

Norfolk State University Bachelor of Science in Chemistry (Pre-Medicine Concentration) Associate Transfer Degree Plan in Chemistry

COURSE REQUIREMENTS

Complete at VCCS				Complete at NSU		
BACHELOR'S DEGREE REQUIREMENT	SATISFIED BY			BACHELOR'S DEGREE REQUIREMENT		
Course	Credits	CC Course	Notes	Course	Credits	Notes
SEM 101 (1 credit), SEM 102 (1 credit), and SEM 201 (1 credit)	1-2	SDV 100 College Success Skills or 101 Orientation	Students will receive 1 or 2 credits based on the number of credits transferred from the VCCS course. Students may need to take an additional 1 or 2 credits at NSU to meet the 120-credit-hour minimum.	CSC 170 Computer Science I and CSC 170L Computer Science Lab I	4	Students may take these courses at VCCS if possible.
ENG 101	3	ENG 111 College Comp I		HED 100 Personal & Community Health and PED 100 Fundamental Fitness for Life	3	Students may take these courses at VCCS if possible.
ENG 102	3	ENG 112 College Comp II or 113 Tech Prof Writing		Humanities or Cultural Elective	3	Students may take this course at VCCS if possible.
Gen Ed	3	Any UCGS Art or Humanities	These two courses must come from two different disciplines.	MTH 252 Calculus III	4	
Gen Ed	3	Any UCGS Art, Humanities, or Literature		ENG 285 Public Speaking	3	Students may take this course at VCCS if possible.
Gen Ed	3	Any UCGS Social & Behavioral Science (not History)		CHM 231R Gen Chem App I and CHM 232R Gen Chem App II	2	
CHM 231 Chemistry I and CHM 221L Chemistry I Lab	4	CHM 111 Chemistry I		CHM 331 Analytical Chemistry I and CHM 331L Analytical Chemistry Lab I	5	
MTH 184 Calc I	4	MTH 263 Calc I		CHM 332 Analytical Chemistry II and CHM 332L Analytical Chemistry Lab II	5	

Gen Ed	3	Any UCGS History		CHM 345 Mathematical Methods and Logic	3	
CHM 232 Chemistry II and CHM 222L Chemistry Lab II	4	CHM 112 Chemistry II		CHM 361 Physical Chemistry I	3	
MTH 251 Calc II	4	MTH 264 Calculus II		CHM 362 Physical Chemistry II and CHM 363L Physical Chemistry Lab	5	
PHY 152 - 153 Physics I & II and PHY 152L - 153L Physics Lab I & II	8	PHY 241 - 242 Univ Physics I & II OR PHY 201 - 202 College Physics I & II		CHM 473 Inorganic Chemistry	3	
CHM 321 Organic Chem I and CHM 321L Organic Chem Lab I	5	CHM 241 Organic Chem I and CHM 245 Organic Chem Lab I		CHM 431 Biochemistry I and CHM 431L Biochemistry Lab I	5	
CHM 322 Organic Chem II and CHM 322L Organic Chem Lab I	5	CHM 242 Organic Chem II and CHM 246 Organic Chem Lab II		CHM 432 Biochemistry II and CHM 432L Biochemistry Lab II	5	
BIO 110 General Biology I & BIO 110L General Biology Lab I and BIO 3XX Biology Elective	Up to 9	If students have completed all prerequisites and other college requirements, they can select up to 9 credits from: BIO 101 General Biology I BIO 102 General Biology II BIO 206 Cell Biology MTH 245 Statistics		CHM 451 or CHM 452 Chemistry Seminar And CHM 497 or CHM 498 Introduction to Research	2	
MTH 153 College Algebra and Trigonometry	3-6	MTH 161-162 or MTH 167 PreCalculus with Trigonometry or other transfer requirements		BIO XXX Biology 300 or 400 level Electives	3-6	
			If students have room in schedule, additional Chemistry or transfer electives can be taken.			
CREDITS PRE-TRANSFER: 60-62				CREDITS POST-TRANSFER: 58-63		

- Our B.S. in Chemistry program requires 121 or 123 credit hours, depending on the track.

TRANSFER GUIDANCE

Guaranteed Admission Agreement between NSU and the VCCS

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

By meeting the following criteria, you are guaranteed admission to the Bachelor of Science in Chemistry:

- Earn a transfer associate degree based on the Chemistry curriculum.
- Earn a minimum of 2.0 GPA for the associate degree.
- A maximum of 63 credits will transfer and apply toward a bachelor's degree requirements.
- Submit your transfer application for Fall admission by March 1 and for Spring admission by December 1, including an unofficial transcript.
- Request an official transcript to be sent upon completing the associate degree.
- Transfer within four years of first enrolling at the community college and within one year of completing the appropriate associate degree.

Please create an account through the www.TransferVirginia.org portal to indicate your intent to use this guarantee for admission to NSU.

IMPORTANT LINKS & DATES:

- **University Transfer Center:** Transfer Admissions & Services <https://www.nsu.edu/transfer>
- **Register Intent to Transfer:** By the end of your first semester at the Community College through College Connect at www.TransferVirginia.org
- **Admission Application:** By May 1 at <https://www.nsu.edu/Admissions-Aid/Apply-Online>
- **Financial Aid:** <https://www.nsu.edu/tuition-and-financial-aid>
- **FAFSA - Free Application for Federal Student Aid:** By October 1 at studentaid.gov

WHAT SHOULD I CONSIDER WHEN SELECTING COURSES?

