## Study Plan for B.S.E., PRODUCT DESIGN & MANUFACTURING ENGINEERING Major & Design Emphasis **Student Name:** GStudent ID#: (2018-19 Catalog) (MTH 123 Placement - 5 Year Program) Minor: Semester Semester Semester 1st Semester: Fall\_\_\_\_ Grade Completed 2nd Semester: Winter \_\_ Semester: S/S \_\_\_\_ Grade Completed Completed MTH 123 Trigonometry MTH 201 Calculus I WRT 150 Writ Strategies CHM 115 Chemistry I EGR 106 Intro to Egr Design I 3 ^ EGR 100 Intro to Engrg GE - Hist • GE-SBS GE - Arts Semester Semester Semester 3rd Semester: Fall Completed 4th Semester: Winter Completed Semester: S/S Completed \* MTH 202 Calculus II MTH 203 Calculus III EGR 107 Intro to Egr Design II 3 STA 220 Engrg Statistics @ GE - P & L (PHI 102 Ethics) EGR 220 Engrg Stats Lab GE - US PHY 230 Physics I # GE - GP Semester 6th Semester: Winter \_\_\_ 5th Semester: Fall Grade Completed Semester: S/S Grade Completed Grade Completed + \* PHY 234/1 Physics II MTH 302 Lin Alg & DEQ EGR 290 Engrg Co-op I \* EGR 209 Mech & Mach EGR 309 Mach Design I \* EGR 226 MicroCtrl Pgm Appl 4 250 Mat Sci & Engrg \* EGR 289 Engrg Co-op Prep EGR 214 Circuit Analysis I Semester Semester Semester Semester: Winter \_\_\_\_ 7th Semester: Fall Grade Completed Grade Completed 8th Semester: S/S Grade Completed EGR 301 Fund Prod Des EGR 390 Engrg Co-op II (SWS) 3 EGR 362 Thermo-Fluid Sys 4 EGR 329 EGR 345 Dyn Sys Mod Intro to FEA EGR 367 Mfg Processes EGR 405 Mat Analysis % ECO 210/211 Economics GE - Issue \_\_\_\_\_ Semester Semester Semester Semester: Fall\_\_ Grade Completed 9th Semester: Winter \_\_\_ Grade Completed 10th Semester: S/S Grade Completed Sr Project II EGR 490 Engrg Co-op III EGR 401 Adv Prod Design EGR 486 3

EGR 485 Sr Project I

3/4

3/4

PDM Elec \_\_\_\_\_

PDM Elec \_\_

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

GE - Issue \_\_\_\_\_

- Engineering Foundation course
- + Students may enroll in PHY 231 instead of PHY 234
- Not required, but strongly recommended for success. Students are advised to take <u>either</u> EGR 100 <u>or</u> EGR 180.
- 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:

EGR 440

GE - LS

- 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

Prod'n Models

- 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.