# Study Plan for B.S.E., **MECHANICAL ENGINEERING** Major & **BIOMED** Minor

## (2014-15 Catalog)  **(MTH 201 Placement - 5 Year Program)**

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<thead>
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<th>1st Year</th>
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<tr>
<td>* MTH 201 Calculus I</td>
<td>* MTH 202 Calculus II</td>
<td>* MTH 203 Calculus III</td>
<td>* MTH 302 Lin Alg &amp; DEQ</td>
<td>* PEY 234 Engr Physics</td>
<td>* EGR 309 Mach Design I</td>
<td>* EGR 390 Engr Co-op II</td>
<td>* EGR 365 Fluid Mechanics</td>
<td>* EGR 485 Sr Project I</td>
<td>* EGR 486 Sr Project II</td>
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<td>EGR 106 Intro to Egr Design</td>
<td>EGR 107 Intro to Egr Design II</td>
<td>EGR 220 Engrg Stats Lab</td>
<td>EGR 241 Circuit Analysis I</td>
<td>EGR 289 Engrg Co-op Prep</td>
<td>EGR 314 Circuit Analysis II</td>
<td>EGR 447 Engrg 447</td>
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<td>ME Elec</td>
<td>EGR 485 Sr Project I</td>
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## 1st Semester: Fall

- MTH 201 Calculus I
- WRT 150 Writ Strategies
- EGR 106 Intro to Egr Design
- GE - Hist
- EGR 490 Engrg Co-op III
- ME Elec

## 2nd Semester: Winter

- MTH 202 Calculus II
- CHM 115 Chemistry I
- EGR 107 Intro to Egr Design II
- @ GE - P & L (PHI 102 Ethics)
- EGR 485 Sr Project I
- ME Elec
- ME Elec
- EGR 447

## 3rd Semester: Fall

- MTH 203 Calculus III
- CHM 230 Organic & Biochem
- EGR 289 Engrg Co-op Prep
- EGR 309 Mach Design I
- EGR 390 Engr Co-op II
- ME Elec
- ME Elec

## 4th Semester: Winter

- MTH 302 Lin Alg & DEQ
- PHY 230 Physics I
- STA 220 Engrg Statistics
- EGR 220 Engrg Stats Lab
- EGR 312 Dynamics
- EGR 335 MMAPS
- EGR 329 FEA
- EGR 468 Heat Transfer
- ME Elec

## 5th Semester: Fall

- PHY 234 Engr Physics
- EGR 226 Intro Digital Sys
- EGR 209 Mech & Mach
- EGR 289 Engrg Co-op Prep
- EGR 230 Intro to Egr Design
- ME Elec
- ME Elec
- ME Elec

## 6th Semester: Winter

- EGR 309 Mach Design I
- EGR 312 Dynamics
- EGR 214 Circuit Analysis I
- EGR 314 Circuit Analysis II
- GE - World Persp (ANT 340)
- GE - Hist
- GE - Hist
- GE - Hist

## 7th Semester: Fall

- EGR 226 Intro Digital Sys
- EGR 309 Mach Design I
- EGR 214 Circuit Analysis I
- EGR 289 Engrg Co-op Prep
- EGR 289 Engrg Co-op Prep
- ME Elec
- ME Elec
- ME Elec

## 8th Semester: S/S

- EGR 290 Engr Co-op I
- EGR 241 Circuit Analysis II
- EGR 314 Circuit Analysis II
- EGR 390 Engr Co-op II
- EGR 335 MMAPS (Mathematical Modeling of Physiologic Systems)
- EGR 289 Engrg Co-op Prep
- EGR 468 Heat Transfer
- ME Elec
- EGR 365 Fluid Mechanics
- EGR 409 Mach Design II
- EGR 329 FEA
- GE - Hist
- GE - Hist
- GE - Hist

## PCEC Student Services: (616)331-6025

- Engineering Foundation course
- Students may enroll in PHY 231 instead of PHY 234
- Not required, but strongly recommended for success
- SOC 205 recommended (covers SBS and US
- AN 340 is WP and Issue. Prereq for AN 340 is another WP or US Diversity course.
- An ethics course is required in the engineering program (PHI 102 or any course in the Ethics theme)
- Consider taking PHI 102 as an SWS
- ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS GenEd requirement.

## Secondary Admissions Criteria:

- A GPA of 2.7 or above in the Engineering Foundation courses
- Completion of each course in the Engineering Foundation with a grade of C (2.0) or above, with no more than one repeat
- Completion of preparation for placement in the cooperative engineering education, EGR 289

## Recommendation:

It is strongly encouraged that students do not begin or break a curriculum thread by taking courses at other institutions; e.g., take the MTH 201 equivalent elsewhere, return to GV and continue in the math thread with MTH 202.