

## Bachelor of Science in Engineering (B.S.E.)

2023 - 2024 Catalog Year

# **Electrical 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 Ed	•	4	EGR 290: Engineering Co-op 1	3
*STA 220: Stat Modeling for EGR		2	*EGR 223: Prob. & Signal Analysi		3		
*EGR 220: EGR Measure & Data		1	*EGR 257: Elec. Materials & Devie	ces	4		
*EGR 224: Intro to Digital System		3	*EGR 214: Circuit Analysis 1		3		
*EGR 226: Microcontroller Program 3		3	*EGR 215: Circuit Analysis 1 Lab		1		
*EGR 227: Microcontroller Progran	ı Lab	1					
*EGR 289: EGR Professionalism		1					
	Total	15-16		Total	15	Total	3
			3rd Year ~ Admission Requ	uired			
Fall			Winter			Spring/Summer	
EGR 314: Circuit Analysis 2		4	EGR 390: Engineering Co-op 2		3	EGR 330: Power Sys. Analysis	4
EGR 315: Electronic Circuits 1		4				EGR 343: Appl. Electromagnetics	4
EGR 326: Embedded Sys. Design		4				EGR 323: Signals & Sys. Analysis	3
HNR 201: Live. Learn. Lead.		3				ECO 210 or 211: Economics	3
	Total	15		Total	3	Total	14
			4th Year ~ Admission Requ	uired			
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
			EE Electives (select 3)		3-4	EE Elective	3-4
			EE Elective		3-4	Supplemental Writing Skills	3
			EE Elective		3-4	HNR 350: Integrative Seminar	3
	Total	3		Total	10-13	Total	11-12

- 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
- 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

B-3-241 Mackinac Hall and 101 Eberhard Center (616) 331-6025 or online at <a href="https://www.gvsu.edu/pcec/advising">www.gvsu.edu/pcec/advising</a>

EE 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 257	EGR 214/215			

Honors Requirements				
HNR 151	HNR 152			
HNR 153	HNR 154			
HNR 300 (fulfilled by EGR 290, EGR 390, and EGR 490)	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, EGR 390, and EGR 490 fulfill the HNR 300 requirement. Students are encouraged to plan ahead and submit a proposal form for the HNR 300 substitution.
- 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.