

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

(2019-20 Catalog) (MTH 201 Placement - 4 Year Program)

Minor: _____

Student Name: _____

 Student ID#: *G* _____

| 1st Year | 1st Semester: Fall _____ | | | Credits | Grade | Semester Completed | 2nd Semester: Winter _____ | | | Credits | Grade | Semester Completed | Semester: S/S _____ | | | Credits | Grade | Semester Completed |
|----------|--------------------------|-----------------|-----------------------|---------|-------------------------------|--------------------|----------------------------|----------------------|------------------------|---------|-----------------|-------------------------------|-------------------------|---------------------|-------|---------|-------|--------------------|
| | * MTH | 201 | Calculus I | 4 | _____ | _____ | * MTH | 202 | Calculus II | 4 | _____ | _____ | GE-Art | _____ | 3 | _____ | _____ | |
| | * WRT | 150 | Writ Strategies | 4 | _____ | _____ | * PHY | 230 | Physics I | 5 | _____ | _____ | | | | | | |
| | * EGR | 106 | Intro to Egr Design I | 3 | _____ | _____ | * EGR | 107 | Intro to Egr Design II | 3 | _____ | _____ | | | | | | |
| | * CHM | 115 | Chemistry I | 4 | _____ | _____ | * STA | 220 | Statistical Modeling | 2 | _____ | _____ | | | | | | |
| | | | | | | | * EGR | 220 | Measure/Data Analysis | 1 | _____ | _____ | | | | | | |
| 2nd Year | 3rd Semester: Fall _____ | | | Credits | Grade | Semester Completed | 4th 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 | 309 | Machine Design I | 4 | _____ | _____ | STA 216 | Inter Applied Stats | 3 | _____ | _____ | |
| | * EGR | 226 | MicroCtrl Pgm Appl | 4 | _____ | _____ | * EGR | 250 | Material Sci & Egr | 4 | _____ | _____ | | | | | | |
| | * EGR | 209 | Mech & Mach | 4 | _____ | _____ | * EGR | 214 | Circuit Analysis I | 4 | _____ | _____ | | | | | | |
| | * EGR | 289 | Engrg Co-op Prep | 1 | _____ | _____ | | | | | | | | | | | | |
| 3rd Year | 5th Semester: Fall _____ | | | Credits | Grade | Semester Completed | Semester: Winter _____ | | | Credits | Grade | Semester Completed | 6th Semester: S/S _____ | | | Credits | Grade | Semester Completed |
| | EGR | 345 | Dyn Sys Mod | 4 | _____ | _____ | EGR 390 | Engrg Co-op II (sws) | 3 | _____ | _____ | EGR 362 | Thermo-Fluids | 4 | _____ | _____ | | |
| | EGR | 367 | Mfg Processes | 4 | _____ | _____ | STA 426 | Multivar Data Anlys | 3 | _____ | _____ | 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 | _____ | _____ | | | | | | % ECO | 210/211 Economics | 3 | _____ | _____ | | |
| 4th Year | Semester: Fall _____ | | | Credits | Grade | Semester Completed | 7th Semester: Winter _____ | | | Credits | Grade | Semester Completed | 8th 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 | _____ | _____ | | | |
| | GE - Issue | _____ | 3 | _____ | _____ | CIS 335 | Data Mining | 3 | _____ | _____ | IE Elec. | (STA 314, EGR 641 or EGR 642) | 3 | _____ | _____ | | | |
| | | | | | | CIS 360 | Info Mgt & Sci | 3 | _____ | _____ | • GE - SBS /US | _____ | 3 | _____ | _____ | | | |
| | | | | | | GE - HP | _____ | 3 | _____ | _____ | # GE - GP/Issue | _____ | 3 | _____ | _____ | | | |
| | | | | | @ GE - P & L (PHI 102 Ethics) | 3 | _____ | _____ | | GE - LS | _____ | 3 | _____ | _____ | | | | |

PCEC Student Services: (616)331-6025

- * Engineering Foundation course - requires PDM foundations
- + 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)
- # 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 GenEd requirement.
- = Either CIS 161 or CIS 162 is required
- ! EGR 435 Mathematical Modeling of Physiologic Systems may be taken instead (Winter offering).

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.