REQUIREMENTS FOR THE BACHELOR OF SCIENCE

GALLOGLY COLLEGE OF ENGINEERING

THE UNIVERSITY OF OKLAHOMA

Academic Year

For Students Entering the Oklahoma State System for Higher Education Summer 2025 through Spring 2026

| General Requirements | |
|--|------|
| Minimum Total Credit Hours | 129 |
| Minimum Retention/Graduation Grade Point Averages: | |
| Overall - Combined and OU | 2.00 |
| Major - Combined and OU | 2.00 |
| Curriculum - Combined and OU | 2.00 |
| | |

| Duoguana |
|---------------------------|
| Program |
| Architectural Engineering |
| B035 |
| Bachelor of Science |
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OU encourages students to complete at least 33 hours of applicable coursework each year to have the opportunity to graduate in 4 years.

GENERAL EDUCATION AND COLLEGE REQUIREMENTS

Courses designated as Core I, II, III, IV, or V are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list, including at least one upper-division Gen. Ed. course outside of the student's major. Courses graded P/NP will not apply.

A grade of C or better is required in each course in the curriculum, including all prerequisite

UNIVERSITY-WIDE GENERAL EDUCATION (MINIMUM 40 HOURS) AND COLLEGE REQUIREMENTS

| Code | Title | Credit Hours |
|--------------------------------|---|--------------|
| • | ic and Oral Communication | |
| English Composition | | |
| ENGL 1113 | Principles of English Composition | 3 |
| ENGL 1213 | Principles of English Composition | 3 |
| or EXPO 1213 | Expository Writing | |
| | in the same language) | 0.10 |
| Beginning Course | be met by two years of the same language in high school: | 0-10 |
| | , continued (0-5 hours) | |
| Mathematics | , continued (o 3 nours) | |
| MATH 1914 | Differential and Integral Calculus I (Core I) 1,2 | 4 |
| Core Area II: Natura | l Science (including one laboratory) | |
| PHYS 2514 | General Physics for Engineering and Science Majors (Core | 4 |
| | II) ² | _ |
| CHEM 1315 | General Chemistry (Core II-Lab) ² | 5 |
| or CHEM 1335 | General Chemistry I: Signature Course | |
| Core Area III: Social | Science | |
| P SC 1113 | American Federal Government | 3 |
| Choose one course ³ | | 3 |
| Core Area IV: Arts & | Humanities | |
| Artistic Forms | | |
| Choose one course ³ | | 3 |
| Western Culture | | |
| HIST 1483 | United States to 1865 | 3 |
| or HIST 1493 | United States, 1865 to the Present | |
| Will be satisfied in ma | ajor requirements | 0 |
| ARCH 2243 | History of the Built Environment I (Core IV-Western Culture) | |
| World Culture | | |
| ANTH 4623 | Approaches to Cross-Cultural Human Problems (or approved substitute Core IV-World Culture) ³ | 3 |
| Core Area V: First-Y | ear Experience | |
| ENGR 1413 | Pathways to Engineering Thinking (Core V-FYE) ⁴ | 3 |
| Total Credit Hours | | 37-47 |

- 1 MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.
- To be chosen from the University-Wide General Education Approved Course List. Three of these hours must be upper-division (3000-4000).
- Transfer students will need to meet the requirements of the first-year experience course as well as the engineering transfer course. Please see your advisor for your specific enrollment.

FREE ELECTIVES

Electives to bring total applicable hours to the minimum total required for the degree including a minimum of 40 upper-division hours.

Bachelor of Science in Architectural Engineering accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Architectural and Similarly Named Program Criteria.

In order to progress in your curriculum in the Gallogly College of Engineering, and as a specific graduation requirement, a grade of C or better is required in each course in the curriculum, including all prerequisite courses.

