

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

Student Name: _____

(2019-20 Catalog) (MTH 124 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 124 Functions & Models	5	_____	_____	* MTH 201 Calculus I	4	_____	_____	_____	_____	_____	_____
	* WRT 150 Writ Strategies	4	_____	_____	* CHM 115 Chemistry I	4	_____	_____	_____	_____	_____	_____
	^ EGR 100 Intro to Engrg	1	_____	_____	* EGR 106 Intro to Egr Design I	3	_____	_____	_____	_____	_____	_____
	GE - HP _____	3	_____	_____	GE - Arts _____	3	_____	_____	_____	_____	_____	_____
^ EGR 180 Intro Engrg Prob Solv	3	_____	_____									
2nd Year	3rd Semester: Fall				4th Semester: Winter				Semester: S/S			
	* MTH 202 Calculus II	4	_____	_____	* MTH 203 Calculus III	4	_____	_____	_____	_____	_____	_____
	* EGR 107 Intro to Egr Design II	3	_____	_____	* STA 220 Statistical Modeling	2	_____	_____	_____	_____	_____	_____
	@ GE - P & L (PHI 102 Ethics)	3	_____	_____	* EGR 220 Measure/Data Analysis	1	_____	_____	_____	_____	_____	_____
	• GE-SBS _____	3	_____	_____	* PHY 230 Physics I	5	_____	_____	_____	_____	_____	_____
				# GE - GP _____	3	_____	_____	_____	_____	_____	_____	_____
3rd Year	5th Semester: Fall				6th Semester: Winter				Semester: S/S			
	+ * PHY 234/1 Physics II	4/5	_____	_____	* MTH 302 Lin Alg & DEQ	4	_____	_____	EGR 290 Engrg Co-op I	3	_____	_____
	* EGR 209 Mech & Mach	4	_____	_____	* EGR 309 Mach Design I	4	_____	_____	_____	_____	_____	_____
	* EGR 226 MicroCtrl Pgm Appl	4	_____	_____	* EGR 250 Mat Sci & Engrg	4	_____	_____	_____	_____	_____	_____
	* EGR 289 Engrg Co-op Prep	1	_____	_____	* EGR 214 Circuit Analysis I	4	_____	_____	_____	_____	_____	_____
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 - Issue _____	3	_____	_____					% ECO 210/211 Economics	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	_____	_____
	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 - US _____	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. Students are advised to take either EGR 100 or 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:
 - 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.