## School of Engineering and Engineering Technology

## Mechanical Engineering, B.S. MECHANICAL ENGINEERING - <u>Optional</u> Biomechanics Focus

## (MEGR/BSME)

**2025-26**COURSE SEQUENCE

Note: The standard Mechanical Engineering course sequence, including the optional Aerospace Focus, are on a separate course sequence sheet.

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First Semester - Fall					
		17	Hours		
BIBL	1033	3	Biblical Literature		
CHEM	1111	1	General Chemistry I Lab		
CHEM	1113	3	General Chemistry I		
ENGL	1013	3	English Composition I		
ENGR	1513	3	Intro to Engr Practice I (Fall Only)		
LETU	1101	1	Cornerstones of Life and Learning		
MATH	1903	3	Calculus I (1)		
Third Semester - Fall					
		17			

Second Semester - Spring						
	17					
ENGL	1023	3	English Composition II			
ENGR	1311	1	Manufacturing Processes Lab			
ENGR	1523	3	Intro to Engr Practice II (Spring Only)			
MATH	2013	3	Calculus II (1)			
PHYS	2011	1	University Physics I Lab (Spring Only)			
PHYS	2013	3	University Physics I (Spring Only)			
THEO	2043	3	Biblical Theology for Life (2)			

Third Semester - Fall				
	17			
COSC 130	03 3	Computer Science I		
ENGR 270	04 4	Proj. Mgmt, Design & Entrepren		
MATH 202	23 3	Calculus III		
MEGR 20	13 3	Statics (1)		
PHYS 202	21 1	University Physics II Lab (Fall Only)		
PHYS 202	23 3	University Physics II (Fall Only)		

Fourth Semester - Spring				
	17	7		
COMM 1	113 3	Introduction to Speech Communication		
ENGR 20	053 3	Introduction to Electric Circuits		
ENGR 24	400 0	Sophomore Design Seminar (Spring Only)		
MATH 22	203 3	Differential Equations		
MEGR 20	023 3	Dynamics <sup>(1)</sup>		
MEGR 2	122 2	Mechanical Engineering Lab I		
MEGR 33	323 3	Mechanics of Materials (1)		

Fifth Semester - Fall						
	16					
	BIBL	3	Biblical Engagement Elective (3)			
	BIOL 2011	1	Human A & P I Lab (Fall Only)			
	BIOL 2013	3	Human A & P I (Fall Only)			
	MATH 3403	3	Statistics			
	MEGR 3513	3	Fluid Mechanics			
	MEGR 3713	3	Thermodynamics			

	Sixth Semester - Spring					
	1.	5				
	MATH 2303 3	,	Linear Algebra			
	ENGR 2013 3	,	Materials Engineering			
	MEGR 3133 3	,	Mechanical Engineering Lab II (Spring Only)			
	MEGR 4723 3	,	Heat Transfer			
	3	,	Civic Engagement Elective (4)			
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Seventh Semester - Fall					
14					
ENGR	4813	3	Senior Design I <sup>(6)</sup>		
BEGR	3614	4	Muscular Skeletal Biomechanics (Fall Only)		
BEGR	3811	1	Jr. Biomedical Engr. Research (Fall Only)		
MEGR	4423	3	Mechanical Vibrations (Fall Only) <sup>(7)</sup>		
MEGR	4443	3	Machine Design (Fall Only)		

Eighth Semester - Spring				
15				
- Comor Booigii ii				
3 Math Elective <sup>(4)</sup>				
3 Theological Engagement Elective (9)				
3 Humanites and Fine Arts Elective (4)				
3 Civic Engagement Elective (4)				

**TOTAL HOURS** 128

- 1: Minimum grade of C is required.
- 2: BIBL1033 is a prerequisite
- 3: Any 2000+ BIBL course
- 4: See approved list available in Engineering Office
- Approved 3000+ Engineering, Business, Science, Math course, approved 2000+ Computer Science course (3cr), BIOL 2011 or 2013 (See approved electives list available in SEET Office)
- BSME senior standing (last full year at LETU) is a pre-requisite
- 7: EEGR 3523 Mechatronics may be substituted for MEGR 4423 Mechanical Vibrations pre-requisite is EEGR 3213 Digital Elec.
- 8: Senior Design II must be the second half of the same project as Senior Design I (sequential semesters)
- Any 2000+ level BIBL course, +A30:M57CCLT 3103, CCLT 3203, CCLT 4103, CMIN 3303, CMIN 3403, THEO 3063, THEO 3103, THEO 3133, THEO 3203, THEO 4941-4993 Special Topics classes

