

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

(2018-19 Catalog)

(MTH 122 Placement - 5 Year Program)

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

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

 Student ID#: G

1st Year	<b>1st Semester: Fall</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>2nd Semester: Winter</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>Semester: S/S</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>
	MTH 122	College Algebra	3	_____	_____		MTH 123	Trigonometry	3	_____	_____		_____	_____	_____	_____	_____	_____
	* WRT 150	Writ Strategies	4	_____	_____		* CHM 115	Chemistry I	4	_____	_____		_____	_____	_____	_____	_____	_____
	^ EGR 100	Intro to Engrg	1	_____	_____		GE - Hist	_____	3	_____	_____		_____	_____	_____	_____	_____	_____
	GE - Arts	_____	3	_____	_____		GE - LS	_____	3	_____	_____		_____	_____	_____	_____	_____	_____
	• GE-SBS	_____	3	_____	_____													
2nd Year	<b>3rd Semester: Fall</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>4th Semester: Winter</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>Semester: S/S</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>
	* 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	_____	_____		_____	_____	_____	_____	_____	_____
	@ GE - P & L (PHI 102 Ethics)		3	_____	_____		* STA 220	Engrg Statistics	2	_____	_____		_____	_____	_____	_____	_____	_____
							* EGR 220	Engrg Stats Lab	1	_____	_____		_____	_____	_____	_____	_____	_____
3rd Year	<b>5th Semester: Fall</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>6th Semester: Winter</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>Semester: S/S</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>
	+ * 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> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>Semester: Winter</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>8th Semester: S/S</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>
	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> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>9th Semester: Winter</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>	<b>10th Semester: S/S</b> _____			<i>Credits</i>	<i>Grade</i>	<i>Semester Completed</i>
	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 - US	_____	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.
- & 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.