TRANSFER GUIDE
Catalog Years: 2025-2026

Virginia Commonwealth University Bachelor of Science in Computer 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 _		CMSC 302	3	
UNIV 111-112	3	ENG 111 College Comp I	UNIV 111 is waived and students receive 3 credits for UNIV 112.	CMSC 312	3	
UNIV 200	3	ENG 112 College Comp II		EGRE 201	3	
PHIL 201	3	PHI 220 Ethics		EGRE 245	0-4	Take at VCU if EGR 125 does not teach C++
General Education	3	Any UCGS Art or Literature course (Block II)		EGRE 246	3	
General Education	3	Any UCGS History course (Block VI)		EGRE 254	4	
ECON 210	3	ECO 202 Microeconomics	This course will substitute for the ECON 205 requirements at VCU.	EGRE 306	4	
MATH 200	4	MTH 263 Calculus I		EGRE 335	4	
MATH 201	4	MTH 264 Calculus II		EGRE 337	3	
MATH 310	3	MTH 266 Linear Algebra		EGRE 347	3	
MATH 301	3	MTH 267 Differential Equations		EGRE 364	4	
PHYS 207	4	PHY 241 University Physics I		EGRE 365	4	

PHYS 208	4	PHY 242 University Physics II		EGRE 399	3	
CHEM/Z 101	4	CHM 111 General Chemistry I		EGRE 426	3	
	2	EGR 121 Foundations of Engineering		EGRE 429	3	
EGRE 101	3	EGR 122 Engineering Design	Need both EGR 121 and 122 to receive credit for EGRE 101	EGRE 513	3	
EGRE 245	4	EGR 125 Intro to Computer Programming for Engineers	Must be C++ to receive credit for EGRE 245	ENGR 395	1	
EGRE 254	4	EGR 270 Fundamentals of Computer Engineering		Select one of the following sequences: EGRE 404+EGRE 405 OR EGRE 406+EGRE 407	4	
EGRE 206	4	EGR 271 Circuits I		Technical electives	11	See VCU advisor for course options.
EGRE 207	4	EGR 272 Circuits II		Math/Science elective	3	See VCU advisor for course options.
CREDITS PRE-TRANSFER: 66-67				**CREDITS POST-TRANSFER: 69-73**		

TRANSFER GUIDANCE

Guaranteed Program Admission Agreement for VCU Engineering

By meeting the following criteria, you are guaranteed admission to the BS in Computer 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?

- Computer engineers (or computer hardware engineers) research, design, develop, test, and oversee the manufacture and installation of computer hardware, including computer chips, circuit boards, computer systems, and related equipment such as keyboards, routers, and printers. This field should not be confused with computer software engineers, who design and develop the software systems that control computers.
- The work of computer hardware engineers is similar to that of electrical engineers in that they may design and test circuits and other electronic components; however, computer hardware engineers do that work only as it relates to computers and computer-related equipment. They work on the design, planning, development, testing, and even the supervision of manufacturing of computer hardware -- including everything from chips to device controllers. They also focus on computer networks for the transmission of data and multimedia.
- The work of a computer engineer is grounded in the hardware -- from circuits to architecture -- but also focuses on operating systems and software. Computer engineers must understand logic design, microprocessor system design, computer architecture, computer interfacing, and continually focus on system requirements and design.

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 coursework 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

The Department of Electrical and Computer Engineering conducts cutting-edge research in the following major areas:

- Micro-/Nano-electronics and Photonics - for developing novel electronic, magnetic, and optical materials and devices for the next generation ultrafast computers, light emitters, photovoltaics, power electronics, wearable and implantable medical sensors for continuous health monitoring, etc.
- Communications, Signal Processing, Power & Controls - for advancing materials, devices, and algorithms to achieve great leaps in mobile/wireless technologies that can address the ever increasing demand for higher data rates and larger bandwidths, wireless telemetry for health monitoring, and for improving efficiency of energy generation and utilization, incorporation of sustainable and renewable power technologies to smart grids, and developing methodologies for control of ever increasingly complex systems ranging from industrial to nanoscale.
- Computer & Cyber-Physical Systems - to develop architectures for ultrafast and low power computing, secure cyber-physical systems, embedded systems, autonomous vehicles, robots, and effective methods for processing big data and enhancing cloud and multicore computing, etc.

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 allows 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/ .