## Study Plan for B.S.E., PRODUCT DESIGN & MANUFACTURING ENGINEERING Major & Robotics and Control Emphasis

(2019-20 Catalog)	(MTH 201 Placement with Honors A	Alliance and Conflict - 4	Year Program

Student Name:	
Student ID#:	$\overline{G}$

Minor:	

1st Year	* MTH 201 Calculus I CHM 115 Chemistry I HNR 260 HNR 201 Live, Learn, Lead	3 3 <i>Credits</i>	 Semester Completed	Semester   Semester	esign II 3 6
2nd Year	3rd Semester: Fall  * PHY 234/1 Physics II  * STA 220 Statistical Modeling  * EGR 220 Measure/Data Analysis  * EGR 209 Mech & Mach  * EGR 289 Engrg Co-op Prep	4/5 2 3 1 4 1	 Semester Completed	Semester   Semester	
		ts	Semester	Semester	s Semester
3rd Year	5th Semester: Fall EGR 301 Fund Prod Des EGR 345 Dyn Sys Mod EGR 367 Mfg Processes	4 4 4	 Completed	Semester: Winter         \$\overline{\chi}\$ Grade         Completed         6th Semester: S/S	d Sys 4

## PCEC Student Services: (616)331-6025

- \* Engineering Foundation course
- + Students may enroll in PHY 231 instead of PHY 234
- # The Jr. Seminar fulfills one Issue and one SWS requirement.

HNR 312 will also fulfill US Diversity.

Junior Seminars can be taken when students have >= 45 credits. Online seminars offered each semester.

- ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS HNR requirement.
- \$ HNR US Diversity requirement can be met with a Jr. Seminar (HNR 312).
- & Completion of EGR 485 and 486 will fulfill the HNR 499 Senior Project requirement.
- ^ Electives (2 required)

EGR 312 Dynamics

EGR 352 Kinematics and Dynamics of Machinery

EGR 405 Materials Failure Analysis

EGR 441 Engineering Economics, Quality Control and Manufacturing Operations

## 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 in each Foundation course.
- 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.

If students do not have Advanced Placement credit applicable to the engineering curriculum, e.g., Calculus, Physics, and/or Chemistry, it is strongly recommended that they consider a 5-year plan.