

**Study Plan for B.S.E., INTERDISCIPLINARY ENGINEERING & Design and Innovation emphasis**

(2018-19 Catalog)

(MTH 110 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	110	Algebra	4	_____	_____	MTH	122	College Algebra	3	_____	_____	_____	_____	_____	_____	_____	_____
	* WRT	150	Writ Strategies	4	_____	_____	MTH	123	Trigonometry	3	_____	_____	_____	_____	_____	_____	_____	_____
	= EGR	100	Intro to Engrg	1	_____	_____	* CHM	115	Chemistry I	4	_____	_____	_____	_____	_____	_____	_____	_____
	GE - Arts	_____	_____	3	_____	_____	• GE-SBS	_____	_____	3	_____	_____	_____	_____	_____	_____	_____	_____
GE - Hist	_____	_____	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	201	Calculus I	4	_____	_____	* MTH	202	Calculus II	4	_____	_____	_____	_____	_____	_____	_____	_____
	* EGR	106	Intro to Egr Design I	3	_____	_____	* EGR	107	Intro to Egr Design II	3	_____	_____	_____	_____	_____	_____	_____	_____
	% ECO	210/211	Economics	3	_____	_____	* PHY	230	Physics I	5	_____	_____	_____	_____	_____	_____	_____	_____
	~ IDS	101	Inov & Prob Solving	2	_____	_____	* STA	220	Engrg Statistics	2	_____	_____	_____	_____	_____	_____	_____	_____
						* EGR	220	Engrg Stats Lab	1	_____	_____	_____	_____	_____	_____	_____	_____	
3rd Year	5th Semester: Fall _____			Credits	Grade	Semester Completed	6th Semester: Winter _____			Credits	Grade	Semester Completed	Semester: S/S _____			Credits	Grade	Semester Completed
	* MTH	203	Calculus III	4	_____	_____	* MTH	302	Lin Alg & DEQ	4	_____	_____	EGR	290	Engrg Co-op I	3	_____	_____
	+ * PHY	234/1	Physics II	4/5	_____	_____	* EGR	309	Machine Design I	4	_____	_____						
	* EGR	209	Mech & Mach	4	_____	_____	* EGR	250	Materials Science	4	_____	_____						
	* EGR	226	MicroCtrl Pgm Appl	4	_____	_____	* EGR	214	Circuit Analysis I	4	_____	_____						
	* EGR	289	Engrg Co-op Prep	1	_____	_____												
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	_____	_____	LIB	323	Design Thinking	3	_____	_____	^ IE	Elec	_____	3/4	_____	_____
	EGR	367	Mfg Processes	4	_____	_____							GE - LS	_____	3	_____	_____	
	~ MDA	112	Design Drawing I	3	_____	_____							! LIB	310	Creativity	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	485	Sr Project I	1	_____	_____	EGR	486	Sr Project II	2	_____	_____
	~ IDS	313	Thought & Design II	3	_____	_____	~ IDS	413	Thought & Design III	3	_____	_____	@ GE - P & L (PHI 102 Ethics)	3	_____	_____	_____	
							~ IDS	312	Human Innovation	3	_____	_____	# GE - GP	_____	3	_____	_____	_____
							• GE - US	_____	_____	3	_____	_____						
						GE - Issue	_____	_____	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 362 or EGR 360 - Thermodynamics (Fall)
- ^ 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.

**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