

Virginia Commonwealth University Bachelor of Science in Mechanical Engineering

Associate Transfer Degree Plan in Engineering

COURSE REQUIREMENTS

Complete at VCCS				Complete at VCU		
BACHELOR'S DEGREE REQUIREMENT		SATISFIED BY		BACHELOR'S DEGREE REQUIREMENT		
Course	Credits	CC Course	Notes	Course	Credits	Notes
UNIV 101	1-2	SDV 100 College Success Skills or SDV 101 Orientation to _		EGMN 203	1	
UNIV 111-112	3	ENG 111 College Comp I	UNIV 111 is waived and students receive 3 credits for UNIV 112.	EGMN 300	3	
UNIV 200	3	ENG 112 College Comp II		EGMN 301	3	
General Education	3	Any UCGS Art, Humanities or Literature course (Block II)		EGMN 302	3	
General Education	3	Any UCGS Art, Humanities or Literature course (Block II)	This course must come from a different group than prior requirement.	EGMN 303	3	
General Education	3	Any UCGS History course (Block VI)		EGMN 309	3	
ECON 210	3	ECO 202 Microeconomics	This course will substitute for the ECON 205 requirements at VCU.	EGMN 311	1.5	
MATH 200	4	MTH 263 Calculus I		EGMN 312	1.5	
MATH 201	4	MTH 264 Calculus II		EGMN 315	3	
MATH 307	4	MTH 265 Calculus III		EMN 321	3	
MATH 301	3	MTH 267 Differential Equations		EGMN 402	2	

PHYS 207	4	PHY 241 University Physics I		EGMN 403	2	
PHYS 208	4	PHY 242 University Physics II		EGMN 420	3	
CHEM/Z 101	4	CHM 111 General Chemistry I		ENGR 395	1	
EGMN 190	2	EGR 121 Foundations of Engineering		ENGR 402	1	
EGMN 110 + EGMN 210	3	EGR 122 Engineering Design	Need both EGR 121 and 122 to receive credit for EGMN 110 + EGMN 210.	ENGR 403	1	
EGRE 206	4	EGR 271 Circuits I		EGMN 416	3	
EGMN 102	3	EGR 240 Statics		EGMN 421	3	
EGMN 201	3	EGR 245 Dynamics		Approved internship or cooperative experience (ENGR 296, ENGR 396, or ENGR 398)	0	
EGMN 202	3	EGR 246 Mechanics of Materials		Review or internship or cooperative experience (ENG 496 or ENGR 498)	0	
EGMN 204	3	EGR 248 Thermo		Engineering electives	6	See VCU advisor for course options.
				Engineering or professional electives	6	See VCU advisor for course options.
				MGMT 310 or SCMA 350	3	
				STAT 441	3	
				Open elective	3-4	
CREDITS PRE-TRANSFER: 67-68				CREDITS POST-TRANSFER: 62-63		

TRANSFER GUIDANCE

Guaranteed Program Admission Agreement for VCU Engineering

By meeting the following criteria, you are guaranteed admission to the BS in Mechanical Engineering program at VCU

- Earn a transfer associate degree (AS or AA&S in Engineering).
- Earn a minimum GPA of 3.0 for your associate degree. VCU will recognize the cumulative GPA as recorded on the VCCS transcript and not recalculate based on multiple course attempts.
- Complete a minimum of 30 credits at VCCS institution.
- Earn grades of "B" or higher in all your EGR, MTH, and science courses.
- Earn grades of "C" or higher in all other community college courses

IMPORTANT LINKS & DATES:

- **University Transfer Center:** <https://transfer.vcu.edu/>.
- **Register Intent to Transfer:** <https://ugradadmissions.vcu.edu/register/letterofinterest>.
- **Admission Application:** By March 15 for fall admission and November 1 for spring at <https://www.vcu.edu/admissions/apply/>.
- **Financial Aid:** <https://semss.vcu.edu/our-services/financial-resources-and-guidance/>.
- **FAFSA - Free Application for Federal Student Aid:** March 1 for fall semester at <https://studentaid.gov/h/apply-for-aid/fafsa>.

WHAT SHOULD I CONSIDER WHEN SELECTING COURSES?

