

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

2023 - 2024

COMMON CO	RE (20 hours)	Credit
All students take th	ne following courses.	Hours
CORE 1002	OBU Connections <sup>†</sup>	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)	
	ed from each of the seven categories.	
Analytic & Qua	antitative Reasoning (Satisfied by major)	
	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	ppreciation and Communication† (Choose two)	
	of credit in the same foreign language. May also be	6
satisfied by appi	roved language-intensive study-abroad experience.	
Physical Well-	being (One course)	
KIN 1002	Concepts of Wellness	2-3
KIN 2073	Health and Safety	
LST 2013	Outdoor Leisure Pursuits	
EXPERIENTIAL	CORE (1 hour)	
CHAP 1000	Chapel (7 credits required)	0
FINA 4011	Arts Engagement Series	1
Total Core Rec	quirements	38-39
<sup>†</sup> 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.		

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MAJOR		Credit Hours	
Science & Ma	th (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	
Mechanical Engineering Emphasis (22 hours)			
ENGR 3203	Strength of Materials	3	
ENGR 3213	Fluid Mechanics	3	
ENGR 3213	Engineering Materials	4	
ENGR 3303	Heat Transfer	3	
		3	
ENGR 4303	Mechanical Element Design	3	
ENGR 4313	Mechanical Design Control	3	
ENGR 4323	Heating, Ventilation, and Air Conditioning		
TUTAL		87	
ADDITIONAL A	AREA REQUIREMENTS		
ENGL 3013 <u>or</u>	Technical & Professional Writing or	3	
CORE 2053	Composition II	0	
The following courses are strongly recommended:			
PHYS 2073	University Physics III	0.0	
MATH 3063	Probability & Statistics Principles of Microeconomics	0-9	
TOTAL	r miciples of wholeeconofflics	3-12	
CREDIT HOUR SUMMARY			
CORE			
MAJOR			
ADDITIONAL AREA REQUIREMENTS			
TOTAL		3-12 128-138	
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