

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 2021 through Spring 2022

General Requirements	
Minimum Total Credit Hours	128
Minimum Retention/Graduation Grade Point Averages:	
Overall - Combined and OU	2.00
Major - Combined and OU	2.00

Program
Aerospace Engineering
B010
Bachelor of Science

OU encourages students to complete at least hours of applicable coursework each year to have the opportunity to graduate in years.

Accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>

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. AME courses are sequential and usually offered only in the semester shown; note prerequisites.

In order to progress into 2nd year courses in AME, students must successfully complete (grade C or better) MATH 1914; MATH 2924; PHYS 2514 and CHEM 1315 with 3.0 Combined Retention GPA, and possess a minimum 3.0 Combined Retention GPA in 24 or more credit hours.

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.

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.

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
	CHEM 1315	General Chemistry (Core II-Lab) ¹	5	MATH 2924	Differential and Integral Calculus II ²	4
	MATH 1914	Differential and Integral Calculus I (Core I) ²	4	PHYS 2514	General Physics for Engineering and Science Majors (Core II)	4
	HIST 1483 or HIST 1493	United States to 1865 (Core IV) or United States, 1865 to the Present	3	C S 1313	Programming for Non-Majors with C	3
	ENGR 1411	Freshman Engineering Experience ³	1	Approved Elective: First-Year Experience (Core V) ⁴		3
	CREDIT HOURS		16	CREDIT HOURS		17
SOPHOMORE	MATH 2934	Differential and Integral Calculus III ²	4	MATH 3413	Physical Mathematics I	3
	PHYS 2524	General Physics for Engineering and Science Majors	4	MATH 3401	Numerical Methods With Matlab	1
	AME 2113	Statics	3	AME 2303	Materials, Design and Manufacturing Processes	3
	AME 2213	Thermodynamics	3	AME 2533	Dynamics	3
	AME 2223	Introduction to Aerospace Engineering	3	AME 2623	Circuits and Sensors	3
	CREDIT HOURS		17	Approved Elective: Artistic Forms (Core IV) ⁴		3
JUNIOR	AME 3112	Solid Mechanics Lab	2	AME 3103	Interactive Engineering Design Simulation	3
	AME 3143	Solid Mechanics	3	AME 3333	Flight Mechanics	3
	AME 3253	Aerodynamics	3	AME 3523	Aerospace Structural Analysis	3
	AME 3272	Windtunnel Laboratory	2	AME 3623	Embedded Real-Time Systems	3
	AME 4383	Control Systems	3	P SC 1113	American Federal Government (Core III)	3
	ENGR 2002	Professional Development	2	Approved Experimental Elective ⁵		2
SENIOR	CREDIT HOURS		15	CREDIT HOURS		17
	AME 4243	Aerospace Propulsion Systems	3	AME 4373	Aerospace Systems Design II	3
	AME 4273	Aerospace Systems Design I	3	AME Approved Technical Elective ⁶		3
	AME 4493	Space Sciences and Astrodynamics	3	COMM 3513	Intercultural Communication (or an advisor-approved substitution) (Western Culture - Core IV) ⁴	3
	AME 4513	Flight Controls	3	ANTH 4623	Approaches to Cross-Cultural Human Problems (or an advisor-approved substitution) (World Culture - Core IV) ⁴	3
	AME Approved Technical Elective ⁶		3	Approved Elective: Social Science (Core III) ⁴		3
SENIOR	CREDIT HOURS		15	CREDIT HOURS		15

¹ CHEM 1315 can be substituted with CHEM 1335 (Fall only).

² MATH 1823, MATH 2423, MATH 2433, and MATH 2443 sequence can be substituted for MATH 1914, MATH 2924, and MATH 2934.

³ Engineering transfer students may take ENGR 3511 in place of ENGR 1411.

⁴ To be chosen from the University-Wide General Education Approved Course List. Three of these 12 hours must be upper-division (3000-4000).

⁵ It is recommended that a student take AME 4802 for the experimental elective.

⁶ A list of Technical Electives is available in the AME Office, Felgar Hall 212.