- Complete your English courses and any math prerequisites in your first year.
- Create a schedule for all required courses, pay attention to prerequisites and when courses are offered. For help, see Transfer Steps and Resource Center at www.TransferVirginia.org.
- Connect with an advisor at your community college and the VCU Transfer Center within your first semester through your account at www.TransferVirginia.org.
- Contact VCU advisor about summer course options prior to enrollment at VCU.

IS THIS DEGREE RIGHT FOR ME?

- Mechanical engineers research, design, develop, manufacture, and test tools, engines, machines, and other mechanical devices. Mechanical engineering is one of the broadest engineering disciplines. Engineers in this discipline work on power-producing machines such as electric generators, internal combustion engines, and steam and gas turbines. They also work on power-using machines such as refrigeration and air-conditioning equipment, machine tools, material-handling systems, elevators and escalators, industrial production equipment, and robots used in manufacturing. Some mechanical engineers design tools that other engineers need for their work. The key characteristics of the profession are its breadth, flexibility, and individuality. The career paths of mechanical engineers are largely determined by individual choices, a decided advantage in a changing world.

WHAT IS THE IMPACT ON MY DEGREE OF WORK I HAVE ALREADY COMPLETED?

- **Associate Transfer Degree Completion:** The completion of a transfer associate degree results in all lower-division general education requirements being met when you transfer to VCU.
- **Dual Enrollment – Completion of Associate Degree in HS:** The completion of an associate degree concurrent with high school results in 60 credits of course work applied towards your degree and VCU's general education courses satisfied. High school students should apply to VCU as freshman applicants for orientation and engagement purposes.
- **Credit for Prior Learning:** VCU accepts AP, IB, Cambridge, CLEP, DANTES, and military credits.
- **Catalog Year:** VCU will honor the degree requirements of the VCU Undergraduate Bulletin in effect at the time of the student's first post-high school enrollment into an appropriate associate degree at the two-year institution. Students must stay enrolled at their community college and take no more than four years to complete their degree. Students must also enroll at VCU within one year of completing their associate degree.

IS THIS COLLEGE RIGHT FOR ME?

- Located in downtown Richmond, within two hours of the beach, the mountains and Washington DC, VCU provides top-ranked academic programs, research opportunities and an urban setting so students can live and learn in the real world.
- VCU is a large, public research institution dedicated to the success and well-being of students and the Richmond community.
- Diversity, inclusion and equity are deeply ingrained core values of VCU.

Learn more about our college at www.TransferVirginia.org

DID YOU KNOW THAT...

- Completing your Associate transfer degree post-high school satisfies all lower division general education requirements and increases the chance of completing your bachelor's degree?
- Exceeding 3 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 VCU?

WHAT CAN I DO WITH THIS DEGREE?

Explore possible careers, salaries, and job outlook at www.TransferVirginia.org

PROGRAM SUCCESSES & HIGHLIGHTS

College of Engineering Teaching and Research Centers:

- The Maker Garage is a newly renovated facility providing faculty and students with state-of-the-art traditional and advanced manufacturing capabilities.
- Nanomaterials Core Characterization Facility (NCC) is a research core facility of the Office of Research. NCC is located at the Institute for Engineering and Medicine and allows access to

sophisticated materials characterization equipment and analytical services unique to the mid-Atlantic region.

- Students within the College of Engineering have access to computer labs conveniently located in both the East and West Hall Engineering buildings. These labs offer a highly integrated environment where students conduct engineering course-related instructional work on desktop computers.

WHAT ARE MY CHANCES FOR GETTING ACCEPTED?

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

Learn more about applying to VCU at <https://www.vcu.edu/admissions/apply/transfer/>

DO MORE WITH YOUR DEGREE!

The accelerated B.S. and M.S. programs allow qualified students to earn both the B.S. and a M.S. in Computer Science or Engineering in a minimum of five years by completing approved graduate courses during the senior year of their undergraduate program.

OTHER THAN CLASSES, ARE THERE OTHER PROGRAM REQUIREMENTS?

- All students must complete at least one VCU “REAL” experiential learning activity in order to graduate from VCU. Examples of REAL activities include: internships, research, and service learning. This requirement may be satisfied by completing a 300-level (or higher) REAL course or through an approved REAL co-curricular experience.
- Learn more at <https://real.vcu.edu/> .