

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

Minor: \_\_\_\_\_

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

(2019-20 Catalog) (MTH 201 Placement with Honors Alliance and Conflict - 4 Year Program)

 Student ID#: G

| 1st Year | 1st Semester: Fall _____ |     |     | Credits             | Grade            | Semester Completed | 2nd Semester: Winter _____ |       |      | Credits | Grade                 | Semester Completed | Semester: S/S _____     |       |       | Credits | Grade             | Semester Completed     |                    |       |       |       |
|----------|--------------------------|-----|-----|---------------------|------------------|--------------------|----------------------------|-------|------|---------|-----------------------|--------------------|-------------------------|-------|-------|---------|-------------------|------------------------|--------------------|-------|-------|-------|
|          | *                        | MTH | 201 | Calculus I          | 4                | _____              | _____                      | *     | MTH  | 202     | Calculus II           | 4                  | _____                   | _____ | *     | EGR     | 107               | Intro to Egr Design II | 3                  | _____ | _____ |       |
|          | *                        | CHM | 115 | Chemistry I         | 4                | _____              | _____                      | *     | EGR  | 106     | Intro to Egr Design I | 3                  | _____                   | _____ | *     | MTH     | 203               | Calculus III           | 4                  | _____ | _____ |       |
|          |                          | HNR | 260 |                     | 3                | _____              | _____                      |       | HNR  | 261     |                       | 3                  | _____                   | _____ | *     | PHY     | 230               | Physics I              | 5                  | _____ | _____ |       |
|          |                          | HNR | 201 | Live, Learn, Lead   | 3                | _____              | _____                      |       | HNR  | 262     |                       | 3                  | _____                   | _____ |       |         |                   |                        |                    |       |       |       |
| 2nd Year | 3rd Semester: Fall _____ |     |     | Credits             | Grade            | Semester Completed | 4th Semester: Winter _____ |       |      | Credits | Grade                 | Semester Completed | Semester: S/S _____     |       |       | Credits | Grade             | Semester Completed     |                    |       |       |       |
|          | +                        | *   | PHY | 234/1               | Physics II       | 4/5                | _____                      | _____ | *    | MTH     | 302                   | Lin Alg & DEQ      | 4                       | _____ | _____ |         | EGR               | 290                    | Engrg Co-op I      | 3     | _____ | _____ |
|          |                          | *   | STA | 220                 | Engrg Statistics | 2                  | _____                      | _____ | *    | EGR     | 309                   | Mach Design I      | 4                       | _____ | _____ | *       | EGR               | 214                    | Circuit Analysis I | 4     | _____ | _____ |
|          |                          | *   | EGR | 220                 | Engrg Stats Lab  | 1                  | _____                      | _____ | *    | EGR     | 312                   | Dynamics           | 3                       | _____ | _____ |         |                   |                        |                    |       |       |       |
|          |                          | *   | EGR | 209                 | Mech & Mach      | 4                  | _____                      | _____ | *    | EGR     | 226                   | MicroCtrl Pgm Appl | 4                       | _____ | _____ |         |                   |                        |                    |       |       |       |
| 3rd Year | 5th Semester: Fall _____ |     |     | Credits             | Grade            | Semester Completed | Semester: Winter _____     |       |      | Credits | Grade                 | Semester Completed | 6th Semester: S/S _____ |       |       | Credits | Grade             | Semester Completed     |                    |       |       |       |
|          |                          | EGR | 250 | Mat Sci & Engrg     | 4                | _____              | _____                      |       | EGR  | 390     | Engrg Co-op II (sws)  | 3                  | _____                   | _____ |       | EGR     | 365               | Fluid Mechanics        | 4                  | _____ | _____ |       |
|          |                          | EGR | 346 | Mechatronics & Ctrl | 4                | _____              | _____                      |       |      |         |                       |                    |                         |       | EGR   | 409     | Mach Design II    | 4                      | _____              | _____ |       |       |
|          |                          | EGR | 360 | Thermodynamics      | 4                | _____              | _____                      |       |      |         |                       |                    |                         |       | EGR   | 329     | FEA               | 3                      | _____              | _____ |       |       |
|          |                          | HNR | LS  | _____               | 3                | _____              | _____                      |       |      |         |                       |                    |                         | #     | HNR   | Jr. Sem | _____             | 3                      | _____              | _____ |       |       |
| 4th Year | Semester: Fall _____     |     |     | Credits             | Grade            | Semester Completed | 7th Semester: Winter _____ |       |      | Credits | Grade                 | Semester Completed | 8th Semester: S/S _____ |       |       | Credits | Grade             | Semester Completed     |                    |       |       |       |
|          |                          | EGR | 490 | Engrg Co-op III     | 3                | _____              | _____                      |       | EGR  | 468     | Heat Transfer         | 4                  | _____                   | _____ | &     | EGR     | 486               | Sr Project II          | 2                  | _____ | _____ |       |
|          |                          |     |     |                     |                  |                    |                            | ME    | Elec | _____   | 3/4                   | _____              | _____                   |       | ME    | Elec    | _____             | 3/4                    | _____              | _____ |       |       |
|          |                          |     |     |                     |                  |                    |                            | ME    | Elec | _____   | 3/4                   | _____              | _____                   | \$    | HNR   | US      | _____             | 3                      | _____              | _____ |       |       |
|          |                          |     |     |                     |                  |                    |                            | &     | EGR  | 485     | Sr Project I          | 1                  | _____                   | _____ | %     | ECO     | 210/211 Economics | 3                      | _____              | _____ |       |       |

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

- \* Engineering Foundation course
- + Students may enroll in PHY 231 instead of PHY 234
- # The Jr. Seminar fulfills one Issue and one SWS requirement.  
HNR 312 will also fulfill US Diversity.  
Junior Seminars can be taken when students have >= 45 credits. Online seminars offered each semester.
- % ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS Honors requirement.
- \$ HNR US Diversity requirement can be met with a Jr. Seminar (HNR 312).
- & Completion of EGR 485 and 486 will fulfill the HNR 499 Senior Project requirement.

***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 in each Foundation course.**

- 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.