

Study Plan for B.S.E., **INTERDISCIPLINARY ENGINEERING** with Design & Innovation 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	<b>1st Semester: Fall</b>				<b>2nd Semester: Winter</b>				<b>Semester: S/S</b>			
	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	_____	_____	_____	_____	_____	_____
	= EGR 180 Intro Egr Prob Solv	3	_____	_____	GE - Arts	3	_____	_____	_____	_____	_____	_____
2nd Year	<b>3rd Semester: Fall</b>				<b>4th Semester: Winter</b>				<b>Semester: S/S</b>			
	* 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	_____	_____	_____	_____	_____	_____
	^ IDS 101 Innov & Prob Solving	2	_____	_____	* PHY 230 Physics I	5	_____	_____	_____	_____	_____	_____
					GE - LS	3	_____	_____	_____	_____	_____	_____
3rd Year	<b>5th Semester: Fall</b>				<b>6th Semester: Winter</b>				<b>Semester: S/S</b>			
	+ * PHY 234/1 Physics II	4/5	_____	_____	* EGR 309 Machine Design I	4	_____	_____	EGR 290 Engrg Co-op I	3	_____	_____
	* EGR 226 MicroCtrl Pgm Appl	4	_____	_____	* EGR 250 Materials Science	4	_____	_____	_____	_____	_____	_____
	* EGR 209 Mech & Mach	4	_____	_____	* EGR 214 Circuit Analysis I	4	_____	_____	_____	_____	_____	_____
	* EGR 289 Engrg Co-op Prep	1	_____	_____	* MTH 302 Lin Alg & DEQ	4	_____	_____	_____	_____	_____	_____
4th Year	<b>7th Semester: Fall</b>				<b>Semester: Winter</b>				<b>8th Semester: S/S</b>			
	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	_____	_____	LIB 323 Design Thinking	3	_____	_____	^ IE Elec	3/4	_____	_____
	EGR 367 Mfg Processes	4	_____	_____					# GE - GP	3	_____	_____
	~ MDA 112 Design Drawing I	3	_____	_____				! LIB 310 Creativity	3	_____	_____	
5th Year	<b>Semester: Fall</b>				<b>9th Semester: Winter</b>				<b>10th Semester: S/S</b>			
	EGR 490 Engrg Co-op III	3	_____	_____	EGR 485 Sr Project I	1	_____	_____	EGR 486 Sr Project II	2	_____	_____
	~ IDS 313 Thought & Design II	3	_____	_____	~ IDS 413 Thought & Design III	3	_____	_____	GE - HP	3	_____	_____
					~ IDS 312 Human Innovation	3	_____	_____	% ECO 210/211 Economics	3	_____	_____
	• GE - US	3	_____	_____	• GE - Issue	3	_____	_____	• GE-SBS	3	_____	_____

PCEC Student Services: (616)331-6025

- \* Engineering Foundation course
- + Students may enroll in PHY 231 instead of PHY 234
- 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.
- ^ Students may enroll in EGR 401-Adv. Product Design (Winter), EGR 403-Medical Device Design (Winter), or EGR 405-Material Failure (Spring/Summer)
- ~ Course is only offered at Cornerstone University
- ! LIB 310 fulfills an Issues requirement.
- = Not required, strongly encouraged for student success. It is advised to take EGR 100 OR EGR 180

**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 per Foundations 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