Virginia Commonwealth University Bachelor of Science in Chemistry

With a concentration in biochemistry

Associate Transfer Degree Plan in Chemistry

TRANSFER GUIDE
Catalog years: 2024-2026

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 or 101		Foreign language 101-102 (by course or placement)	0-6	This requirement can be waived if students completed through Level 3 of a foreign language at high school.
UNIV 111-112	3	ENG 111	UNIV 111 is waived and students receive 3 credits for UNIV 112.	CHEM 309 Quantitative Analysis	3	
UNIV 200	3	ENG 112		CHEZ 309 Quantitative Analysis Lab	2	
General Education	3	Any UCGS Art or Humanities	These two courses must come from two different disciplines.	CHEZ 313 Physical Chemistry Lab	2	
General Education	3	Any UCGS Art, Humanities, or Literature		CHEM 313 Physical Chemistry I or CHEM 314 Physical Chemistry I with Math Modules	3-4	
General Education	3	Any UCGS Social & Behavioral Science (not History)		CHEM 315 Physical Chemistry II	3	
CHEM/Z 101	4	CHM 111 Chemistry I	A score of 3 or 4 in the AP Chemistry exam is required to receive credit for VCU CHEM/Z 101.	CHEM 320 Inorganic Chemistry I	3	
MATH 200	4	MTH 263 Calculus I		CHEM 398 Professional Practices & Perspectives	1	
General Education	3	Any UCGS History		CHEM 499 Chemistry Capstone Experience	0	
CHEM/Z 102	4	CHM 112 Chemistry II	A score of 5 in the AP Chemistry exam is required to receive credit for VCU CHEM/Z 101 + CHEM/Z 102.	CHEM 403 Biochemistry I	3	
MATH 201	4	MTH 264 Calculus II		CHEM 404 Biochemistry II	3	

PHYS 207-208 OR PHYS 201-202	8	PHY 241 - 242 Univ Physics I & II OR PHY 201 - 202 College Physics I & II	PHY 241-242 recommended.	Capstone	2	Select one two-credit 400-level CHEZ course or two credits of CHEM 392 or CHEM 492.
CHEM/Z 301	5	CHM 241 Organic Chem I and CHM 245 Organic Chem Lab I		Major electives	3	Select approved course from approved lis.
tCHEM/Z 302	5	CHM 242 Organic Chem II and CHM 246 Organic Chem Lab II		STAT 210 Basic Practice of Statistics or STAT 212 Concepts of Statistics	3	Take at VCU unless MTH 245 is taken at CC.
MATH 151	3-8	MTH 161-162 Precalculus I-II or MTH 167 Precalc with Trig. Or transfer electives if MTH prerequisite is not necessary.	If MTH prerequisites are not required, take BIO 101 and BIO 102.	BIOL/Z 151 Intro to Biological Science I + Laboratory	4	Take in first semester at VCU unless BIO 101 is taken at CC.
		Additional transfer electives, if needed to meet 60 credits	MTH 245 Statistics recommended.	BIOL/Z 152 Intro to Biological Science II + Laboratory	4	Take in second semester at VCU unless BIO 102 is taken at CC.
				BIOL 300 Cellular and Molecular Biology	3	
				Electives	10-16	
CREDITS PRE-TRANSFER: 60-62				**CREDITS POST-TRANSFER: 58-60**		

TRANSFER GUIDANCE

This degree program is covered by VCU's Guaranteed Admission Agreement.

By meeting the following criteria, you are guaranteed admission to the BS in Chemistry:

- Earn a transfer associate degree.
- Earn a minimum GPA of 2.5 for your associate degree.
- Earn grades of "C" or higher in all community college courses. VCU will accept credit for repeated courses for "D" or "F" grades.

IMPORTANT LINKS & DATES:

- **University Transfer Center:** https://transfer.vcu.edu/.
- **Register Intent to Transfer:** By end of first semester at community college through the www.TransferVirginia.org portal.
- **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 start your math sequence 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?

The curriculum in chemistry prepares students for graduate study in chemistry and related fields and for admission to schools of medicine, dentistry, pharmacy and veterinary medicine. It prepares students to teach in secondary schools or to work in chemical and industrial laboratories and in related fields of business and industry. The biochemistry concentration focuses on the biological aspects of chemistry, including molecular genetics and molecular biotechnology.

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 will be satisfied. High school students must 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 associate 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 at VCU. If you are looking to connect with a broad range of people, come join us!

Learn more about our college at www.TransferVirginia.org.

DID YOU KNOW THAT…

- Completing your associate transfer degree satisfies all lower division general education requirements and increases the likelihood you will complete your bachelor's degree?
- Exceeding 3 years or 90 credits at your community college could exhaust your financial aid there and reduce 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

Every year, VCU's Department of Chemistry graduates more female chemists than most other programs in the country. In 2019, the program was ranked as having the fifth-most female graduates in the nation by the Integrated Postsecondary Education Data System (IPED), part of the U.S. Department of Education. Women also make up about half of the department's faculty.

WHAT ARE MY CHANCES FOR GETTING ACCEPTED?

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

Learn more about applying at www.TransferVirginia.org.

DO MORE WITH YOUR DEGREE!

Chemistry majors can select from the following concentrations: Biochemistry, Chemical Modeling, Chemical Science, and Professional Chemist. The Department of Chemistry offers an **accelerated B.S. to M.S. program** that allows students to earn both degrees 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/.