MAJOR REQUIREMENTS

| Code | Title | Credit Hours |
|---------------------------|---|--------------|
| Required Courses | | |
| AME 2213 | Thermodynamics | 3 |
| AME 3173 | Heat Transfer | 3 |
| AME 4653 | Air Conditioning Systems | 3 |
| ARCH 1263 | Methods II - Pattern of Architecture | 3 |
| ARCH 2243 | History of the Built Environment I | 3 |
| ARCH 2363 | Materials and Form | 3 |
| CEES 1000 | CEES Seminar (minimum of four semesters required) | 0 |
| CEES 1111 | Exploring CEES | 1 |
| CEES 2113 | Statics | 3 |
| CEES 2153 | Mechanics of Materials | 3 |
| CEES 2213 | CADD Fundamentals | 3 |
| CEES 2223 | Fluid Mechanics | 3 |
| CEES 3263 | Introduction to Dynamics for Architectural and Civil Engineers | 3 |
| CEES 3361 | Soil Mechanics Laboratory | 1 |
| CEES 3363 | Soil Mechanics | 3 |
| CEES 3403 | Materials | 3 |
| CEES 3413 | Structural Analysis I | 3 |
| CEES 3453 | Introduction to Construction Management | 3 |
| CEES 3663 | Structural Design - Steel I | 3 |
| CEES 3673 | Structural Design - Concrete I | 3 |
| CEES 4113 | Building Lighting and Electrical Systems | 3 |
| CEES 4333 | Foundation Engineering | 3 |
| CEES 4753 | Structural Design - Wood | 3 |
| CEES 4991 | Introduction to AE Capstone | 1 |
| CEES 4993 | Architecture Engineering Capstone | 3 |
| ENGR 2431 | Electrical Circuits | 1 |
| ENGR 3401 | Engineering Economics | 1 |
| Professional Electiv | re | |
| Choose any 3000-lev | vel or higher course in CEES | 3 |
| Total Credit Hours | | 71 |

MAJOR SUPPORT REQUIREMENTS

| Code | Title | | |
|---------------------------|--|----|--|
| Math and Science | | | |
| MATH 2924 | Differential and Integral Calculus II | 4 | |
| MATH 2934 | 4 | | |
| MATH 3113 | 3 | | |
| PHYS 2524 | 4 | | |
| Choose one of the follo | wing: | 4 | |
| GEOL 1114 | Physical Geology for Science and Engineering Majors (Core II-Lab) | | |
| Basic Science Electi | ve | | |
| Math (calculus or a | bove) | | |
| Additional College Re | quirements | | |
| ENGR 2002 | Professional Responsibilities and Skills of Engineers and Scientists | 2 | |
| Total Credit Hours | | 21 | |

More information in the catalog: (http://ou-public.courseleaf.com/gallogly-engineering/ civil-engineering-environmental-science/architectural-engineering-bachelor-science/).

SUGGESTED SEMESTER PLAN OF STUDY

Bachelor of Science in Architectural Engineering accredited by the Engineering Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Architectural and Similarly Named Program Criteria.

In order to progress in your curriculum in the Gallogly College of Engineering, and as a specific graduation requirement, a grade of C or better is required in each course in the curriculum, including all prerequisite courses.

Two college-level courses in a single world language are required; this may be satisfied by successful completion of 2 years in a single world language in high school. Students who must take a language at the University will have an additional 6-10 hours of coursework.

