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

**Student Name:** _____

**(2019-20 Catalog)** ***(MTH 201 Placement with Honors Alliance and Conflict - 4 Year Program)***

**Student ID#:** *G* _____

**Minor:** _____

## 1st Year

| | 1st Semester: Fall____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| * | MTH | 201 | Calculus I | 4 | | |
| * | CHM | 115 | Chemistry I | 4 | | |
| | HNR | 260 | _____ | 3 | | |
| | HNR | 201 | Live, Learn, Lead | 3 | | |

| | 2nd Semester: Winter ____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| * | MTH | 202 | Calculus II | 4 | | |
| * | EGR | 106 | Intro to Egr Design I | 3 | | |
| | HNR | 261 | _____ | 3 | | |
| | HNR | 262 | _____ | 3 | | |

| | Semester: S/S ____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| * | MTH | 203 | Calculus III | 4 | | |
| * | EGR | 107 | Intro to Egr Design II | 3 | | |
| * | PHY | 230 | Physics I | 5 | | |

## 2nd Year

| | | 3rd Semester: Fall____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|---|
| * | STA | 220 | Statistical Modeling | 2 | | |
| * | EGR | 220 | Measure/Data Analysis | 1 | | |
| + * | PHY | 234/1 | Physics II | 4/5 | | |
| * | EGR | 226 | MicroCtrl Pgm Appl | 4 | | |
| * | EGR | 209 | Mech & Mach | 4 | | |
| * | EGR | 289 | Engrg Co-op Prep | 1 | | |

| | 4th Semester: Winter ____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| * | MTH | 302 | Lin Alg & DEQ | 4 | | |
| * | EGR | 309 | Machine Design I | 4 | | |
| * | EGR | 250 | Material Sci & Egr | 4 | | |
| * | EGR | 214 | Circuit Analysis I | 4 | | |

| | Semester: S/S ____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| | EGR | 290 | Engrg Co-op I | 3 | | |
| | STA | 216 | Inter Applied Stats | 3 | | |

## 3rd Year

| | | 5th Semester: Fall____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|---|
| | EGR | 345 | Dyn Sys Mod | 4 | | |
| | EGR | 367 | Mfg Processes | 4 | | |
| ! | STA | 321 | App Regres Anlys | 3 | | |
| = | CIS | 161/2 | Computational Sci | 3 | | |

| | Semester: Winter ____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| | EGR | 390 | Engrg Co-op II (SWS) | 3 | | |
| | STA | 426 | Multivar Data Anlys | 3 | | |

| | 6th Semester: S/S ____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| | EGR | 362 | Thermo-Fluids | 4 | | |
| | EGR | 440 | Production Models | 3 | | |
| | EGR | 441 | Engrg Econ/QC/Mfg Ops | 4 | | |
| # | HNR | Jr. Sem | _____ | 3 | | |

## 4th Year

| | Semester: Fall____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| | EGR | 490 | Engrg Co-op III | 3 | | |

| | 7th Semester: Winter ____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| ^ | EGR | 485 | Sr Project I | 1 | | |
| | CIS | 335 | Data Mining | 3 | | |
| | CIS | 360 | Info Mgt & Sci | 3 | | |
| | HNR | LS | _____ | 3 | | |
| % | ECO | 210/211 | Economics | 3 | | |

| | 8th Semester: S/S ____ | | | Credits | Grade | Semester Completed |
|---|---|---|---|---|---|---|
| ^ | EGR | 486 | Sr Project II | 2 | | |
| | IE | Elec. | (STA 314, EGR 641, or EGR 642) | 3 | | |
| $ | HNR | US | _____ | 3 | | |

***PCEC Student Services: (616)331-6025***

* Engineering Foundation course - requires PDM foundations
\+ Students may enroll in PHY 231 instead of PHY 234
\# The Jr. Seminar fulfills one Issue and one SWS requirement.
HNR 312 will also fulfill US Diversity
Junior Seminars can be taken when students have >= 45 credits. Online seminars offered each semester.
% ECO 210 or 211 is required in the engineering curriculum. Also fulfills one SBS Honors requirement.
$ HNR US Diversity requirement can be met with a Jr. Seminar (HNR 312).
^ Completion of EGR 485 and 486 will fulfill the HNR 499 Senior Project 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.