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

Student Name: _____

(2019-20 Catalog) ***(MTH 110 Placement - 5 Year Program)*** **Minor:** _____

Student ID#: G

		Credits	Grade	Semester Completed
1st Year	**1st Semester: Fall____**			
	MTH 110 Algebra	4	_____	_____
	* WRT 150 Writ Strategies	4	_____	_____
	^ EGR 100 Intro to Engrg	1	_____	_____
	GE - Arts _____	3	_____	_____
	GE - HP _____	3	_____	_____
	2nd Semester: Winter ____			
	MTH 124 Functions and Models	5	_____	_____
	* CHM 115 Chemistry I	4	_____	_____
	GE - LS _____	3	_____	_____
	• GE-SBS _____	3	_____	_____
	Semester: S/S ____			
	_____	__	_____	_____
	_____	__	_____	_____
	_____	__	_____	_____
2nd Year	**3rd Semester: Fall____**			
	* MTH 201 Calculus I	4	_____	_____
	* EGR 106 Intro to Egr Design I	3	_____	_____
	% ECO 210/211 Economics	3	_____	_____
	@ GE - P & L (PHI 102 Ethics)	3	_____	_____
	4th Semester: Winter ____			
	* MTH 202 Calculus II	4	_____	_____
	* EGR 107 Intro to Egr Design II	3	_____	_____
	* PHY 230 Physics I	5	_____	_____
	* STA 220 Statistical Modeling	2	_____	_____
	* EGR 220 Measure/Data Analysis	1	_____	_____
	Semester: S/S ____			
	_____	__	_____	_____
	_____	__	_____	_____
	_____	__	_____	_____
3rd Year	**5th Semester: Fall____**			
	* MTH 203 Calculus III	4	_____	_____
	+ * PHY 234/1 Physics II	4/5	_____	_____
	* EGR 209 Mech & Mach	4	_____	_____
	* EGR 226 MicroCtrl Pgm Appl	4	_____	_____
	* EGR 289 Engrg Co-op Prep	1	_____	_____
	6th Semester: Winter ____			
	* MTH 302 Lin Alg & DEQ	4	_____	_____
	* EGR 309 Mach Design I	4	_____	_____
	* EGR 250 Mat Sci & Engrg	4	_____	_____
	* EGR 214 Circuit Analysis I	4	_____	_____
	Semester: S/S ____			
	EGR 290 Engrg Co-op I	3	_____	_____
4th Year	**7th Semester: Fall____**			
	EGR 301 Fund Prod Des	4	_____	_____
	EGR 345 Dyn Sys Mod	4	_____	_____
	EGR 367 Mfg Processes	4	_____	_____
	# GE-GP _____	3	_____	_____
	Semester: Winter ____			
	EGR 390 Engrg Co-op II	3	_____	_____
	GE - Issue _____	3	_____	_____
	8th Semester: S/S ____			
	EGR 362 Thermo-Fluid Sys	4	_____	_____
	EGR 440 Prod'n Models	3	_____	_____
	EGR 441 Egr Econ	4	_____	_____
	GE-US _____	3	_____	_____
5th Year	**Semester: Fall____**			
	EGR 490 Engrg Co-op III	3	_____	_____
	9th Semester: Winter ____			
	EGR 450 Mfg Controls	4	_____	_____
	EGR 485 Sr Project I	1	_____	_____
	EGR 404 Polymer Science	4	_____	_____
	$ PDM Elec _____	3/4	_____	_____
	GE - Issue _____	3	_____	_____
	10th Semester: S/S ____			
	EGR 486 Sr Project II	2	_____	_____
	$ PDM Elec _____	3/4	_____	_____

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 GP 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 (2 required)**
EGR 413 Materials for Energy Storage
EGR 445 Robotics Systems Engineering
MGT 337 Supply Chain Management
STA 314 Statistical Quality Methods OR 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.