# B.S. in Mechanical Engineering and B.A. in Business
## Plan of Study

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer/ J-Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ENGR 150 Introduction to Engineering (LAB)</td>
<td>MATH 114 Calculus II</td>
<td>THEO 101 The Christian Theological Tradition</td>
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<td></td>
<td>MATH 113 Calculus I</td>
<td>ENGR 171 Engineering Graphics and Design</td>
<td>HIST 1XX</td>
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<td>ENGR 121 Critical Thinking: Literature &amp; Writing</td>
<td>CISC 130 Introduction to Programming and Problem Solving in the Sciences (LAB)</td>
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<td></td>
<td>Foreign Language 111*</td>
<td>PHYS 111 Classical Physics I</td>
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<td>Foreign Language 112*</td>
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<td>2</td>
<td>ENGR 220 Statics (LAB)</td>
<td>ENGR 221 Mechanics of Materials (LAB)</td>
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<td></td>
<td>MATH 200 Multi-Variable Calculus</td>
<td>ENGL 20X Texts in Conversation</td>
<td>COJO 100 Public Speaking</td>
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<td>PHYS 112 Classical Physics II</td>
<td>CHEM 109 General Chemistry for Engineers (LAB)</td>
<td>PHIL 115 Philosophy of the Human Person (Sum)</td>
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<td>Foreign Language 211*</td>
<td>STAT 220 Statistics I</td>
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<td>ENGR 371 Manufacturing Processes and Statistical Control (LAB)</td>
<td>ENGR 322 Dynamics (LAB)</td>
<td>PHIL 214 Introductory Ethics</td>
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<td>MGMT 305 Management and Organizational Behavior</td>
<td>OPMT 310 Operations Management</td>
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<td></td>
<td>ECON 251 Principles of Macroeconomics</td>
<td>ECON 252 Principles of Microeconomics</td>
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<td>4</td>
<td>ENGR 381 Thermodynamics (LAB)</td>
<td>ENGR 382 Heat Transfer (LAB)</td>
<td>Fine Arts Elective**</td>
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<td></td>
<td>ENGR 380 Engineering Design Clinic I</td>
<td>ENGR 410 Control Systems and Automation</td>
<td>THEO 2XX or 3XX**</td>
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<td></td>
<td>MKTG 300 Principles of Marketing</td>
<td>BETH 301 Business Ethics</td>
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<td>ACCT 210 Introduction to Financial Accounting</td>
<td>ACCT 215 Managerial Accounting</td>
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<td>5</td>
<td>ENGR 480 Engineering Design Clinic I</td>
<td>ENGR 481 Engineering Design Clinic II</td>
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<td>ENGR 361 Engineering Materials (LAB)</td>
<td>ENGR 383 Fluid Mechanics (LAB)</td>
<td>THEO 4XX</td>
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<td>BLAW 301, 302 or 303 Business Law</td>
<td>ENGR XXX Engineering Elective</td>
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<td>FINC 321 Financial Management</td>
<td>MGMT 480 Strategic Management</td>
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* May place out of one or more semesters if proficient at 3rd Level
** May satisfy human diversity requirement

** denotes that the two courses can be interchanged
Complete Course Listing:

**Engineering Courses:**
- ENGR 150 – Introduction to Engineering (1 credit)
- ENGR 171 – Engineering Graphics and Design (4 credits)
- ENGR 220 – Statics (4 credits)
- ENGR 221 – Mechanics of Materials (4 credits)
- ENGR 320 – Machine Design and Synthesis (4 credits)
- ENGR 322 – Dynamics (4 credits)
- ENGR 350 – Introduction to Electronics (4 credits)
- ENGR 361 – Engineering Materials (4 credits)
- ENGR 371 – Manufacturing Processes and Statistical Control (4 credits)
- ENGR 381 – Thermodynamics (4 credits)
- ENGR 382 – Heat Transfer (4 credits)
- ENGR 383 – Fluid Mechanics (4 credits)
- ENGR 410 – Control Systems and Automation (4 credits)
- ENGR 480 – Engineering Design Clinic I (4 credits)
- ENGR 481 – Engineering Design Clinic II (4 credits)

4 Credits of Engineering Electives

61 Engineering Credits

**Allied Requirements:**
- MATH 113 – Calculus I (4 credits)
- MATH 114 – Calculus II (4 credits)
- MATH 200 – Multi-Variable Calculus (4 credits)
- MATH 210 – Introduction to Differential Equations and Systems (4 credits)
- PHYS 111 – Classical Physics I (4 credits)
- PHYS 112 – Classical Physics II (4 credits)
- CHEM 109 – General Chemistry for Engineers (4 credits)
- CISC 130 – Introduction to Programming and Problem Solving in the Sciences (4 credits)

32 allied requirement credits

**Business Courses:**
- ACCT 210 - Introduction to Financial Accounting (4 credit)
- ACCT 215 - Managerial Accounting (4 credit)
- BETH 301 - Business Ethics (4 credit)
- BLAW 301/2/3 - Business Law (4 credits)
- BUSN 200 - Business Learning Through Service (0 credit)
- OPMT 310 - Operations Management (4 credits)
- FINC 321 - Financial Management (4 credits)
- MGMT 305 - Management & Organizational Behavior (4 credits)
- MGMT 480 - Strategic Management (4 credits)
- MKTG 300 - Principles of Marketing (4 credits)

36 Business credits

**Allied Requirements:**
- ECON 251* - Principles of Macroeconomics (4 credits)
- ECON 252 - Principles of Microeconomics (4 credits)
- STAT 220 - Statistics I (4 credits)
- COJO 100 - Public Speaking (4 credits)

*Fulfills social science requirement

16 allied requirements credits

**Core Curriculum**
- Three courses in foreign language (12 credits)
- Two courses in English (8 credits)
- Three courses in Theology** (12 credits)
- Two courses in Philosophy (8 credits)
- One Fine Arts course** (4 credits)
- One History course (4 credits)

**One of these courses must satisfy the human diversity requirement

48 core curriculum credits

Total Credit Count: 193 credits