

Study Plan for B.S.E., PRODUCT DESIGN & MANUFACTURING ENGINEERING Major & Design Emphasis

Student Name: _____

(2019-20 Catalog) (MTH 201 Placement - 4 Year Program)

Minor: _____

Student ID#: G

| | 1st Semester: Fall _____ | | | | 2nd Semester: Winter _____ | | | | Semester: S/S _____ | | | |
|-----------|--------------------------|-----------------------|-------|-------------------------------|----------------------------|------------------------|-------|--------------------|-------------------------|----------------|-------|--------------------|
| | | Credits | Grade | Semester Completed | | Credits | Grade | Semester Completed | | Credits | Grade | Semester Completed |
| 1st Year | * MTH 201 | Calculus I | 4 | _____ | * MTH 202 | Calculus II | 4 | _____ | | | | |
| | * WRT 150 | Writ Strategies | 4 | _____ | * PHY 230 | Physics I | 5 | _____ | | | | |
| | * EGR 106 | Intro to Egr Design I | 3 | _____ | * EGR 107 | Intro to Egr Design II | 3 | _____ | | | | |
| | * CHM 115 | Chemistry I | 4 | _____ | * STA 220 | Statistical Modeling | 2 | _____ | | | | |
| | | | | * EGR 220 | Measure/Data Analysis | 1 | _____ | | | | | |
| 2nd Year | 3rd Semester: Fall _____ | | | | 4th Semester: Winter _____ | | | | Semester: S/S _____ | | | |
| | | Credits | Grade | Semester Completed | | Credits | Grade | Semester Completed | | Credits | Grade | Semester Completed |
| | * MTH 203 | Calculus III | 4 | _____ | * MTH 302 | Lin Alg & DEQ | 4 | _____ | EGR 290 | Engrg Co-op I | 3 | _____ |
| | + * PHY 234/1 | Physics II | 4/5 | _____ | * EGR 309 | Mach Design I | 4 | _____ | GE - Arts | | 3 | _____ |
| | * EGR 226 | MicroCtrl Pgm Appl | 4 | _____ | * EGR 250 | Mat Sci & Engrg | 4 | _____ | | | | |
| | * EGR 209 | Mech & Mach | 4 | _____ | * EGR 214 | Circuit Analysis I | 4 | _____ | | | | |
| * EGR 289 | Engrg Co-op Prep | 1 | _____ | | | | | | | | | |
| 3rd Year | 5th Semester: Fall _____ | | | | Semester: Winter _____ | | | | 6th Semester: S/S _____ | | | |
| | | Credits | Grade | Semester Completed | | Credits | Grade | Semester Completed | | Credits | Grade | Semester Completed |
| | EGR 301 | Fund Prod Des | 4 | _____ | EGR 390 | Engrg Co-op II (SWS) | 3 | _____ | EGR 362 | Thermo-Fluid S | 4 | _____ |
| | EGR 345 | Dyn Sys Mod | 4 | _____ | GE - Issue | | 3 | _____ | EGR 329 | Intro to FEA | 3 | _____ |
| | EGR 367 | Mfg Processes | 4 | _____ | | | | | EGR 405 | Mat Analysis | 3 | _____ |
| • GE-SBS | | 3 | _____ | | | | | % ECO 210/211 | Economics | 3 | _____ | |
| | | | | | | | | # GE - GP | | 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 401 | Adv Prod Design | 4 | _____ | EGR 486 | Sr Project II | 2 | _____ |
| | GE - Issue | | 3 | _____ | EGR 485 | Sr Project I | 1 | _____ | EGR 440 | Prod'n Models | 3 | _____ |
| | | | | \$ PDM Elec | | 3/4 | _____ | GE - LS | | 3 | _____ | |
| | | | | \$ PDM Elec | | 3/4 | _____ | GE - HP | | 3 | _____ | |
| | | | | @ GE - P & L (PHI 102 Ethics) | | 3 | _____ | GE - US | | 3 | _____ | |

PCEC Student Services: (616)331-6025

- * Engineering Foundation course
- + Students may enroll in PHY 231 instead of PHY 234
- Consider taking a course that doubles as SBS and US (See Gen Ed guide for selections)
- # Consider taking a course that doubles as WP and Issue (See Gen Ed guide for selections)
- @ An ethics course is required in the engineering program (PHI 102 or another ethics course in General Education). Consider taking PHI 102 as an SWS.
- % ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS Gen Ed requirement.
- \$ **Electives (Choose 2)**
 EGR 311 Intermediate CAD/CAM
 EGR 326 Embedded System Design
 EGR 403 Medical Device Design
 EGR 404 Polymer Science and Processing
 EGR 409 Machine Design II
 EGR 441 Engineering Economics, Quality Control, and Manufacturing Operations
 EGR 453 Biomedical Materials
 STA 315 Design of Experiments

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.