

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

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

(2019-20 Catalog) (MTH 201 Placement - 5 Year Program)

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

Student ID#: G

	1st Semester: Fall _____	Credits	Grade	Semester Completed	2nd Semester: Winter _____	Credits	Grade	Semester Completed	Semester: S/S _____	Credits	Grade	Semester Completed
1st Year	* MTH 201 Calculus I	4	_____	_____	* MTH 202 Calculus II	4	_____	_____	_____	_____	_____	_____
	* WRT 150 Writ Strategies	4	_____	_____	* CHM 115 Chemistry I	4	_____	_____	_____	_____	_____	_____
	* EGR 106 Intro to Egr Design I	3	_____	_____	* EGR 107 Intro to Egr Design II	3	_____	_____	_____	_____	_____	_____
	GE - HP _____	3	_____	_____	GE - Arts _____	3	_____	_____	_____	_____	_____	_____
2nd Year	3rd Semester: Fall _____	Credits	Grade	Semester Completed	4th Semester: Winter _____	Credits	Grade	Semester Completed	Semester: S/S _____	Credits	Grade	Semester Completed
	* MTH 203 Calculus III	4	_____	_____	* MTH 302 Lin Alg & DEQ	4	_____	_____	_____	_____	_____	_____
	* STA 220 Statistical Modeling	2	_____	_____	% ECO 210/211 Economics	3	_____	_____	_____	_____	_____	_____
	* EGR 220 Measure/Data Analysis	1	_____	_____	* PHY 230 Physics I	5	_____	_____	_____	_____	_____	_____
• GE-SBS _____	3	_____	_____	# GE - GP _____	3	_____	_____	_____	_____	_____	_____	
@ GE - P & L (PHI 102 Ethics)	3	_____	_____									
3rd Year	5th Semester: Fall _____	Credits	Grade	Semester Completed	6th Semester: Winter _____	Credits	Grade	Semester Completed	Semester: S/S _____	Credits	Grade	Semester Completed
	+ * PHY 234/1 Physics II	4/5	_____	_____	* EGR 309 Mach Design I	4	_____	_____	EGR 290 Engrg Co-op I	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	_____	_____	GE - LS _____	3	_____	_____	_____	_____	_____	_____	
4th Year	7th Semester: Fall _____	Credits	Grade	Semester Completed	Semester: Winter _____	Credits	Grade	Semester Completed	8th Semester: S/S _____	Credits	Grade	Semester Completed
	EGR 301 Fund Prod Des	4	_____	_____	EGR 390 Engrg Co-op II (SWS)	3	_____	_____	EGR 362 Thermo-Fluid Sys	4	_____	_____
	EGR 345 Dyn Sys Mod	4	_____	_____					EGR 329 Intro to FEA	3	_____	_____
	EGR 367 Mfg Processes	4	_____	_____					EGR 405 Mat Analysis	3	_____	_____
GE - Issue _____	3	_____	_____					GE - Issue _____	3	_____	_____	
5th Year	Semester: Fall _____	Credits	Grade	Semester Completed	9th Semester: Winter _____	Credits	Grade	Semester Completed	10th Semester: S/S _____	Credits	Grade	Semester Completed
	EGR 490 Engrg Co-op III	3	_____	_____	EGR 401 Adv Prod Design	4	_____	_____	EGR 486 Sr Project II	2	_____	_____
					EGR 485 Sr Project I	1	_____	_____	EGR 440 Prod'n Models	3	_____	_____
					\$ PDM Elec _____	3/4	_____	_____	GE - US _____	3	_____	_____
				\$ PDM Elec _____	3/4	_____	_____					

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