

Computer Engineering

Honors College: MTH 201 Start, 4 Year Plan

Secondary Admission Required

| 1st Year | | | | | |
|---------------------------------------|--------------|------------------------------------|--------------|------------------------------------|------------|
| Fall | | Winter | | Spring/Summer | |
| *MTH 201: Calculus 1 | 4 | *MTH 202: Calculus 2 | 4 | *EGR 185: First-Year EGR Design | 2 |
| *EGR 100: Intro to EGR | 1 | *PHY 230: Physics 1 | 5 | *CHM 115: Chemistry 1 | 4 |
| *EGR 111: Intro to EGR Graphics | 1 | *EGR 113: Intro to CAD/CAM | 1 | *MTH 203: Calculus 3 | 4 |
| *EGR 112: Appl Program for EGR | 2 | HNR 153: Interdisciplinary Seq. 3 | 3 | | |
| HNR 151: Interdisciplinary Seq. 1 | 3 | HNR 154: Interdisciplinary Seq. 4 | 3 | | |
| HNR 152: Interdisciplinary Seq. 2 | 3 | | | | |
| Total | 14 | Total | 16 | Total | 10 |
| 2nd Year | | | | | |
| Fall | | Winter | | Spring/Summer | |
| *PHY 234 or 231: Physics 2 | 4-5 | *MTH 302: Linear Algebra/Diff Eq | 4 | EGR 290: Engineering Co-op 1 | 3 |
| *STA 220: Stat Modeling for EGR | 2 | *EGR 223: Prob. & Signals Analysis | 3 | | |
| *EGR 220: EGR Measure & Data | 1 | *CIS 163: Computer Science 2 | 4 | | |
| *EGR 224: Intro to Digital System | 3 | *EGR 214: Circuit Analysis 1 | 3 | | |
| *EGR 226: Microcontroller Program | 3 | *EGR 215: Circuit Analysis 1 Lab | 1 | | |
| *EGR 227: Microcontroller Progr. Lab | 1 | | | | |
| *EGR 289: EGR Professionalism | 1 | | | | |
| *CIS 159: Obj. Oriented Prog. for EGR | 1 | | | | |
| Total | 16-17 | Total | 15 | Total | 3 |
| 3rd Year ~ Admission Required | | | | | |
| Fall | | Winter | | Spring/Summer | |
| EGR 314: Circuit Analysis 2 | 4 | EGR 390: Engineering Co-op 2 | 3 | ^CIS 241: Sys-level Program & Util | 3 |
| EGR 315: Electronic Circuits 1 | 4 | | | CIS 350: Intro to Software EGR | 3 |
| EGR 326: Embedded Sys. Design | 4 | | | ^CIS 263: Data Struct & Algorithms | 3 |
| HNR 201: Live. Learn. Lead. | 3 | | | ECO 210 or 211: Economics | 3 |
| Total | 15 | Total | 3 | Total | 12 |
| 4th Year ~ Admission Required | | | | | |
| Fall | | Winter | | Spring/Summer | |
| EGR 490: Engineering Co-op 3 | 3 | EGR 485: Senior Egr Project 1 | 1 | EGR 486: Senior EGR Project 2 | 2 |
| | | CIS 452: Operating Sys Concepts | 3 | CE Elective | 3-4 |
| | | CE Electives (Select 2) | 6-8 | HNR 350: Integrative Seminar | 3 |
| | | Supplemental Writing Skills | 3 | | |
| Total | 3 | Total | 13-15 | Total | 8-9 |

- This is a suggested curriculum guide that might not be applicable to every student
- Foundation courses are required for secondary admission and are designated by an asterisk (*) on this guide
- ^CIS 241 is completed in the 1st 6 weeks of Summer and CIS 263 is completed in the 2nd 6 weeks of Summer. A Registration Override Request via Banner will be required to register for both courses simultaneously.
- Student must have a **minimum of 120 credits** to graduate, with **58 of the 120 credits** being from a senior level institution and the **final 30 of the 120 credits** completed at GVSU

| CE Foundation Course Requirements | | | |
|-----------------------------------|---------|--------------------|--------------------------|
| WRT 150 (or WRT 130) | MTH 201 | MTH 202 | MTH 203 |
| MTH 302 | PHY 230 | PHY 231 or PHY 234 | CHM 115 |
| STA 220/EGR 220 | EGR 100 | EGR 111 | EGR 112 (or EGR 104+108) |
| EGR 113 | EGR 185 | EGR 224 | EGR 226/227 |
| EGR 289 | EGR 223 | EGR 214/215 | CIS 159 (or CIS 162) |
| CIS 163 | | | |

| Honors Requirements | |
|--|---------|
| HNR 151 | HNR 152 |
| HNR 153 | HNR 154 |
| HNR 300 (fulfilled by EGR 290) | HNR 201 |
| HNR 251 (fulfilled by EGR 100 + EGR 185) | HNR 350 |
| HNR 401/499 (fulfilled by EGR 485 + EGR 486) | |

Secondary Admission Requirements:

Detailed application and admission requirements available at <https://www.gvsu.edu/engineering/secondary-admission-to-engineering-majors-44.htm>

- ✓ A GPA of 2.7 or above in Engineering Foundation courses. Foundation courses are designated by an asterisk (*) on this guide.
- ✓ Completion of each course in the Engineering Foundation with a grade of C (2.0) or above, with no more than one repeat.
- ✓ Completion of preparation for placement in the cooperative engineering education course, EGR 289.

Honors:

The Frederik Meijer Honors College and the School of Engineering have approved the following substitutions for the honors curriculum:

- 1) Together, EGR 100 and EGR 185 fulfill the HNR 251 requirement.
- 2) EGR 290 fulfills the HNR 300 requirement.
- 3) EGR 485 fulfills the HNR 401 requirement.
- 4) EGR 486 fulfills the HNR 499 requirement.
- 5) The completion of the honors curriculum will fulfill the engineering ethics requirement.
- 6) All GVSU students must earn credit for two Supplemental Writing Skills (SWS) courses. Honors students can earn credit for one SWS course by completing HNR 154 (the winter semester of a first-year sequence) with a grade of C or better. They must earn their second SWS course credit outside of the Honors requirements.

Recommendations:

It is strongly encouraged that students do not begin or break curriculum thread by taking courses at other institutions.

For example: Taking MTH 201 equivalent elsewhere, then return to Grand Valley and continuing in the math thread with MTH 202.