

Study Plan for B.S.E., INTERDISCIPLINARY ENGINEERING with Design & Innovation emphasis

(2018-19 Catalog) (MTH 122 Placement - 5 Year Program)

Minor: _____

Student Name: _____

 Student ID#: G

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| 1st Year | 1st Semester: Fall _____ | | | Credits | Grade | Semester Completed | 2nd Semester: Winter _____ | | | Credits | Grade | Semester Completed | Semester: S/S _____ | | | Credits | Grade | Semester Completed | |
| | 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 - P & L (PHI 102 Ethics) | _____ | 3 | _____ | _____ | _____ | _____ | _____ | _____ | _____ | | |
| | • | GE-SBS | _____ | _____ | 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 | _____ | _____ | _____ | _____ | _____ | _____ | |
| | | GE - LS | _____ | _____ | 3 | _____ | _____ | * | PHY | 230 | Physics I | 5 | _____ | _____ | _____ | _____ | _____ | _____ | |
| | ~ | IDS | 101 | Inov & Prob Solving | 2 | _____ | _____ | * | STA | 220 | Engrg Statistics | 2 | _____ | _____ | _____ | _____ | _____ | _____ | |
| | | | | | | | | * | EGR | 220 | Engrg Stats Lab | 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 | 309 | Machine Design I | 4 | _____ | _____ | | | | | |
| | * | EGR | 226 | MicroCtrl Pgm Appl | 4 | _____ | _____ | * | EGR | 250 | Materials Science | 4 | _____ | _____ | | | | | |
| | * | EGR | 209 | Mech & Mach | 4 | _____ | _____ | * | EGR | 214 | Circuit Analysis I | 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 | 301 | Fund Prod Des | 4 | _____ | _____ | EGR | 390 | Engrg Co-op II (SWS) | 3 | _____ | _____ | • | EGR | 362 | Thermo-Fluid Sys | 4 | _____ | |
| | EGR | 345 | Dyn Sys Mod | 4 | _____ | _____ | LIB | 323 | Design Thinking | 3 | _____ | _____ | ^ | IE | Elec | _____ | 3/4 | _____ | |
| | EGR | 367 | Mfg Processes | 4 | _____ | _____ | | | | | | | # | GE - GP | _____ | 3 | _____ | | |
| | ~ | MDA | 112 | Design Drawing I | 3 | _____ | _____ | | | | | | ! | LIB | 310 | Creativity | 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 | _____ | | |
| | ~ | IDS | 313 | Thought & Design II | 3 | _____ | ~ | IDS | 413 | Thought & Design III | 3 | _____ | ~ | IDS | 312 | Human Innovation | 3 | _____ | |
| | | | | | | | ~ | IDS | 312 | Human Innovation | 3 | _____ | | | | | | | |
| | • | GE - US | _____ | _____ | 3 | _____ | | • | GE - US | _____ | 3 | _____ | | | | | | | |
| | | GE - Issue | _____ | _____ | 3 | _____ | | | GE - Issue | _____ | 3 | _____ | | | | | | | |

PCEC Student Services: (616)331-6025

- * 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)
- # 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).
Consider taking PHI 102 as an SWS.
- % ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS Gen Ed requirement.
- Students may enroll in EGR 362 or EGR 360 - Thermodynamics (Fall)
- ^ Students may enroll in EGR 401-Adv. Product Design (Winter), EGR 403-Medical Device Design (Winter), or EGR 405-Material Failure (Spring/Summer)
- ~ Course is only offered at Cornerstone University
- ! LIB 310 fulfills an Issues requirement.
- = Not required, strongly encouraged for student success.

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.