

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

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

(2019-20 Catalog) (MTH 201 Placement - 5 Year Program)

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

Student ID#: **G**

Year	1st Semester: Fall	Credits	Grade	Semester Completed	2nd Semester: Winter	Credits	Grade	Semester Completed	Semester: S/S	Credits	Grade	Semester Completed
1st Year	* MTH 201 Calculus I * WRT 150 Writ Strategies * EGR 106 Intro to Egr Design I GE - HP	4 4 3 3	_____ _____ _____ _____	_____ _____ _____ _____	* MTH 202 Calculus II * CHM 115 Chemistry I * EGR 107 Intro to Egr Design II GE - Arts	4 4 3 3	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
2nd Year	3rd Semester: Fall * MTH 203 Calculus III * STA 220 Statistical Modeling * EGR 220 Measure/Data Analysis ^ BIO 105 Environmental Sci. % ECO 210/211 Micro/Macroecon.	4 2 1 3 3	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	4th Semester: Winter * MTH 302 Lin Alg & DEQ * PHY 230 Physics I ~ EGR 224 Intro Dig Sys Design • GE SBS/US	4 5 3 3	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____	_____ _____ _____ _____
3rd Year	5th Semester: Fall + * PHY 234/1 Physics II * EGR 226 MicroCtrl Pgm Appl * EGR 209 Mech & Mach * EGR 289 Engrg Co-op Prep	4/5 4 4 1	_____ _____ _____ _____	_____ _____ _____ _____	6th Semester: Winter * EGR 223 Probability/Signals * EGR 257 Elec. Materials * EGR 214 Circuit Analysis I	3 4 4	_____ _____ _____ _____	_____ _____ _____ _____	Semester: S/S EGR 290 Engrg Co-op I	3	_____ _____	_____ _____
4th Year	7th Semester: Fall # EGR 314, 360 or 362 # EGR 326, 345 or 346 & IE Elec	4 4 3/4	_____ _____ _____	_____ _____ _____	Semester: Winter EGR 390 Engrg Co-op II (sws)	3	_____ _____	_____ _____	8th Semester: S/S ~ EGR 330 or IE Elec. ~ EGR 323 or IE Elec. GE GP @ PHI 102 Ethics	3/4 3 3 3	_____ _____ _____ _____	_____ _____ _____ _____
5th Year	Semester: Fall EGR 490 Engrg Co-op III EGR 463 Alternative Energy	3 3	_____ _____	_____ _____	9th Semester: Winter EGR 485 Sr Project I ^ EGR 406 Renewable Energy EGR 413 Mats Energy Storage & IE Elec (EGR 430) ^ GEO 360 Earth Resources	1 3 3 3/4 3	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____	10th Semester: S/S EGR 486 Sr Project II & IE Elec. (EGR 455)	2 3/4	_____ _____	_____ _____

\* 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.

# 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.

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

! Not required, but highly recommended for success.

~ IE Prerequisite course for selected upper-level 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 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.