### **School of Engineering and Engineering Technology**

# Bachelor of Science MECHANICAL ENGINEERING (MEGR/BSME)

2025-26

**COURSE SEQUENCE** 

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			

Second Semester - Spring			
	17		
ENGL 10	023 3	English Composition II	
ENGR 10	311 1	Manufacturing Processes Lab	
ENGR 15	523 3	Intro to Engr Practice II (Spring Only)	
MATH 20	013 3	Calculus II <sup>(1)</sup>	
PHYS 20	011 1	University Physics I Lab (Spring Only)	
PHYS 20	013 3	University Physics I (Spring Only)	
THEO 2	043 3	Biblical Theology for Life <sup>(2)</sup>	

	Third Semester - Fall				
		17			
cosc	1303	3	Computer Science I		
ENGR	2704	4	Proj. Mgmt, Design & Entrepren		
MATH	2023	3	Calculus III		
MEGR	2013	3	Statics <sup>(1)</sup>		
PHYS	2021	1	University Physics II Lab (Fall Only)		
PHYS	2023	3	University Physics II (Fall Only)		

Fourth Semester - Spring					
	17				
COMM 1113	3	Introduction to Speech Communication			
ENGR 2053	3	Introduction to Electric Circuits			
ENGR 2400	0	Sophomore Design Seminar (Spring Only)			
MATH 2203	3	Differential Equations			
MEGR 2023	3	Dynamics <sup>(1)</sup>			
MEGR 2122	2	Mechanical Engineering Lab I			
MEGR 3323	3	Mechanics of Materials <sup>(1)</sup>			

Fifth Semester - Fall				
15				
BIBL	3	Biblical Engagement Elective (3)		
ENGR 231	3 3	Materials Engineering		
MATH 3403	3	Statistics		
MEGR 3513	3 3	Fluid Mechanics		
MEGR 371:	3 3	Thermodynamics		

Sixth Semester - Spring			
		15	
MATH	2303	3	Linear Algebra
MEGR	3133	3	Mechanical Engineering Lab II (Spring Only)
MEGR	4723	3	Heat Transfer
		3	Civic Engagement Elective (4)
		3	Approved STEM Elective (5)

Seventh Semester - Fall					
	15				
ENGR 4813	3	Senior Design I <sup>(6)</sup>			
MEGR 4423	3	Mechanical Vibrations (Fall Only) <sup>(7)</sup>			
MEGR 4443	3	Machine Design (Fall Only)			
	3	Civic Engagement Elective (4)			
	3	Approved STEM Elective (5)			

Eighth Semester - Spring			
15			
ENGR 4823	3 Senior Design II (8)		
MATH	3 Math Elective (4)		
THEO	3 Theological Engagement Elective (9)		
	3 Humanities and Fine Arts Elective (4)		
	3 BSME Technical Elective (4)		

#### **TOTAL HOURS 128**

## **Optional Aerospace Engineering Focus within the BSME**

Select 2 of the following 4 courses

MEGR 4243: Applied Aerodynamics (Fall, Grad offered)

MEGR 4313: Aircraft Dynamics & Control (Spring, Grad Offered)

MEGR 4643: Compressible Flow (Spring, Grad Offered)

MEGR 4233: Aerospace Propulsion Sys. (Fall, Grad Offered)

#### **Count as STEM or BSME Technical Electives**

- 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) (See approved electives list available in SEET Office)
- Counts as STEM Elective ONLY

AERO 3153: Aviation Safety Factors (online; Fall, Spring, Summer)

- 6: BSME senior standing (last full year at LETU) is a pre-requisite
  7: EEGR 3523 Mechatronics may be substituted for MEGR 4423 Mechanical Vibrations
- 8: Senior Design II must be the second half of the same project as Senior Design I (sequential semesters)
- 9: Any 2000+ level BIBL course, CCLT 3103, CCLT 3203, CCLT 4103, CMIN 3303, CMIN 3403, THEO 3063, THEO 3103, THEO 3133, THEO 3203, THEO 4941-4993 Special Topics classes

Sophomore

Design Seminar

**ENGR 2400** 

(S)

Corequisite

(F) = Fall Only

(S) = Spring Only

\* Senior standing, completion of junior courses in

concentration, and consent of instructor required.

**ENGR 1513** 

(F)

**ENGR 1523** 

(S)