<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
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</table>
| Fall (17) | 5 Chemistry 101 General Chemistry (F,S)  
3 Engineering 101 Intro to Engineering Design (F)  
1 Engineering 181 Graphical Communication Lab (F)  
4 Mathematics 171 Calculus I (F,S)  
3 English 101 Written Rhetoric  |
| Spring (15) | 3 Interdisciplinary 150 Developing the Christian Mind  
3 Engineering 205 Material Science (S)  
4 Mathematics 172 Calculus II (F,S)  
4 Physics 133 Introductory Physics, Mechanics and Gravity (S)  
3 History Core See Core Curriculum section of catalog for options  
1 Health and Fitness See Core Curriculum section of catalog for options  |
| **Second Year** |
| Fall (16) | 4 Engineering 20x* ★  
3 Mathematics 270/271 Multivariable Calculus - Math 270 (F only), Math 271 (F,S)  
2 Computer Science 104 Applied Computing (F) (CS 106 or 108 may be substituted but both are 4 SH)  
3 Religion 121 or 131 Biblical Literature/Christian Theology  
0 Engineering 295 Internship Workshop  |
| Spring (17) | 4 Engineering 184 Sustainability Challenges (F) (Required for students seeking Sustainability Designation)  
3 Free Elective (or consider taking IDIS 103 here in place of IDIS 102 or taking an off-campus interim)  |
| **Third Year** |
| Fall (17) | 4 Engineering 305 Mechanics of Materials (F)  
4 Engineering 319 Intro. To Thermal/Fluid Sciences (F)  
4 Elective: Basic Science or Advanced Math  
3 The Arts See Core Curriculum section of catalog for options  
2 Interdisciplinary 102 Oral Rhetoric for Engineers (F,S) or IDIS 103  |
| Spring (16) | 4 Engineering 322 Machine Design with Finite Element Analysis (S)  
4 Engineering 328 Intermediate Thermal/Fluid Sciences & Design (S)  
3 Engineering 334 Dynamics of Machinery (S)  
1 Engineering 382 Engineering Instrumentation Laboratory (S)  
3 Philosophy 153 Fundamental Questions in Philosophy  
1 Engineering 384 Sustainability Analysis (S) (Required for students seeking Sustainability Designation)  |
| **Fourth Year** |
| Fall (15) | 4 Engineering 333 Thermal Systems Designs (F)  
2 Engineering 339 Senior Project (F)  
3 Literature See Core Curriculum section of catalog for options  
4 Elective: Basic Science, Advanced Math, Engineering, or Technical  
2 Business 357 Business Aspects for Engineers (F)  |
| Spring (13) | 4 Engineering 324 Materials & Processes in Manufacturing (S)  
4 Engineering 340 Senior Design Project (S)  
4 Engineering Elective ENGR 314, 315, or 342  
1 Health and Fitness See Core Curriculum section of catalog for options  
0 Engineering 394 Engineering Seminar  
3 Free Elective  |

**Other Requirements**

- 0-8 Foreign Language (2 years of high school or one year of college)