- Chemistry requires mathematics up to Calculus III. Chemistry courses require integration of knowledge across disciplines, and high-level critical thinking. The chemistry program requires the sequential completion of courses. Students are highly encouraged to learn about chemistry course pre-requisites.
- Students planning to enter the Chemistry program should take general chemistry with laboratory, algebra, and trigonometry courses. If possible, students should also take organic chemistry with laboratory and calculus courses. An advisor will meet with students to determine their initial chemistry and mathematics course placement depending on their transfer courses.
- Create a schedule for all required courses, pay attention to prerequisites and when courses are offered, and complete your first math and English courses in your first year. For help, see Transfer Steps and Resource Center at www.TransferVirginia.org
- Connect with an advisor at your community college and Norfolk State University within your first year. College Connect available in your account at www.TransferVirginia.org

IS THIS DEGREE RIGHT FOR ME?

- Grades of C or higher are required for all CHM courses.
- The chemistry degree, especially the pre-medicine track, requires great focus on academics. Students should plan to spend at least 40 hours a week on academic work to have a competitive advantage upon graduation.
- The Chemistry program requires mathematics up to Calculus III and development of rigorous critical thinking.
- Chemistry knowledge is cumulative. That means you will use knowledge acquired in previous courses throughout your academic career.

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

- **Associate Transfer Degree Completion:** Completion of a transfer-level associate degree satisfies all lower-division general education requirements.
- **Dual Enrollment – Completion of Associate Degree in HS:** The agreement of guaranteed admission into the college applies to students earning an associate degree concurrent with high school who have completed a transfer-approved degree with a minimum of 45 credits completed through a Virginia Community College, with a GPA of 2.0 or higher and that meets all requirements outlined in the Transfer Guide.
- **Credit for Prior Learning:** All course credits that were awarded by the two-year institution for equivalent prior learning experiences (IB, AP, CLEP, Military, etc.) will transfer based on the transfer equivalence for the course awarded.
- **Catalog Year:** Catalog year determined by first semester of attendance at the community college post high school graduation. For students maintaining continuous enrollment, this entitlement will be in effect for a minimum of four years from the time of the student's first enrollment at the two-year institution. Students must enroll at the four-year institution within one year of completing their associate degree.

IS THIS COLLEGE RIGHT FOR ME?

- NSU has been ranked by U.S. News and World Report as one of the Top 20 HBCUs in the nation.
- It is close to downtown Norfolk and within driving distance of Virginia Beach.
- On-campus housing is available.
- Weekend/evening/summer courses are available, and online degree options are available for several programs.
- NSU is a military-friendly institution.
- 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 Norfolk State University?

WHAT CAN I DO WITH THIS DEGREE?

- Chemistry majors have numerous paid opportunities to further develop in their field and contribute as undergraduate researchers, peer leaders, tutors and peer mentors.

- Chemistry majors have opportunities to do research internships during the academic year with departmental faculty, sometimes with a stipend.
- Majors lead two affiliated student clubs: NOBBChE Student Chapter (National Organization for the Professional Development of Black Chemists and Chemical Engineers) and ACS Student Chapter (American Chemical Society).
- Chemistry is an excellent foundation for a variety of careers, including clinical medicine and medical research, pharmacy and drug design, toxicology and forensics, and entrepreneurship.
- Explore possible careers, salaries, and job outlook at www.TransferVirginia.org

PROGRAM SUCCESSES & HIGHLIGHTS

- Chemistry majors regularly participate in prestigious summer research and pre-medicine internships, such as at the Lawrence Livermore National Laboratory, the University of Michigan and Johns Hopkins (summer 2022).
- In the past two years, 2021 and 2022, a chemistry major and an alumna were selected for the White House Initiative on Historically Black Colleges and Universities (HBCUs) Scholar.
- All majors have the opportunity to develop a mentoring relationship with alumni and have a close relationship with faculty as part of a well-knit community.
- All NSU chemistry graduates are certified by the American Chemical Society, the largest professional organization in the world.
- Students have the opportunity to serve as paid peer leaders, assisting fellow students in structured learning teams.

- Most students participate in paid research internships during the summer.
- Successful Chemistry program alumni serve in the department external advisory board and mentor chemistry majors.
- Most students who complete two years of the required chemistry courses graduate in less than six years and secure jobs or post-graduate education positions in their preferred career path.

WHAT ARE MY CHANCES FOR GETTING ACCEPTED?

- NSU accepts close to 90 percent of students who complete an application.
- The average GPA of students admitted is a 2.9.
- Learn more about applying at www.TransferVirginia.org

DO MORE WITH YOUR DEGREE!

- In addition to our general track, you can also pursue a chemistry degree with an emphasis in pre-medicine, preparing you for dental, veterinary and medical careers.
- If you're interested in teaching chemistry, our teacher certification program prepares you to work in K-12 education.
- Our five-year, dual-degree program is another incredible educational option, resulting in a B.S. in chemistry and an M.S. in materials science. This valuable credential prepares you for industry leadership roles.