# **ENGINEERING TRANSFER GUIDE 2024-25**

**Eastern Mennonite University Bachelor of Science in Engineering**Associate Transfer Degree Plan in Engineering



## **COURSE REQUIREMENTS**

COURSE REQUIREMENTS									
	Complete	Complete at EMU							
BACHELOR'S DEGREE REQUIREMENT		SATISFIED BY		BACHELOR'S DEGRI REQUIREMENT		EE			
Course	Credits	Gen Ed*	CC Course	Notes	Course	Credits	Notes		
Non-transferable	1-2		SDV 100 College Success Skills or 101 Orientation		Core: Bible, Religion and Theology course	3			
Core: WRIT 125	3	PUA	ENG 111 College Comp I		Core: Intercultural Social Science	3			
Core: WRIT 135	3	UA	ENG 112 College Comp II		Core: Language Learning	3			
Core: Creative Arts	3	PUA	Any UCGS Art or Humanities		CORE 301 Transfer Portfolio	1			
Core: Literature	3	UA	Any UCGS Literature	This course must come from a different group than prior requirement	CORE 402 Senior Portfolio	1			
Core: History	3	PUA	Any UCGS History						
Core: Natural Science	4	PUA	Any UCGS Natural Sciences		ENGR Core: ENGR 110 Introduction to Engineering and Design	4			
Core: Technology Intensive	3	PUA	MTH 245 Statistics	Fulfills ENGR Core: STAT 220	ENGR Core: ENGR 156 Mathematics for Engineering Lab	2			
Core: WRIT 160	3	UA	CST 100 Public Speaking, or CST 110 Intro to Communication		ENGR Core: ENGR 245 Experimental Methods	2			
Core: Quantitative Reasoning	3-5		MTH 154 Quantitative Reasoning, 161/162 Precalc I/II, 167 Precalc with Trig		ENGR Core: ENGR 291 Engineering Design II	2			
Core: Quantitative Reasoning	3-5		Any course listed above, MTH 154, 161/162, 167		ENGR Core: ENGR 325 Engineering Ethics	2			

Complete at VCCS (cont'd)					Complete at EMU (cont'd)			
BACHELOR'S DEGREE REQUIREMENT		SATISFIED BY		BACHELOR'S DEGR REQUIREMENT		E		
Course	Credits	Gen Ed*	CC Course	Notes	Course	Credits	Notes	
Core: Quantitative Reasoning	3-5		Any course listed above, MTH 154, 161/162, 167	Only needed if 60 credits not met	ENGR Core: ENGR 390 Engineering Design III	2		
					ENGR Core: ENGR 490 Senior Design	2		
ENGR Core: ENGR 270 Engineering Statics	3		EGR 240 - Statics		ENGR Core: ENGR 491 Capstone Project	2		
ME Elective: ENGR 280 Engineering Dynamics	3		EGR 245 - Dynamics					
ME Elective: ENGR 370 Strength of Materials	4		EGR 246 Mechanics of Materials AND EGR 247 Mechanics of Materials Laboratory		CE or ME Elective: ENGR 380 Systems	4		
ME Elective: ENGR 340 Engineering Thermodynamics	3		EGR 248 Thermodynamics for Engineering		ME Elective: ENGR 350 Fluid Mechanics	4		
ENGR Core: ENGR 265 Analog Circuits	4		EGR 271 Electric Circuits I		CE or ME Elective: ENGR 333 Topics in Engineering	2-4		
CE or ME Elective: CE 365 Digital Circuits	3		EGR 265 Digital Electronics and Logic Design		CE or ME Elective: ENGR 480 Control Systems	3		
					CE or ME Elective: ENGR 499 Independent Study	1-3		
ENGR Core: Two of CS 145 Introduction to Programming, CS 155 Programming in Python, CS 245 Programming in Java, OR CS 255 Intermediate Programming	4		EGR 125 Introduction to Computer Programming for Engineers					
					Math/Sci Core: MATH 170 Discrete Math	4		
Math/Sci Core: CHEM 223 General Chemistry I	4		CHM 111 General Chemistry I					
Math/Sci Core: MATH 185 Calculus I	4		MTH 263 Calculus I		CE Elective: CE 165 Networks and Data Communications	2		

