Virginia Commonwealth University Bachelor of Science in Computer Science with a concentration in Data Science

TRANSFER GUIDE
Catalog Years: 2025-2026

Associate Transfer Degree Plan in Computer Science

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 235	3	
UNIV 111-112	3	ENG 111 College Comp I	UNIV 111 is waived and students receive 3 credits for UNIV 112	CMSC 303	3	
UNIV 200	3	ENG 112 College Comp II		CMSC 304	3	
General Education	3	Any UCGS Humanities or Fine Arts (Block II)		CMSC 355	3	
General Education	3	Any UCGS Humanities, Fine Arts, or Literature (Block II)	Must be from different category than previous course.	CMSC 357	4	
General Education	3	Any UCGS History (Block VI)		CMSC 401	3	
General Education	3	Any UCGS Social/Behavioral Science (Block III)	This course may not be a history course.	CMSC 405	3	
General Education	4	Select one: BIO 101, CHM 111, or PHY 241		CMSC 408	3	
MATH 200	4	MTH 263 Calculus I		CMSC 440	3	
MATH 201	4	MTH 264 Calculus II		CMSC 441 + CMSC 451	3	
STAT 212	3	MTH 245 Statistics I		CMSC 442 + CMSC 452	3	
CMSC 254 (major)	3	CSC 221 Intro to Problem Solving & Programming		Select three from the following list: CMSC 435, CMSC 436, CMSC 437, CMSC 438	9	

CMSC 255 (major)	4	CSC 222 Object Oriented Programming		ECON 205	3	
CMSC 256 (major)	4	CSC 223 Data Structures & Analysis of Algorithms		ENGR 395	1	
CMSC 302 (major)	3	CSC 208 Intro to Discrete Structures		MATH 300-level	0-3	Not needed if MTH 265 or MTH 266 is taken at VCCS.
CMSC 311 (major)	3	CSC 205 Computer Organization		Open electives	8-13	
Electives	9	Prerequisites or electives to fulfill associate degree requirements	Select from following list: MTH prerequisites for MTH 263 MTH 265 Calculus III MTH 266 Linear Algebra CST 100 or CST 110 Additional Science (BIO 102, CHM 112, or PHY 242)			
CREDITS PRE-TRANSFER: 60-62				**CREDITS POST-TRANSFER: 58-60**		

TRANSFER GUIDANCE

Guaranteed Program Admission Agreement for VCU Engineering

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

- Earn a transfer associate degree (AS or AA&S in Computer Science).
- 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 CSC, 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.
- **Letter of Interest form:** https://ugradadmissions.vcu.edu/register/letterofinterest.

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

IS THIS DEGREE RIGHT FOR ME?

Computer science offers a foundation that permits graduates to adapt to new technologies and new ideas. The work of computer scientists falls into three categories: a) designing and building software; b) developing effective ways to solve computing problems, such as storing information in databases, sending data over networks or providing new approaches to security problems; and c) devising new and better ways of using computers and addressing particular challenges in areas such as robotics, computer vision, or digital forensics. To obtain a concentration in Data Science, students pursuing a Bachelor of Science degree in Computer Science must successfully complete three of the following technical elective courses: ● CMSC 435 - Introduction to Data Science ● CMSC 436 - Artificial Intelligence ● CMSC 437 - Introduction to Natural Language Processing ● CMSC 438 – Machine Learning.

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

VCU Computer Science offers students access to a wide variety of faculty labs. Research and exploration areas include the intersection of computer science and life science, data mining and machine learning algorithms, Computational Intelligence (CI), cybersecurity, assistive robots, and more.

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. program allows qualified students to earn both the B.S. and M.S. in Computer Science 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/