

# Study Plan for B.S.E., MECHANICAL ENGINEERING Major

(2015-16 Catalog)

(MTH 201 Placement with Honors - 4 Year Program

Option 2: 12 credits over two semesters, including Live Learn Lead)

Student Name: \_\_\_\_\_

Student ID#: \_\_\_\_\_

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| 1st Year   | 1st Semester: Fall _____ |                       |       |                    | 2nd Semester: Winter _____ |                        |       |                    | Semester: S/S _____     |                    |       |                    |
|--|--------------------------|-----------------------|-------|--------------------|----------------------------|------------------------|-------|--------------------|-------------------------|--------------------|-------|--------------------|
|  |                          | Credits               | Grade | Semester Completed |                            | Credits                | Grade | Semester Completed |                         | Credits            | Grade | Semester Completed |
|  | * MTH 201                | Calculus I            | 4     | _____              | * MTH 202                  | Calculus II            | 4     | _____              | * PHY 230               | Physics I          | 5     | _____              |
|  | * EGR 106                | Intro to Egr Design I | 3     | _____              | * EGR 107                  | Intro to Egr Design II | 3     | _____              | * MTH 203               | Calculus III       | 4     | _____              |
|  | HNR                      | Interdisc Seq (Opt 2) | 3     | _____              | * STA 220                  | Engrg Statistics       | 2     | _____              |                         |                    |       | _____              |
|  | HNR                      | Live Learn Lead       | 3     | _____              | * EGR 220                  | Engrg Stats Lab        | 1     | _____              |                         |                    |       | _____              |
|  |                          |                       |       |                    | HNR                        | Interdisciplinary Seq  | 3     | _____              |                         |                    |       | _____              |
|  |                          |                       |       |                    | HNR                        | Interdisc Seq (Opt 2)  | 3     | _____              |                         |                    |       | _____              |
|  |                          |                       |       | 13                 |                            |                        |       | 16                 |                         |                    |       |                    |
| PHY offered spring; MTH offered summer; or move MTH 203 to 3rd semester (fall) |                          |                       |       |                    |                            |                        |       |                    |                         |                    |       |                    |
| 2nd Year   | 3rd Semester: Fall _____ |                       |       |                    | 4th Semester: Winter _____ |                        |       |                    | Semester: S/S _____     |                    |       |                    |
|  |                          | Credits               | Grade | Semester Completed |                            | Credits                | Grade | Semester Completed |                         | Credits            | Grade | Semester Completed |
| +  | * PHY 234/1              | Physics II            | 4/5   | _____              | * MTH 302                  | Lin Alg & DEQ          | 4     | _____              | EGR 290                 | Engrg Co-op I      | 3     | _____              |
|  | * CHM 115                | Chemistry I           | 4     | _____              | * EGR 309                  | Mach Design I          | 4     | _____              | * EGR 214               | Circuit Analysis I | 4     | _____              |
|  | * EGR 209                | Mech & Mach           | 4     | _____              | * EGR 312                  | Dynamics               | 3     | _____              |                         |                    |       | _____              |
|  | * EGR 289                | Engrg Co-op Prep      | 1     | _____              | * EGR 226                  | Intro Digital Sys      | 4     | _____              |                         |                    |       | _____              |
|  |                          |                       |       | _____              |                            |                        |       | _____              |                         |                    |       | _____              |
| 3rd Year   | 5th Semester: Fall _____ |                       |       |                    | Semester: Winter _____     |                        |       |                    | 6th Semester: S/S _____ |                    |       |                    |
|  |                          | Credits               | Grade | Semester Completed |                            | Credits                | Grade | Semester Completed |                         | Credits            | Grade | Semester Completed |
|  | EGR 250                  | Mat Sci & Engrg       | 4     | _____              | EGR 390                    | Engrg Co-op II         | 3     | _____              | EGR 365                 | Fluid Mechanics    | 4     | _____              |
|  | EGR 345                  | Dyn Sys Mod           | 4     | _____              |                            |                        |       | _____              | EGR 409                 | Mach Design II     | 4     | _____              |
|  | EGR 360                  | Thermodynamics        | 4     | _____              |                            |                        |       | _____              | EGR 329                 | FEA                | 3     | _____              |
|  | HNR SBS                  |                       | 3     | _____              |                            |                        |       | _____              | % ECO 210/211           | Economics          | 3     | _____              |
| 4th Year   | Semester: Fall _____     |                       |       |                    | 7th Semester: Winter _____ |                        |       |                    | 8th Semester: S/S _____ |                    |       |                    |
|  |                          | Credits               | Grade | Semester Completed |                            | Credits                | Grade | Semester Completed |                         | Credits            | Grade | Semester Completed |
|  | EGR 490                  | Engrg Co-op III       | 3     | _____              | EGR 468                    | Heat Transfer          | 4     | _____              | EGR 486                 | Sr Project II      | 2     | _____              |
|  |                          |                       |       |                    | ME Elec                    |                        | 4     | _____              | ME Elec                 |                    | 4     | _____              |
|  |                          |                       |       |                    | ME Elec                    |                        | 4     | _____              | # GE - LS (BIO 105)     |                    | 3     | _____              |
|  |                          |                       |       |                    | EGR 485                    | Sr Project I           | 1     | _____              |                         |                    |       | _____              |

PCEC Student Services: (616)331-6025

- \* Engineering Foundation course
- + Students may enroll in PHY 231 instead of PHY 234
- # Issues courses as well.
- % ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS GenEd requirement.

**Junior Seminar** : can be taken when students have >=45 credits. Online seminars offered each semester.

**If students do not have Advanced Placement credit applicable to the engineering curriculum, e.g., Calculus, Physics, and/or Chemistry, it is strongly recommended that they consider a 5-year plan.**

## 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.