| Year | | FIRST SEMESTER | Hours | | SECOND SEMESTER | Hours |
|-----------|---------------------------|---|-------|---------------------------|--|-------|
| FRESHMAN | ENGL 1113 | Principles of English Composition (Core I) | 3 | ENGL 1213 or EXPO 1213 | Principles of English Composition (Core I) or Expository Writing | 3 |
| | | Choose one of the following: | 4 | MATH 2924 | Differential and Integral Calculus II ¹ | 4 |
| | GEOL 1114 | Physical Geology for Science and Engineering Majors (Core II-Lab) | | PHYS 2514 | General Physics for Engineering and Science Majors ($\operatorname{Core}\ II$) | 4 |
| | | MATH (calculus or above) | | ARCH 1263 | Methods II - Pattern of Architecture | 3 |
| | | Basic Science Elective | | CEES 1111 | Exploring CEES | 1 |
| | MATH 1914 | Differential and Integral Calculus I (Core I) $^{\mathrm{1}}$ | 4 | | | |
| | ARCH 2363 | Materials and Form | 3 | | | |
| | ENGR 1413 | Pathways to Engineering Thinking (Core V-FYE) $^{\mathrm{2}}$ | 3 | | | |
| | | CREDIT HOURS | 17 | | CREDIT HOURS | 15 |
| SOPHOMORE | ARCH 2243 | History of the Built Environment I (Core IV: Western Culture) | 3 | CHEM 1315 | General Chemistry (Core II-Lab) ⁴ | 5 |
| | MATH 2934 | Differential and Integral Calculus III ¹ | 4 | ENGR 2002 | Professional Responsibilities and Skills of Engineers and Scientists | 2 |
| M | PHYS 2524 | General Physics for Engineering and Science Majors | 4 | MATH 3113 | Introduction to Ordinary Differential Equations | 3 |
| ОН | CEES 1000 | CEES Seminar ³ | 0 | CEES 1000 | CEES Seminar ³ | 0 |
| SOI | CEES 2213 | CADD Fundamentals | 3 | CEES 2153 | Mechanics of Materials | 3 |
| | CEES 2113 | Statics | 3 | CEES 2223 | Fluid Mechanics | 3 |
| | | CREDIT HOURS | 17 | | CREDIT HOURS | 16 |
| | AME 2213 | Thermodynamics | 3 | AME 3173 | Heat Transfer | 3 |
| | CEES 1000 | CEES Seminar ³ | 0 | CEES 1000 | CEES Seminar ³ | 0 |
| | CEES 3263 | Introduction to Dynamics for Architectural and Civil Engineers | 3 | CEES 3403 | Materials | 3 |
| OR | CEES 3363 | Soil Mechanics | 3 | CEES 3663 | Structural Design - Steel I | 3 |
| JUNIOR | CEES 3361 | Soil Mechanics Laboratory | 1 | CEES 4113 | Building Lighting and Electrical Systems | 3 |
| Ц | CEES 3413 | Structural Analysis I | 3 | CEES 3453 | Introduction to Construction Management | 3 |
| | ENGR 2431 | Electrical Circuits | 1 | ENGR 3401 | Engineering Economics | 1 |
| | P SC 1113 | American Federal Government (Core III) | 3 | | | |
| | | CREDIT HOURS | 17 | | CREDIT HOURS | 16 |
| | AME 4653 | Air Conditioning Systems | 3 | | Choose one of the following: | 3 |
| | CEES 1000 | CEES Seminar ³ | 0 | ANTH 4623 | Approaches to Cross-Cultural Human Problems (Core IV-World Culture) | |
| | CEES 3673 | Structural Design - Concrete I | 3 | | Approved substitute (Core IV-World Culture) | |
| ~ | | CEES Professional Elective ⁵ | 3 | CEES 1000 | CEES Seminar ³ | 0 |
| SENIOR | CEES 4753 | Structural Design - Wood | 3 | CEES 4333 | Foundation Engineering | 3 |
| | CEES 4991 | Introduction to AE Capstone | 1 | CEES 4993 | Architecture Engineering Capstone | 3 |
| | HIST 1483 or HIST 1493 | United States to 1865 (Core IV) or United States, 1865 to the Present | 3 | | Approved Elective: Social Science (Core III) ⁶ | 3 |
| | | | | | Approved Elective: Artistic Forms (Core IV) ⁶ | 3 |
| | | CREDIT HOURS | 16 | | CREDIT HOURS | 15 |

- 1 MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.
- 2 Transfer students will need to meet the requirements of the first-year experience course as well as the engineering transfer course. Please see your advisor for your specific enrollment.
- 3 Students must complete a minimum of four semesters of CEES 1000.
- 4 CHEM 1315 can be substituted with CHEM 1335 (Fall only).
- 5 Professional Elective can be chosen from any 3000-level or higher course in CEES
- To be chosen from the University-Wide General Education Approved Course List. Three of these hours must be upper-division (3000-4000). See list in the Class Schedule.

Courses designated as Core I, II, III, IV, or V are part of the General Education curriculum. Students must complete a minimum of 40 hours of General Education courses, chosen from the approved list.