

Study Plan for B.S.E., INTERDISCIPLINARY ENGINEERING & Data Science emphasis

(2019-20 Catalog) (MTH 123 Placement - 5 Year Program)

Minor: \_\_\_\_\_

Student Name: \_\_\_\_\_

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 123 Trigonometry	3			* 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-SBS _____	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 - US _____	3			* EGR 220 Measure/Data Analysis	1			_____	_____	_____	_____
	GE - LS _____	3			* PHY 230 Physics I	5			_____	_____	_____	_____
% ECO 210/211 Economics	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			* 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	<b>7th Semester: Fall</b>				<b>Semester: Winter</b>				<b>8th Semester: S/S</b>			
	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	<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		
					CIS 335 Data Mining	3			IE Elec. (STA 314, EGR 641, or EGR 642)	3		
					CIS 360 Info Mgt & Sci	3			@ GE - P & L (PHI 102 Ethics)	3		
					STA 426 Multivar Data Anlys	3			# GE - GP _____	3		
				GE - Issue _____	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
- 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