 16       |

**TOTAL CREDIT-HOURS = 128**

<sup>1</sup> See the lists of acceptable General Education (GE) and Advanced Education (AE) *KU Core* courses via [kucore.ku.edu](http://kucore.ku.edu)

<sup>2</sup> See the BS ARCE's *Electives List*, available via [www.ceae.ku.edu/undergraduate/curriculum.html](http://www.ceae.ku.edu/undergraduate/curriculum.html)

<sup>3</sup> Taking the Fundamentals of Engineering (FE) Exam is a requirement of this program for graduation.

<sup>(F)</sup> Courses are only offered in the Fall Semesters. <sup>(S)</sup> Courses are only offered in the Spring Semesters.

<sup>(H)</sup> Honors options available. Consult with your CEAE and University Honors Program advisors for details.