

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 2023 through Spring 2024

General Requirements	
Minimum Total Credit Hours	130
Minimum Retention/Graduation Grade Point Averages:	
Overall - Combined and OU	2.00
Major - Combined and OU	2.00
Curriculum - Combined and OU	2.00

Program
Architectural Engineering
B035
Bachelor of Science

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 courses.

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

Code	Title	Credit Hours
Core Area I: Symbolic and Oral Communication		
<i>English Composition</i>		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213	Expository Writing	
<i>Language (0-10 hours in the same language)</i>		
This requirement can be met by two years of the same language in high school:		0-10
Beginning Course (0-5 hours)		
Beginning Course, continued (0-5 hours)		
<i>Mathematics</i>		
MATH 1914	Differential and Integral Calculus I (Core I) ^{1,2}	4
Core Area II: Natural Science (including one laboratory)		
PHYS 2514	General Physics for Engineering and Science Majors (Core II) ²	4
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		
<i>Artistic Forms</i>		
Choose one course ³		3
<i>Western Culture</i>		
HIST 1483	United States to 1865	3
or HIST 1493	United States, 1865 to the Present	
Will be satisfied in major requirements		0
ARCH 2243	History of the Built Environment I (Core IV-Western Culture)	
<i>World Culture</i>		
ANTH 4623	Approaches to Cross-Cultural Human Problems (or approved substitute Core IV-World Culture) ³	3
Core Area V: First-Year Experience		
Choose one course ³		3
Total Credit Hours		37-47

¹MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.

²Major support requirements that also satisfy University General Education requirements.

³To be chosen from the University-Wide General Education Approved Course List. Three of these hours must be upper-division (3000-4000).

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 Elective		
Choose any 3000-level or higher course in CEES		3
Total Credit Hours		71

MAJOR SUPPORT REQUIREMENTS

Code	Title	Credit Hours
Math and Science		
MATH 2924	Differential and Integral Calculus II	4
MATH 2934	Differential and Integral Calculus III	4
MATH 3113	Introduction to Ordinary Differential Equations	3
PHYS 2524	General Physics for Engineering and Science Majors	4
Choose one of the following:		4
GEOL 1114	Physical Geology for Science and Engineering Majors (Core II-Lab)	
Basic Science Elective		
Math (calculus or above)		
Additional College Requirements		
ENGR 1410	Freshman Engineering Orientation ¹	0
ENGR 1411	Pathways to Engineering Thinking ¹	1
ENGR 2002	Professional Development	2
Total Credit Hours		22

¹Engineering transfer students may take ENGR 3410 in place of ENGR 1410 and ENGR 3511 in place of ENGR 1411.

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 (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) ¹	4		Approved Elective: First-Year Experience (Core V) ⁶	3
	ENGR 1410	Freshman Engineering Orientation ²	0			
	ENGR 1411	Pathways to Engineering Thinking ²	1			
	ARCH 2363	Materials and Form	3			
	CREDIT HOURS	15		CREDIT HOURS	18	
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 Development	2
	PHYS 2524	General Physics for Engineering and Science Majors	4	MATH 3113	Introduction to Ordinary Differential Equations	3
	CEES 1000	CEES Seminar ³	0	CEES 1000	CEES Seminar ³	0
	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
JUNIOR	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
	CEES 3363	Soil Mechanics	3	CEES 3663	Structural Design - Steel I	3
	CEES 3361	Soil Mechanics Laboratory	1	CEES 4113	Building Lighting and Electrical Systems	3
	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	
SENIOR	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
	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 Engineering transfer students may take ENGR 3410 in place of ENGR 1410 and ENGR 3511 in place of ENGR 1411.

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

⁶ 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.