

**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 <b>Summer 2024 through Spring 2025</b>

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

Program
<b>Architectural Engineering</b>
<b>B035</b>
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
<b>Core Area I: Symbolic and Oral Communication</b>		
<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) <sup>1,2</sup>	4
<b>Core Area II: Natural Science (including one laboratory)</b>		
PHYS 2514	General Physics for Engineering and Science Majors (Core II) <sup>2</sup>	4
CHEM 1315	General Chemistry (Core II-Lab) <sup>2</sup>	5
or CHEM 1335	General Chemistry I: Signature Course	
<b>Core Area III: Social Science</b>		
P SC 1113	American Federal Government	3
Choose one course <sup>3</sup>		3
<b>Core Area IV: Arts &amp; Humanities</b>		
<i>Artistic Forms</i>		
Choose one course <sup>3</sup>		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) <sup>3</sup>	3
<b>Core Area V: First-Year Experience</b>		
ENGR 1413	Pathways to Engineering Thinking (Core V-FYE) <sup>4</sup>	3
<b>Total Credit Hours</b>		<b>37-47</b>

- 1 MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.
- 2 Major support requirements that also satisfy University General Education requirements.
- 3 To be chosen from the University-Wide General Education Approved Course List. Three of these hours must be upper-division (3000-4000).
- 4 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
<b>Required Courses</b>		
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
<b>Professional Elective</b>		
Choose any 3000-level or higher course in CEES		3
<b>Total Credit Hours</b>		<b>71</b>

**MAJOR SUPPORT REQUIREMENTS**

Code	Title	Credit Hours
<b>Math and Science</b>		
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)		
<b>Additional College Requirements</b>		
ENGR 2002	Professional Responsibilities and Skills of Engineers and Scientists	2
<b>Total Credit Hours</b>		<b>21</b>

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

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**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 <sup>1</sup>	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 ) <sup>1</sup>	4			
	ARCH 2363	Materials and Form	3			
	ENGR 1413	Pathways to Engineering Thinking ( Core V-FYE ) <sup>2</sup>	3			
	<b>CREDIT HOURS</b>	<b>17</b>		<b>CREDIT HOURS</b>	<b>15</b>	
SOPHOMORE	ARCH 2243	History of the Built Environment I ( Core IV: Western Culture )	3	CHEM 1315	General Chemistry ( Core II-Lab ) <sup>4</sup>	5
	MATH 2934	Differential and Integral Calculus III <sup>1</sup>	4	ENGR 2002	Professional Responsibilities and Skills of Engineers and Scientists	2
	PHYS 2524	General Physics for Engineering and Science Majors	4	MATH 3113	Introduction to Ordinary Differential Equations	3
	CEES 1000	CEES Seminar <sup>3</sup>	0	CEES 1000	CEES Seminar <sup>3</sup>	0
	CEES 2213	CADD Fundamentals	3	CEES 2153	Mechanics of Materials	3
	CEES 2113	Statics	3	CEES 2223	Fluid Mechanics	3
		<b>CREDIT HOURS</b>	<b>17</b>		<b>CREDIT HOURS</b>	<b>16</b>
JUNIOR	AME 2213	Thermodynamics	3	AME 3173	Heat Transfer	3
	CEES 1000	CEES Seminar <sup>3</sup>	0	CEES 1000	CEES Seminar <sup>3</sup>	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			
		<b>CREDIT HOURS</b>	<b>17</b>		<b>CREDIT HOURS</b>	<b>16</b>
SENIOR	AME 4653	Air Conditioning Systems	3		Choose one of the following:	3
	CEES 1000	CEES Seminar <sup>3</sup>	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 <sup>5</sup>	3	CEES 1000	CEES Seminar <sup>3</sup>	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) <sup>6</sup>	3
					Approved Elective: Artistic Forms (Core IV) <sup>6</sup>	3
	<b>CREDIT HOURS</b>	<b>16</b>		<b>CREDIT HOURS</b>	<b>15</b>	

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

<sup>2</sup> 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.

<sup>3</sup> Students must complete a minimum of four semesters of CEES 1000.

<sup>4</sup> CHEM 1315 can be substituted with CHEM 1335 (Fall only).

<sup>5</sup> Professional Elective can be chosen from any 3000-level or higher course in CEES

<sup>6</sup> 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.