

Major: General Engineering - Mechanical Emphasis Degree: B.S.

2024 - 2025

COMMON CO	RE (20 hours)	Credit
All students take th	e following courses.	Hours
CORE 1002	OBU Connections [†]	2
CORE 1023	The Contemporary World	3
CORE 1043	Composition I	3
CORE 1113	Survey of the Bible	3
CORE 1123	Interpreting the Bible	3
CORE 2233	World Literature	3
CORE 2243	History of World Societies	3
CORE 2334	Scientific Inquiry (Satisfied by major)	0
CORE 3023	Scientific Connections (Satisfied by major)	0
	RE (17-18 hours)	
	d from each of the seven categories.	
Analytic & Qua	Intitative Reasoning (Satisfied by major)	
Students with an Mi	PI less than 80 must take one of the MATH courses.	
MATH 1003	College Algebra	
MATH 1033	Mathematics for the Liberal Arts	0
PHIL 1003	Introduction to Philosophy	
PHIL 1023	Logic	
Applied Skills	(Choose one)	
COMM 1003	Fundamentals of Public Speaking	3
FINN 2003	Personal Finance	
Artistic Engage	ement (Choose one)	
May be satisfied by pa	articipation in the European Study Program.	
FINA 3113	Fine Arts: Art	3
FINA 3123	Fine Arts: Music	
FINA 3133	Fine Arts: Theatre	
Civic Engagem	nent in America (Choose one)	
PSCI 2013	American National Government	3
HIST 2003	United States History to 1877	
HIST 2013	United States History Since 1877	
Intercultural A	opreciation and Communication† (Choose two)	
	of credit in the same foreign language. May also be	6
	oved language-intensive study-abroad experience.	
Physical Well-	being (One course)	
KIN 1002	Concepts of Wellness	2-3
KIN 2073	Health and Safety	
KIN 2013	Outdoor Leisure Pursuits	
EXPERIENTIAL	CORE (1 hour)	
CHAP 1000	Chapel (7 credits required)	0
FINA 4011	Arts Engagement Series	1
Total Core Rec	puirements	38-39
[†] For more detail, refer to the School of Interdisciplinary Studies section of the catalog.		

GENERAL GRADUATION REQUIREMENTS		
7 Chapel Credits, or 1 per semester for transfer students		
2.000 minimum GPA (overall, OBU, major, and minor)		
At least 24 hours with grades of C or higher in the major		
Jr./Sr. Hours: At least 39 total, 12 in the major and 6 in the minor		
At least 60 hours taken at OBU, including 30 of last 36 hours.		

		2 "	
MAJOR		Credit Hours	
Science & Math (37 hours)			
PHYS 2054	University Physics I	4	
PHYS 2064	University Physics II	4	
PHYS 3004	Introduction to Modern Physics	4	
PHYS 3033 or	Electricity and Magnetism <u>or</u>		
PHYS 4043	Quantum Mechanics	3	
PHYS 4003	Classical Mechanics	3	
CHEM 1004	General Chemistry I	4	
MATH 2014	Calculus I (May have prerequisites, depending on student's MPI.)	4	
MATH 2024	Calculus II	4	
MATH 3034	Calculus III	4	
MATH 3043	Differential Equations	3	
Engineering C	ore (28 hours)		
ENGR 1123	Introduction to Physics and Engineering	3	
ENGR 1112	Engineering Graphics	2	
ENGR 2102	Introduction to Engineering Laboratory	2	
ENGR 2123	Statics	3	
ENGR 2133	Dynamics	3	
ENGR 3023	Thermodynamics	3	
ENGR 3124	Electrical Circuits	4	
ENGR 3233	Numerical Methods	3	
ENGR 4511	Engineering Proficiency	1	
ENGR 4601	Engineering Capstone I	1	
ENGR 4603	Engineering Capstone II	3	
	ngineering Emphasis (22 hours)		
ENGR 3203	Strength of Materials	3	
ENGR 3213	Fluid Mechanics	3	
ENGR 3224	Engineering Materials	4	
ENGR 3303	Heat Transfer	3	
ENGR 4303	Mechanical Element Design	3	
ENGR 4313	Mechanical Design Control	3	
ENGR 4323	Heating, Ventilation, and Air Conditioning	3	
TOTAL		87	
ADDITIONAL A	AREA REQUIREMENTS		
ENGL 3013 <u>or</u>	Technical & Professional Writing or	2	
CORE 2053	Composition II	3	
The following co	ourses are strongly recommended:		
PHYS 2073	University Physics III		
MATH 3063	Probability & Statistics	0-9	
ECON 2023	Principles of Microeconomics	0.40	
TOTAL 3-12			
CREDIT HOUR SUMMARY			
CORE		38-39 87	
MAJOR			
	AREA REQUIREMENTS	3-12	
TOTAL		128-138	