1. 34 hours General Education
   - Christian Scholar (BIBL-1112)
   - Life of the Early Church: Acts (BIBL-1312)
   - Story of the Old Testament (BIBL-2202)
   - Story of the New Testament (BIBL-2302)
   - Christ and His World (BIBL-4523)
   - Composition I (ENGL-1113 -or- ACT English score of 28 or more)
   - Oral Communication (SPCH-1213)
   - Introduction to American Politics (POLS-2113)
   - Turning Points in U.S. History (HIST-1223)
   - 3-hour Bible Elective #1 (BIBL or MISS course)
   - 2-hour Bible Elective #2 (BIBL or MISS course)
   - 3-hour Great Works Elective (Literature or Fine Arts course)
   - 3-hour Liberal Arts Elective (Behavioral Science, Fine Arts, or Foreign Language course)

2. 21 hours mathematics
   - Engineering Mathematics (ENGR-1113)
   - Calculus I with Analytical Geometry (MATH-2114)
   - Calculus II with Analytical Geometry (MATH-2214)
   - Calculus III (MATH-2314)
   - Differential Equations (MATH-3013)
   - Probability and Statistics for Engineers (ENGR-3023)

3. 11 hours science
   - Engineering Chemistry (ENGR-2323)
   - Physics I (PHYS-2514)
   - Physics II (PHYS-2614)

4. 26 hours engineering and computer science
   - Procedural Programming (ENGR-1132 or CMSC-1113)
   - Introduction to Solid Modeling (ENGR-1252)
   - Statics (ENGR-2313)
   - Thermodynamics I (ENGR-2433)
   - Dynamics (ENGR-2523)
   - Engineering Materials (ENGR-2403)
   - Strength of Materials (ENGR-2533)
   - ME Instrumentations (ENGR-2623)
   - Engineering Economics (ENGR-3213)
   - Experimental Mechanics (ENGR-3311)

5. 30 hours mechanical engineering
   - Fluid Mechanics (MECH-3443)
   - Thermodynamics II (MECH-3453)
   - Manufacturing Processes (MECH-3613)
   - Mechatronics (MECH-3813)
   - Dynamic Systems & Controls (MECH-4133)
   - Machine Design (MECH-4213)
   - Heat Transfer (MECH-4243)
   - Thermal-Fluid Lab (MECH-4253)
   - Systems Design I (MECH-4732)
   - Systems Design II (MECH-4743)
   - Systems Design III (MECH-4753)

6. 6 hours elective (choose any two)
   - Advanced Mechanics of Materials (MECH-4513)
   - Vibration Theory & Application (MECH-4533)
   - Machine Dynamics (MECH-4123)
   - Finite Element Analysis (MECH-4523)

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.

It should also be noted 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/or trigonometry, additional math pre-requisite courses may be needed.

ME 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>3 SPCH 1213 Oral Communication</td>
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<td>4 MATH 2114 Calculus I</td>
<td>4 PHYS 2514 Physics I</td>
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<td>3 ENGR 1113 Composition I</td>
<td>4 MATH 2214 Calculus II</td>
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<td>2 ENGR 1132 Procedural Programming</td>
<td>3 ENGR 2313 Statics</td>
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<tr>
<td>2 ENGR 1252 Intro. to Solid Modeling</td>
<td>16 hrs</td>
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<td>2 BIBL 2202 Old Testament</td>
<td>2 BIBL 2302 New Testament</td>
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<tr>
<td>4 PHYS 2614 Physics II</td>
<td>3 ENGR 2323 Engineering Chemistry</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>3 ENGR 3023 Prob &amp; Stats for Eng</td>
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<td>3 Bible Elective</td>
<td>3 Literature or Fine Arts Elective</td>
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<tr>
<td>3 HIST 1223 Turning Points in US History</td>
<td>3 ENGR 3213 Engineering Economics</td>
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<tr>
<td>4 MATH 2314 Calculus III</td>
<td>3 MECH 3443 Fluid Mechanics</td>
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<td>3 ENGR 2403 Engineering Materials</td>
<td>3 MECH 3613 Manufacturing Processes</td>
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<tr>
<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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<tr>
<td>2 Bible Elective</td>
<td>3 BIBL 4523 Christ and His World</td>
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<tr>
<td>3 POLS 2113 Introduction to American Politics</td>
<td>3 Behavioral Sci., Fine Arts or Foreign Lang. Elective</td>
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<tr>
<td>3 MECH 3813 Mechatronics</td>
<td>3 MECH 4133 Dyn. Systems &amp; Controls</td>
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<tr>
<td>3 MECH 4243 Heat Transfer</td>
<td>1 MECH 4311 Thermal/Fluids Laboratory</td>
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<tr>
<td>3 Mechanical Engineering Elective</td>
<td>3 Mechanical Engineering Elective</td>
</tr>
<tr>
<td>3 MECH 4743 Systems II</td>
<td>17 hrs</td>
</tr>
</tbody>
</table>

Bible Electives: Any non-core bible or missions class, excluding

Literature Electives: ENGR-2213

Fine Arts Electives: MUSC-2013, ARTS-2013, COMM-2023, COMM-2033, MUSC-3213

Behavioral Science Electives: PSYC-1113, SOCI-1113

Mechanical Eng. Electives: MECH-4123, MECH-4513, MECH-4523, MECH-4533