Oklahoma Christian University

B.S.M.E. Degree in Mechanical Engineering
(128 hours, no minor required)

34 hours General Education

- BIBL 1112 Christian Scholar
- BIBL 1312 Life of the Early Church: Acts
- BIBL 2202 Story of the Old Testament
- BIBL 2302 Story of the New Testament
- BIBL 4523 Capstone: Christ and His World
- 3-hour Bible Elective #1 (BIBL or MISS course)
- 2-hour Bible Elective #2 (BIBL or MISS course)
- ENGL 1113 Composition I
- COMM 1213 Oral Communication
- Great Works: ENGL 2213 OR choose from (MUSC 2013, ARTS 2013, COMM 2023, COMM 2033, MUSC 3213)
- HIST 1223 Turning Points in U.S. History
- 3-hour Liberal Arts Elective (Psychology, Social Sciences, Fine Arts, or Foreign Language)

21 hours mathematics

- ENGR 1113 Engineering Mathematics
- MATH 2114 Calculus I with Analytical Geometry
- MATH 2214 Calculus II with Analytical Geometry
- MATH 2314 Calculus III
- MATH 3013 Differential Equations
- ENGR 3023 Probability and Statistics for Engineers

11 hours science

- CHEM 1313 General Chemistry for Engineers
- PHYS 2514 Physics I
- PHYS 2614 Physics II

23 hours engineering and computer science

- ENGR 1132 Procedural Programming (or CMSC 1113)
- ENGR 1252 Introduction to Solid Modeling
- ENGR 2313 Statics
- ENGR 2433 Thermodynamics I
- ENGR 2523 Dynamics
- ENGR 2533 Strength of Materials
- ENGR 2623 ME Instrumentation
- ENGR 3213 Engineering Economics
- ENGR 3311 Experimental Mechanics

33 hours mechanical engineering

- MECH 3403 Engineering Materials
- MECH 3443 Fluid Mechanics
- MECH 3453 Thermodynamics II
- MECH 3613 Manufacturing Processes
- MECH 3813 Mechatronics
- MECH 413 Dynamic Systems & Controls
- MECH 4213 Machine Design
- MECH 4243 Heat Transfer
- MECH 4311 Thermal-Fluids Lab
- MECH 4732 Systems Design I
- MECH 4743 Systems Design II
- MECH 4753 Systems Design III

6 hours elective (choose any two)

- MECH 4113 Engineering Applications of Partial Differential Equations
- MECH 4123 Machine Dynamics
- MECH 4513 Advanced Mechanics of Materials
- MECH 4523 Finite Element Analysis
- MECH 4533 Vibration Theory & Application
- MECH 4623 Advanced Engineering Materials

The Oklahoma Christian Undergraduate Academic Catalog details each course on this list. Depending on the nature of a student’s high school preparation, it may be necessary to take additional pre-requisite classes.

Please note that certain restrictions exist on the number of transfer credits allowed and the nature of upper-division transfer work. Reference the Undergraduate Academic Catalog for details.
Oklahoma Christian University

B.S.M.E. Degree in Mechanical Engineering
(128 hours, no minor required)

The degree plan for Mechanical Engineering presumes that the student has obtained a solid high school mathematics education. If a student’s high school preparation lacks strong algebra and trigonometry, additional math pre-requisite courses may be needed.

### Most Current ME Four – Year Degree Plan

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
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<tbody>
<tr>
<td>2  BIBL 1112 Christian Scholar</td>
<td>2  BIBL 1312 Acts</td>
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<tr>
<td>3  ENGR 1113 Engineering Math</td>
<td>4  MATH 2214 Calculus II</td>
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<tr>
<td>2  ENGR 1252 Introduction to Solid Modeling or ENGR 1132 Procedural Programming</td>
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<td>3  ENGL 1113 Composition I or COMM 1213 Oral Communication</td>
<td>4  PHYS 2514 Physics I</td>
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<td>4  MATH 2114 Calculus I</td>
<td>3  ENGR 2313 Statics</td>
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<td>3  HIST 1223 Turning Points in US History</td>
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<td>2  BIBL 2202 Old Testament</td>
<td>2  BIBL 2302 New Testament</td>
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<td>4  PHYS 2614 Physics II</td>
<td>3  CHEM 1313 Chemistry for Engineers</td>
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<td>3  MATH 3013 Differential Equations</td>
<td>3  ENGR 2433 Thermodynamics I</td>
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<td>3  ENGR 2523 Dynamics</td>
<td>3  ENGR 2623 ME Instrumentation</td>
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<td>3  ENGR 2533 Strength of Materials</td>
<td>ENGL 1113 Composition I or COMM 1213 Oral Communication</td>
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<td>3  ENGR 3023 Eng. Prob &amp; Stats</td>
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<td>3  Bible Elective</td>
<td>3  Great Works Elective</td>
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<tr>
<td>3  POLS 2113 Introduction to American Politics</td>
<td>3  ENGR 3213 Engineering Economics</td>
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<td>4  MATH 2314 Calculus III</td>
<td>3  MECH 3443 Fluid Mechanics</td>
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<td>1  ENGR 3311 Experimental Mechanics</td>
<td>3  MECH 4213 Machine Design</td>
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<tr>
<td>3  MECH 3453 Thermodynamics II</td>
<td>17 hrs</td>
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<td>2  Bible Elective</td>
<td>3  BIBL 4523 Christ and His World</td>
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<td>3  MECH 3813 Mechatronics</td>
<td>3  Behavioral Science Elective</td>
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<tr>
<td>3  MECH 4243 Heat Transfer</td>
<td>3  MECH 4133 Dynamic Systems &amp; Controls</td>
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<tr>
<td>1  MECH 4311 Thermal/Fluids Laboratory</td>
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<td>3  MECH 4743 Systems II</td>
<td>3  MECH 4753 Systems III</td>
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<td>3  Mechanical Engineering Elective</td>
<td>3  Mechanical Engineering Elective</td>
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<td>14 to 15 hrs</td>
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Bible Electives: Any non-core bible or missions class, except Missions Experience
Great Works: ENGL 2213 OR choose from MUSC-2013, MUSC 3213, ARTS-2013, COMM 2023, COMM 2033
Behavioral Science Electives: PSYC-1113, SOCI-1113, Fine Arts (NOT taken in Great Works) or Foreign Language
Mechanical Eng. Electives: MECH 4113, MECH-4123, MECH-4513, MECH-4523, MECH-4533, MECH-4623