Complete at VCCS (cont'd)					Complete at EMU (cont'd)			
BACHELOR'S DEGREE REQUIREMENT		SATISFIED BY			BACHELOR'S DEGREE REQUIREMENT			
Course	Credits	Gen Ed*	CC Course	Notes	Course	Credits	Notes	
Math/Sci Core: MATH 195 Calculus II	4		MTH 264 Calculus II	Only needed if 60 credits not met	CE Elective: CE 175 Architecture and Operating Systems	4		
Math/Sci Core: MATH 284 Multivariate AND MATH 286 Vector Calculus	4		MTH 265 Calculus III		CE Elective: CE 375 Software Engineering	2		
Math/Sci Core: MATH 310 Differential Equations	3		MTH 267 Differential Equations		CE Elective: CS 345 Data Structures	2		
					CE Elective CS 355 Adv. Data Structures	2		
Math/Sci Elective: MATH 350 Linear Algebra	3		MTH 266 Linear Algebra					
Math/Sci Core: PHYS 252 University Physics I Lecture AND PHYS 253 University Physics I Lab	4		PHY 241 University Physics I					
Math/Sci Core: PHYS 262 University Physics II Lecture AND PHYS 263 University Physics II Lab	4		PHY 242 University Physics II					

<sup>\*</sup> **A** = Completion of the Associate Degree satisfies this General Education requirement. **U** = This course satisfies a Uniform Certificate of General Studies requirement. **P** = This course satisfies a Passport requirement.

## TRANSFER GUIDANCE

#### **Guaranteed Admission Agreement**

Students who complete the prescribed curriculum and meet the criteria below are guaranteed admission into Eastern Mennonite University. (This agreement does not guarantee your enrollment in any specific major. See available Guaranteed Program Admission Agreements for details about majors.)

- Earn a transferable associate degree
- Earn a minimum of 2.5 or higher cumulative GPA
- Earn a grade of C or higher in each VCCS course applicable to the transfer-oriented associate degree program
- Students should apply to transfer to EMU, which serves as their registration of intent to utilize the GAA
- Upon graduation, submit an official transcript showing completion of associate degree to the EMU Admissions

Please visit the TransferVirginia.org portal to find course requirements for different majors and **Transfer Guides** that outline course requirements for specific majors.

#### **IMPORTANT LINKS & DATES:**

- University transfer center: <a href="https://emu.edu/transfer">https://emu.edu/transfer</a>
- Admission Application (rolling admissions): https://emu.edu/apply
- **Financial aid:** https://emu.edu/financial-aid/transfer
- FAFSA Free Application for Federal Student Aid: https://studentaid.gov/

#### WHAT SHOULD I CONSIDER WHEN SELECTING COURSES?

- Create a schedule for all required courses, pay attention to prerequisites and when courses are offered, and complete your first math and English courses in your first year. For help, see Transfer Steps and Resource Center at www.TransferVirginia.org.
- Connect with an advisor at your community college and EMU in your first year. College Connect is available in your account at <a href="https://www.TransferVirginia.org">www.TransferVirginia.org</a>.

## WHICH MAJORS WILL BE AVAILABLE TO ME THROUGH THIS GAA?

Acceptance is required into competitive programs in addition to acceptance to EMU. To participate in this admission agreement, please follow all special program application procedures, deadlines, and grade point average requirements.

### IS THIS COLLEGE RIGHT FOR ME?

- **EMU at a glance:** EMU is a smaller private liberal arts university located in Harrisonburg, VA, NCAA Division III.
- **Cost and value:** EMU averages financial aid based on family income. Learn more at https://emu.edu/financial-aid/prospective/.
- **Stellar outcomes:** View alumni outcomes and student demographic statistics at <a href="https://emu.edu/about/facts/">https://emu.edu/about/facts/</a>.
- **You matter:** When you choose to join the EMU story, you become a part of an inclusive and equitable community of learners who are connected, accepted, valued and respected. EMU will prepare you for a career and develop, mentor, support and challenge you to make the world a better place.
- Learn more: <u>www.TransferVirginia.org</u>

## WHAT RESOURCES ARE AVAILABLE TO HELP ME SELECT A MAJOR?

- Explore EMU's majors and minors: https://emu.edu/academics/degree-programs
- Reach out to your EMU admissions counselor: https://emu.edu/admissions/counselors/
- Learn more about career pathways: <u>www.TransferVirginia.org</u>

#### **OTHER THINGS TO CONSIDER:**

- Completing your associate transfer degree after high school satisfies all lower division general education requirements and increases the chance of completing your bachelor's degree.
- Exceeding three years or 90 credits at your community college means you may have exhausted your financial aid at that college and have limited your future financial aid at EMU.

## WHAT ARE MY CHANCES FOR GETTING ACCEPTED?

If you apply through the general application instead of through the GAA, you will be considered for admission with all other transfer applicants.

EMU evaluates transfer applicants based on satisfactory academic progress criteria. We encourage all students to apply to receive a personalized holistic application review process.



