

**Study Plan for B.S.E., INTERDISCIPLINARY ENGINEERING & Data Science 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 - LS	_____		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	226	MicroCtrl Pgm Appl	4	_____	_____	* EGR	309	Machine Design I	4	_____	_____	STA 216	Inter Applied Stats		3	_____	_____
	* EGR	209	Mech & Mach	4	_____	_____	* EGR	250	Material Sci & Egr	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	345	Dyn Sys Mod	4	_____	_____	EGR 390	Engrg Co-op II (SWS)		3	_____	_____	& EGR 362	Thermo-Fluids		4	_____	_____
	EGR	367	Mfg Processes	4	_____	_____						EGR 440	Production Models		3	_____	_____	
	STA	321	App Regres Anlys	3	_____	_____						EGR 441	Engrg Econ/QC/Mfg Ops		4	_____	_____	
	= CIS	161/2	Comp Sci	3	_____	_____						# GE - Issue	_____		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	_____	_____
							CIS 335	Data Mining		3	_____	_____	IE Elec.	_____		3/4	_____	_____
							CIS 360	Info Mgt & Sci		3	_____	_____	# GE - GP	_____		3	_____	_____
							STA 426	Multivar Data Anlys		3	_____	_____	% ECO 210/211	Economics		3	_____	_____
							GE - Issue	_____		3	_____	_____	• 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).
- % ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS Gen Ed requirement.
- & Students may take EGR 362-Thermo Fluids or EGR 360-Thermo (Fall only)
- = Either CIS 161 or CIS 162 is required

**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 equivalent elsewhere, return to GV and continue in the math thread with MTH 202.