Virginia Commonwealth University Bachelor of Science in Chemical and Life Science Engineering with a concentration in Life Science 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 _		CLSE 201	0-4	Not needed if EGR 231 is taken at VCCS.			
UNIV 111-112	3	ENG 111 College Comp I	UNIV 111 is waived and students receive 3 credits for UNIV 112.	CLSE 202	0-4	Not needed if EGR 232 is taken at VCCS.			
UNIV 200	3	ENG 112 College Comp II		ENGR 395	1	Take in first year at VCU			
PHIL 201	3	PHI 220 Ethics		CLSE 301	3				
General Education	3	Any UCGS Art or Literature course (Block II)		CLSE 302	4				
General Education	3	Any UCGS History course (Block VI)		CLSE 305	3				
ECON 210	3	ECO 202 Microeconomics	This course will substitute for the ECON 205 requirements at VCU.	CLSE 312	3				
MATH 200	4	MTH 263 Calculus I		CLSE 320	3				
MATH 201	4	MTH 264 Calculus II		CLSE 402	2				
MATH 307	4	MTH 265 Calculus II		CLSE 403	2				
MATH 301	3	MTH 267 Differential Equations		CLSE 409	3				
PHYS 207	4	PHY 241 University Physics I		CLSE 440	3				

PHYS 208	4	PHY 242 University Physics II		ENGR 402	1	
CHEM/Z 101	4	CHM 111 General Chemistry I		ENGR 403	1	
	2	EGR 121 Foundations of Engineering		Approved internship or cooperative education experience	0	
CLSE 101	3	EGR 122 Engineering Design	Need both EGR 121 and 122 to receive credit for CLSE 101	Review of internship or cooperative education experience	0	
CLSE 115	4	EGR 125 Intro to Computer Programming for Engineers		Engineering electives	9	See VCU advisor for course options
CHEM/Z 102	4	CHM 112 General Chemistry II		BIOL/Z 151	4	
CLSE 201 or CHEM/Z 301	3-5	EGR 231 Mass & Energy Balances (recommended) or CHM 241/245 Organic Chemistry I + Lab	Only take CHM 241/245 if EGR 231 is not offered at your CC or you are unable to take the class online.	BIOL 152	3	
CLSE 202 or CHEM/Z 302	3-5	EGR 232 Chemical Engineering Thermodynamics (recommended) or CHM 242/246 Organic Chemistry II + Lab	Only take CHM 242/246 if EGR 232 is not offered at your CC or you are unable to take the class online.	CHEM/Z 301	0-5	Not needed if CHM 241/245 are taken at VCCS.
				CHEM/Z 302	0-5	Not needed if CHM 242/246 are taken at VCCS.
				CHEM 403	3	
				STAT 441	3	

TRANSFER GUIDANCE

Guaranteed Program Admission Agreement for VCU Engineering

By meeting the following criteria, you are guaranteed admission to the BS in Chemical and Life Science 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?

Chemical engineers work in manufacturing, pharmaceuticals, healthcare, design and construction, pulp and paper, petrochemicals, food processing, specialty chemicals, polymers, biotechnology, and environmental health and safety industries, among others. Within these industries, chemical engineers rely on their knowledge of mathematics and science, particularly chemistry, to overcome technical problems safely and economically. And, of course, they draw upon and apply their engineering knowledge to solve any technical challenges they encounter.

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

State-of-the-art facilities such as the Nanomaterials Characterization Center, the Center for High Performance Computing, the Center for the Study of Biological Complexity and the Massey Cancer Center provide modern equipment and technical expertise. Our collaborative ties with faculty in life sciences, biology, biochemistry, chemistry, medicine, dentistry, pharmacy and forensics have led to multidisciplinary research projects.

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/ .