Architectural Engineering Flowchart

128 credit hours total

YEAR 1

FALL
- MATH 220 (4)
  Analytic Geometry and Calculus I
  KSC-3
- ENGL 100 (3)
  Expository Writing I
  KSC-1
- PHYS 213 (5)
  Engineering Physics I
  KSC-4
- DEN 160 (1)
  College of Engineering Orientation
- COMM 106 (3)
  Public Speaking
  KSC-2
- ELECTIVE (3)
  Arts and Humanities
  KSC-6
- CNS 220 (2)
  Construction Materials
  PR/CO: DEN 160

SPRING
- MATH 221 (4)
  Analytic Geometry and Calculus II
  PR: MATH 220 ≥C
- PHYS 214 (5)
  Engineering Physics II
  PR: MATH 221 ≥C, PHYS 213 ≥C
- ELECTIVE (3)
  Arts and Humanities
  KSC-6
- ELECTIVE (3)
  Design
- COMM 106 (3)
  Public Speaking
  KSC-2
- ELECTIVE (3)
  Social and Behavioral Sciences
  KSC-5

YEAR 2

FALL
- MATH 222 (4)
  Analytic Geometry and Calculus III
  PR: MATH 221 ≥C
- PHYS 214 (5)
  Engineering Physics II
  PR: MATH 222 ≥C, PHYS 213 ≥C
- CE 333 (3)
  Statics
  PR: MATH 221 ≥C, PHYS 213 ≥C
- ARE 010 (0)
  ARE 012 (0)
  (14 credit hours)

SPRING
- MATH 340 (4)
  Elementary Differential Equations
  PR: MATH 221 ≥C
- ME 513 (3)
  Thermodynamics I
  PR: MATH 222 ≥C, PHYS 213 ≥C
- CE 333 (3)
  Statics
  PR: MATH 221 ≥C, PHYS 213 ≥C
- ARE 010 (0)
  ARE 012 (0)
  (15 credit hours)

YEAR 3

FALL
- CE 537 (3)
  Introduction to Structural Analysis
  PR: CE 333 ≥C
- ARE 421 (3)
  Plan Reading & Systems Communications
  PR: ARE 295 ≥C, CE 332 ≥C
- ARE 551 (3)
  Electrical Systems I
  PR: ARE 295 ≥C, PHYS 214 ≥C
- ARE 552 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 553 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 561 (3)
  Electrical Systems II
  PR: ARE 551 ≥C
- ARE 562 (3)
  Mechanical Systems I
  PR: ARE 551 ≥C
- ARE 563 (3)
  Mechanical Systems II
  PR: ARE 552 ≥C
- ARE 564 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 565 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 566 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 567 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 568 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 569 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 571 (3)
  Systems Integration & Design
  PR: ARE 295, 521, 561
- ARE 572 (3)
  Design
  PR: ARE 571 ≥C
- ARE 573 (3)
  Design
  PR: ARE 571 ≥C
- ARE 574 (3)
  Design
  PR: ARE 571 ≥C
- ARE 575 (3)
  Design
  PR: ARE 571 ≥C
- ARE 576 (3)
  Design
  PR: ARE 571 ≥C
- ARE 577 (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Social and Behavioral Sciences
  KSC-5
- ELECTIVE (3)
  Institutional
  KSC-7
- ELECTIVE (3)
  Institutional
  KSC-7

SPRING
- ARE 551 (3)
  Electrical Systems I
  PR: ARE 295 ≥C, PHYS 214 ≥C
- ARE 552 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 553 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 554 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 555 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 556 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 557 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 558 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 559 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 560 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 561 (3)
  Electrical Systems II
  PR: ARE 551 ≥C
- ARE 562 (3)
  Mechanical Systems II
  PR: ARE 551 ≥C
- ARE 563 (3)
  Mechanical Systems II
  PR: ARE 552 ≥C
- ARE 564 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 565 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 566 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 567 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 568 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 569 (3)
  Structural Systems II
  PR: ARE 553 ≥C
- ARE 570 (3)
  Systems Integration & Design
  PR: ARE 295, 521, 561
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C

YEAR 4

FALL
- ARE 551 (3)
  Electrical Systems I
  PR: ARE 295 ≥C, PHYS 214 ≥C
- ARE 552 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 553 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 554 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 555 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 556 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 557 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 558 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 559 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 560 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ELECTIVE (3)
  Arts and Humanities
  KSC-6
- ELECTIVE (3)
  Institutional
  KSC-7
- ELECTIVE (3)
  Institutional
  KSC-7

SPRING
- ARE 551 (3)
  Electrical Systems I
  PR: ARE 295 ≥C, PHYS 214 ≥C
- ARE 552 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 553 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 554 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 555 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 556 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 557 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 558 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 559 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ARE 560 (3)
  Structural Systems I
  PR: ARE 295 ≥C, CE 333 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C
- ELECTIVE (3)
  Design
  PR: ARE 571 ≥C

Flowchart is for advising purposes only. Students are responsible for complying with University Catalog requirements.
Architectural Engineering Curriculum Notes

A letter grade of C or better is required for all prerequisite courses prior to taking subsequent departmental and non-departmental prefix courses. A letter grade of C or better is required for all graded departmental prefix courses applied to the degree.

**Technical Electives**

- Design electives are to be selected from the current approved department list. Minimum 9 hours, maximum 12 hours required.
- Engineering electives are to be selected from the current approved department list. Minimum 3 hours, maximum 6 hours required.
- Complementary electives are to be selected from the approved department list. Minimum 0 hours, maximum 3 hours required.
- Design, Engineering and Complementary elective information can be found at are-cns.k-state.edu/undergrad/are.
- A degree requirement for the Bachelor of Science in architectural engineering includes taking the NCEES FE Exam and reporting individual passing or non-passing results. This action is required as a course completion requirement for ARE 671 – ARE Capstone. Failure to provide the required information will result in a failing grade for ARE 671 and non-completion of the degree.

**K-State Core**

The K-State Core (KSC) is the university's version of the systemwide general education framework established by the Kansas Board of Regents.

- **KSC requirement 1** – English (6 hours)
- **KSC requirement 2** – Communications (3 hours)
- **KSC requirement 3** – Math and Statistics (3 hours)
- **KSC requirement 4** – Natural and Physical Sciences (4-5 hours)
- **KSC requirement 5** – Social and Behavioral Sciences (6 hours)
- **KSC requirement 6** – Arts and Humanities (6 hours)
- **KSC requirement 7** – Institutional Electives (6 hours)

To view course lists for each requirement, visit k-state.edu/provost/kstate-core.

*Requires two courses from two different subject areas.