

REQUIREMENTS FOR THE BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING
GALLOGLY COLLEGE OF ENGINEERING
THE UNIVERSITY OF OKLAHOMA

Academic Year	General Requirements	Program
For Students Entering the Oklahoma State System for Higher Education Summer 2019 through Spring 2020	Minimum Total Credit Hours..... 123 Minimum Retention/Graduation Grade Point Averages: Overall - Combined and OU 2.00 Major - Combined and OU 2.00	Mechanical Engineering (Standard) B675 Bachelor of Science in Mechanical Engineering

OU encourages students to complete at least 31 hours of applicable coursework each year to have the opportunity to graduate in 4 years.

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

- **DEPARTMENTAL PROGRESSION REQUIREMENTS:** 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. AP credit is acceptable for any of these required courses.

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.

Two college-level courses in a single foreign language are required; this may be satisfied by successful completion of 2 years in a single foreign language in high school. Students who must take foreign 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
	CHEM 1315	General Chemistry 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
	ENGR 1411	Freshman Engineering Experience ³	1	P SC 1113	American Federal Government (Core III)	3
	HIST 1483 or HIST 1493	United States, 1492 to 1865 (Core IV) or United States, 1865 to the Present	3		REFER TO DEPARTMENTAL PROGRESSION REQUIREMENTS LISTED AT THE TOP OF THIS PAGE	
	CREDIT HOURS		16	CREDIT HOURS		14
SOPHOMORE	MATH 2934	Differential and Integral Calculus III ²	4	MATH 3113	Introduction to Ordinary Differential Equations	3
	PHYS 2524	General Physics for Engineering and Science Majors (Core II)	4	AME 2303	Materials, Design and Manufacturing Processes	3
	AME 2113	Statics	3	AME 2533	Dynamics	3
	AME 2213	Thermodynamics	3	ENGR 2431	Electrical Circuits	1
	AME 2402	Engineering Computing	2	ENGR 2531	Electrical Circuits II	1
				ENGR 3431	Electromechanical Systems	1
CREDIT HOURS		16	CREDIT HOURS		15	
JUNIOR	AME 3112	Solid Mechanics Lab	2	AME 3103	Interactive Engineering Design Simulation	3
	AME 3143	Solid Mechanics	3	AME 3122	Heat Transfer and Fluid Mechanics Lab	2
	AME 3153	Fluid Mechanics	3	AME 3173	Heat Transfer	3
	AME 3723	Numerical Methods For Engineering Computation	3	AME 3353	Design of Mechanical Components	3
	ENGR 2002	Professional Development	2	ENGL 3153	Technical Writing	3
		Approved Technical Elective ⁵	3		Approved Technical Elective ⁵	3
CREDIT HOURS		16	CREDIT HOURS		17	
SENIOR	PHYS 3223	Modern Physics for Engineers	3	AME 4553	Design Practicum (Capstone)	3
	AME 3363	Design of Thermal-Fluid Systems	3	COMM 3513	Intercultural Communication (or an advisor approved substitution) (Western Civ. & Culture - Core IV) ⁴	3
	AME 4163	Principles of Engineering Design	3	ANTH 4623	Approaches to Cross-Cultural Human Problems (or an advisor-approved substitution) (Non-Western Culture - Core IV) ⁴	3
		Approved Engineering Science Elective ⁵	3		Approved Engineering Science Elective ⁵	3
		Approved Experimental Elective ⁵	2		Approved Elective: Artistic Forms (Core IV) ⁴	3
CREDIT HOURS		14	CREDIT HOURS		15	

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

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 A list of Technical, Experimental, and Engineering Science electives is available in the AME Office, FH 212.