

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

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

(2019-20 Catalog) (MTH 110 Placement - 5 Year Program) Minor: \_\_\_\_\_

Student ID#: G

Year	Semester	Credits	Grade	Semester Completed	Semester	Credits	Grade	Semester Completed	Semester	Credits	Grade	Semester Completed
1st Year	1st Semester: Fall				2nd Semester: Winter				Semester: S/S			
	MTH 110 Algebra	4			MTH 124 Functions and Models	5						
	* WRT 150 Writ Strategies	4			* CHM 115 Chemistry I	4						
	^ EGR 100 Intro to Engrg	1			GE - LS	3						
	GE - Arts	3			• GE-SBS	3						
	GE - HP	3										
2nd Year	3rd Semester: Fall				4th Semester: Winter				Semester: S/S			
	* MTH 201 Calculus I	4			* MTH 202 Calculus II	4						
	* EGR 106 Intro to Egr Design I	3			* EGR 107 Intro to Egr Design II	3						
	% ECO 210/211 Economics	3			* PHY 230 Physics I	5						
	@ GE - P & L (PHI 102 Ethics)	3			* STA 220 Statistical Modeling	2						
				* EGR 220 Measure/Data Analysis	1							
3rd Year	5th Semester: Fall				6th Semester: Winter				Semester: S/S			
	* 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						
	* EGR 209 Mech & Mach	4			* EGR 250 Mat Sci & Engrg	4						
	* EGR 226 MicroCtrl Pgm Appl	4			* EGR 214 Circuit Analysis I	4						
	* EGR 289 Engrg Co-op Prep	1										
4th Year	7th Semester: Fall				Semester: Winter				8th Semester: S/S			
	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 - GP	3							GE-US	3		
5th Year	Semester: Fall				9th Semester: Winter				10th Semester: S/S			
	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 - Issue	3			
				§ PDM Elec	3/4			GE - Issue	3			

PCEC Student Services: (616)331-6025

- \* Engineering Foundation course
- + Students may enroll in PHY 231 instead of PHY 234
- ^ Not required, but strongly recommended for success
- 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.