School of Engineering and Engineering Technology Bachelor of Science

Mechanical Engineering (BSME)

2023-24

COURSE SEQUENCE

| First Semester - Fall | Second Semester - Spring |
|---|--|
| 17 Hours BIBL 1033 3 Biblical Literature | 17 ENGL 1023 3 English Composition II |
| CHEM 1111 1 General Chemistry I Lab | ENGR 1311 1 Manufacturing Processes Lab |
| CHEM 1113 3 General Chemistry I | ENGR 1523 3 Intro to Engr Practice II (Spring Only) |
| ENGL 1013 3 English Composition I | MATH 2013 3 Calculus II ⁽¹⁾ |
| ENGR 1513 3 Intro to Engr Practice I (Fall Only) | PHYS 2011 1 University Physics I Lab (Spring Only) |
| LETU 1101 1 Cornerstones of Life and Learning | PHYS 2013 3 University Physics I (Spring Only) |
| MATH 1903 3 Calculus I ⁽¹⁾ | THEO 2043 3 Biblical Theology for Life ⁽²⁾ |
| Third Semester - Fall | Fourth Semester - Spring |
| 17 | 17 |
| COSC 1303 3 Computer Science I | COMM 1113 3 Introduction to Speech Communication ENGR 2053 3 Introduction to Electric Circuits |
| ENGR 2704 4 Proj. Mgmt, Design & Entrepren MATH 2023 3 Calculus III | ENGR 2053 3 Introduction to Electric Circuits ENGR 2400 0 Sophomore Design Seminar (Spring Only) |
| MEGR 2013 3 Statics ⁽¹⁾ | MATH 2203 3 Differential Equations |
| PHYS 2021 1 University Physics II Lab (Fall Only) | MEGR 2023 3 Dynamics ⁽¹⁾ |
| PHYS 2023 3 University Physics II (Fall Only) | MEGR 2122 2 Mechanical Engineering Lab I |
| | MEGR 3323 3 Mechanics of Materials ⁽¹⁾ |
| | Sixth Semester - Spring |
| | |
| Fifth Semester - Fall 15 | |
| 15 | 15 |
| 15 BIBL 3 Biblical Engagement Elective ⁽³⁾ | |
| 15 BIBL 3 Biblical Engagement Elective ⁽³⁾ | 15 MATH 2303 3 Linear Algebra |
| 15 BIBL 3 Biblical Engagement Elective ⁽³⁾ ENGR 2313 3 Materials Engineering | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) |
| 15 BIBL 3 Biblical Engagement Elective ⁽³⁾ ENGR 2313 3 Materials Engineering MATH 3403 3 Statistics | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) MEGR 4723 3 Heat Transfer (Spring Only) |
| Image: High state | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) MEGR 4723 3 Heat Transfer (Spring Only) 3 Civic Engagement Elective ⁽⁴⁾ 3 Approved STEM Elective ⁽⁵⁾ |
| 15 BIBL 3 Biblical Engagement Elective (3) ENGR 2313 3 Materials Engineering MATH 3403 3 Statistics MEGR 3513 3 Fluid Mechanics (Fall Only) MEGR 3713 3 Thermodynamics | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) MEGR 4723 3 Heat Transfer (Spring Only) 3 Civic Engagement Elective ⁽⁴⁾ 3 Approved STEM Elective ⁽⁵⁾ |
| 15 BIBL 3 Biblical Engagement Elective (3) ENGR 2313 3 Materials Engineering MATH 3403 3 Statistics MEGR 3513 3 Fluid Mechanics (Fall Only) MEGR 3713 3 Thermodynamics Seventh Semester - Fall 15 ENGR 4813 3 Senior Design I (6) | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) MEGR 4723 3 Heat Transfer (Spring Only) 3 Civic Engagement Elective ⁽⁴⁾ 3 Approved STEM Elective ⁽⁵⁾ Eighth Semester - Spring 15 ENGR 4823 3 Senior Design II ⁽⁸⁾ |
| 15 BIBL 3 Biblical Engagement Elective (3) ENGR 2313 3 Materials Engineering MATH 3403 3 Statistics MEGR 3513 3 Fluid Mechanics (Fall Only) MEGR 3713 3 Thermodynamics Seventh Semester - Fall 15 ENGR 4813 3 Senior Design I (6) MEGR 4423 MEGR 4423 3 MEGR 4423 3 | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) MEGR 4723 3 Heat Transfer (Spring Only) 3 Civic Engagement Elective ⁽⁴⁾ 3 Approved STEM Elective ⁽⁵⁾ Eighth Semester - Spring 15 15 MATH 3 Math Elective ⁽⁴⁾ |
| 15 BIBL 3 Biblical Engagement Elective ⁽³⁾ ENGR 2313 3 Materials Engineering MATH 3403 3 Statistics MEGR 3513 3 Fluid Mechanics (Fall Only) MEGR 3713 3 Thermodynamics Seventh Semester - Fall 1 15 ENGR 4813 3 Senior Design I ⁽⁶⁾ MEGR 4423 3 Mechanical Vibrations (Fall Only) ⁽⁷⁾ MEGR 4443 3 Machine Design (Fall Only) | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) MEGR 4723 3 Heat Transfer (Spring 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 3 THEO 3 |
| 15 BIBL 3 Biblical Engagement Elective (3) ENGR 2313 3 Materials Engineering MATH 3403 3 Statistics MEGR 3513 3 Fluid Mechanics (Fall Only) MEGR 3713 3 Thermodynamics Seventh Semester - Fall MEGR 4813 3 Senior Design I (6) MEGR 4423 3 Mechanical Vibrations (Fall Only)(7) MEGR 4443 3 Machine Design (Fall Only) 3 Civic Engagement Elective (4) | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) MEGR 4723 3 Heat Transfer (Spring 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 3 Math Elective ⁽⁴⁾ THEO 3 Ingenuity Elective ⁽⁴⁾ |
| 15 BIBL 3 Biblical Engagement Elective ⁽³⁾ ENGR 2313 3 Materials Engineering MATH 3403 3 Statistics MEGR 3513 3 Fluid Mechanics (Fall Only) MEGR 3713 3 Thermodynamics Seventh Semester - Fall 1 15 ENGR 4813 3 Senior Design I ⁽⁶⁾ MEGR 4423 3 Mechanical Vibrations (Fall Only) ⁽⁷⁾ MEGR 4443 3 Machine Design (Fall Only) | 15 MATH 2303 3 Linear Algebra MEGR 3133 3 Mechanical Engineering Lab II (Spring Only) MEGR 4723 3 Heat Transfer (Spring 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 3 THEO 3 |

| 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) Count as STEM or BSME Technical Electives | AERO 3153: Aviation Safety Factors (online; Fall, Spring, Summer) |
| Count as OTEM OF DOME Technical Electives | |
| 1: Minimum grade of C is required. | 6: BSME senior standing (last full year at LETU) is a pre-requisite |
| 2: BIBL1033 is a prerequisite | EEGR 3523 Mechatronics may be substituted for MEGR 4423 |
| 3: Any 2000+ BIBL course | Mechanical Vibrations |
| 4: See approved list available in Engineering Office | 8: Senior Design II must be the second half of the same project as |
| 5. Approved 3000+ Engineering, Business, Science, Math | Senior Design I (sequential semesters) |
| course, approved 2000+ Computer Science course (3cr) (See approved electives list available in SEET Office) | 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 |

BSME

Technical Course Sequence - Mechanical Engineering



