Study Plan for B.S.E., *INTERDISCIPLINARY ENGINEERING* & Renewable Energy emphasis (Solar/All Track)

(2019-20 Catalog) ***(MTH 110 Placement - 5 Year Program)*** **Minor:** _____

Student Name: _____

Student ID#: G _____

		1st Semester: Fall____	Credits	Grade	Semester Completed	2nd Semester: Winter ____	Credits	Grade	Semester Completed	Semester: S/S ____	Credits	Grade	Semester Completed
1st Year		MTH 110 Algebra	4			MTH 124 Functions & Models	5						
	*	WRT 150 Writ Strategies	4			* CHM 115 Chemistry I	4						
	!	EGR 100 Intro to Engrg	1			^ BIO 105 Environmental Sci	3						
		GE - Arts _____	3			@ GE P & L PHI 102	3						
		GE - HP _____	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						
	*	STA 220 Statistical Modeling	2			• GE SBS/US _____	3						
	*	EGR 220 Measure/Data Analysis	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 214 Circuit Analysis I	4			* EGR 223 Probability/Signals	3		
	~	EGR 224 Intro Dig Sys Design	3			* EGR 257 Elec. Materials	4						
	*	EGR 209 Mech & Mach	4			* EGR 226 MicroCtrl Pgm Appl	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 314, 360 or 362	4			EGR 390 Engrg Co-op II (SWS)	3			~ EGR 330 or IE Elec.	3/4		
	#	EGR 326, 345 or 346	4							~ EGR 323 or IE Elec.	3/4		
	&	IE Elec _____	3/4							GE GP _____	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		
		EGR 463 Alternative Energy	3			^ EGR 406 Renewable Energy	3			& IE Elec. (EGR 455)	3/4		
						EGR 413 Matls Energy Storage	3						
						& IE Elec (EGR 430)	3/4						
						^ GEO 360 Earth Resources	3						

* 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)

@ 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 GenEd requirement.

^ Emphasis required general education course. Check availability ASAP for planning purposes.

! Not required, but highly recommended for success. Students should take EGR 100 or EGR 180

~ IE Prerequiste course for selected upper-level electives.

Select one for required IE coursework (EGR 314 and EGR 326 recommended)

& A total of four electives is required. Please see a faculty advisor ASAP to select electives.

Electives	Credits	Title	Semester	Course Prerequisites	Energy Focus
EGR 314	4	Circuit Analysis II	Fall	Only if not taken for required course, no double dipping	Solar
EGR 315	4	Electronic Circuits I	Fall		Solar
EGR 326	4	Embedded System Design	Fall		Solar
EGR 430	4	Electromechanics	Winter	EGR 330	All
EGR 455	4	Automatic Control	Summer	EGR 323	All
EGR 435	3	Math Model of Phys Sys	Winter	MTH 302	All

Secondary Admission Criteria:

- 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 eudcation course, EGR 289

Recommendation:

It is strongly encouraged that students do not beging 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