

Study Plan for B.S.E., **INTERDISCIPLINARY ENGINEERING** & Data Science 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	1st Semester: Fall				2nd Semester: Winter				Semester: S/S			
	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 - HP _____	3	_____	_____	GE - Arts _____	3	_____	_____	_____	_____	_____	_____
^ EGR 180 Intro Egr Prob Solv	3	_____	_____									
2nd Year	3rd Semester: Fall				4th Semester: Winter				Semester: S/S			
	* 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	_____	_____	_____	_____	_____	_____
	• GE-SBS _____	3	_____	_____	* PHY 230 Physics I	5	_____	_____	_____	_____	_____	_____
				GE - LS _____	3	_____	_____	_____	_____	_____	_____	_____
3rd Year	5th Semester: Fall				6th Semester: Winter				Semester: S/S			
	+ * 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				Semester: Winter				8th Semester: S/S			
	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				9th Semester: Winter				10th Semester: S/S			
	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. (STA 314, EGR 641, or EGR 642)	3	_____	_____
					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 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).
- % ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS Gen Ed requirement.
- = 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.