

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

(2018-19 Catalog) (MTH 124 Placement - 5 Year Program)

Minor: _____

Student Name: _____

 Student ID#: G

1st Year	1st Semester: Fall_____				Credits	Grade	Semester Completed	2nd Semester: Winter _____				Credits	Grade	Semester Completed	Semester: S/S _____				Credits	Grade	Semester Completed
	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 - Hist	_____	_____	3	_____	_____	GE - Arts	_____	_____	3	_____	_____	_____	_____	_____	_____	_____	_____			
^	EGR	180	Intro Engrg Prob Solv	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	202	Calculus II	4	_____	_____	*	MTH	203	Calculus III	4	_____	_____	_____	_____	_____	_____	_____		
	*	EGR	107	Intro to Egr Design II	3	_____	_____	*	STA	220	Engrg Statistics	2	_____	_____	_____	_____	_____	_____			
	@	GE - P & L (PHI 102 Ethics)	_____	3	_____	_____	*	EGR	220	Engrg Stats Lab	1	_____	_____	_____	_____	_____	_____	_____			
	•	GE-SBS	_____	3	_____	_____	*	PHY	230	Physics I	5	_____	_____	_____	_____	_____	_____	_____			
							#	GE - GP	_____	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	_____	_____	*	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_____				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	_____	_____						% ECO	210/211 Economics	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	_____	_____			
	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.