2+2 Articulation Agreement for Anne Arundel Community College and Towson University

Associate's Degree: A.S. in Arts & Sciences Transfer, Chemistry Concentration
Bachelor's Degree: B.S. in Chemistry
Effective Term: Fall 2020

Section 1: Course Completion Plan for AACC

English Composition	ENG 101 Academic Writing & Research 1	3	ENGL 102 Writing for a Liberal Education
English Composition	ENG 102 Academic Writing & Research 2	3	ENGL TLL English Elective
Mathematics	MAT 191 Calculus & Analytic Geometry 1	4	MATH 273 Calculus I
Arts & Humanities	Any Arts & Humanities course	3	Equivalency will vary by course.
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Social & Behavioral Sciences	Any Social & Behavioral Science course	3	Equivalency will vary by course.
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Biological & Physical Sciences	CHE 111 General Chemistry 1	4	CHEM 131 & 131L General Chemistry I Lecture & Lab
Biological & Physical Sciences	CHE 112 General Chemistry 2	4	CHEM 132 & 132L General Chemistry II Lecture & Lab
Wellness Requirement	Any Wellness GER course	3	Equivalency will vary by course.
Technology Requirement	Any Technology GER course	3-4	Equivalency will vary by course.

Total general education applied to the TU Core Curriculum: 36 -37 credits

Completing the courses above will satisfy the general education program at AACC. TU will transfer these courses without a course-by-course match to the Core Curriculum requirements. See section 2 for details.

Table 2: Program Requirements and Electives Applied to TU Degree

AACC Requirement	AACC Course to Take	Credits	Towson University Equivalent Course
Program Requirement	CHE 213 Organic Chemistry 1	4	CHEM T31 Organic Chemistry I
Program Requirement	CHE 214 Organic Chemistry 2	4	CHEM T32 Organic Chemistry II
Program Requirement	MAT 192 Calculus & Analytic Geometry 2	4	MATH 274 Calculus II
Program Requirement	PHY 211 General Physics 1	4	PHYS 241 General Physics I Calculus-Based
Program Requirement	PHY 212 General Physics 2	4	PHYS 242 Gen-Phal

LOWER-LEVEL EQUIVALENTS OF UPPER-LEVEL COURSES

A course number beginning with T indicates that it is a lower-level equivalent of an upper-level TU course. CHEM T31 and CHEM T32 will satisfy the major requirements for CHEM 331 and 332, but they will not count toward the TU degree requirement for 32 upper-level units.

MATH AND CHEMISTRY PREREQUISITES

The Chemistry program is designed for students who are ready to enroll in calculus and general chemistry in their first term. Students should note the following requirements for enrollment into these courses:

- MAT 191 Calculus 1: Enrollment in this course requires an appropriate score on the AACC Mathematics Placement Test on the mathematics portio43 -1.205 Tc 0.004 -1.8 (o)7 (n)wTw 0.3dy <</MCID 6 >>mon th[e majouTEd ra(a)2 (o)7 (n)

Section 3: Degree Requirements to Be Completed at TU

This section outlines the degree requirements for students transferring into the Chemistry major. This program is designed for students who intend to work in a hospital laboratory, technical library, chemistry-related professions such as chemical or instrument sales, or who intend to pursue careers in medicine, dentistry, pharmacy, veterinary medicine, environmental science, agriculture, or other allied fields. Refer to section 4 for additional major requirements, recommendations, and university-wide degree requirements.

CORE CURRICULUM REQUIREMENTS: 6 UNITS
Core 9 Advanced Writing Seminar
Core 14 Ethical Perspectives

REQUIRED CHEMISTRY COURSES: 17 UNITS
CHEM 210 Analytical Chemistry (5 units)
CHEM 323 Inorganic Chemistry (4 units)
CHEM 345 Principles of Physical Chemistry (3 units)
CHEM 351 Biochemistry I (3 units)
CHEM 372 Physical Chemistry Laboratory (2 units)

MAJOR ELECTIVES: 6 UNITS
In addition to the required courses listed above, students electing this major must take a minimum of 16 additional units. Students may choose from a list of courses in Elective Group A and Elective Group B. At least 12 units must be selected from Elective Group A, and the remaining units can be selected from either group. Elective courses may require additional prerequisites not included in the chemistry major requirements. A list of course options for each group is available in the current TU catalog.

GENERAL ELECTIVES: 29-31 UNITS
The number of elective units required will be determined by the total units transferred from AACC. Electives can be additional major electives or courses for personal interests. Students may also consider adding a minor in a related field, which may require between 18-30 units depending on the program.

Section 4: Additional Requirements & Recommendations for TU Degree Completion

ADDITIONAL REQUIREMENTS & RECOMMENDATIONS FOR CHEMISTRY MAJORS:

- Students may not repeat any more than three courses required for the Chemistry major, including multiple attempts of the same course. This applies to any required courses and major electives and only applies to courses taken at TU.
- If students are interested in a double major or minor, they should contact the Department of Chemistry in their first term at TU to discuss program options based on their career goals and needs.

BACHELOR'S DEGREE REQUIREMENTS FOR ALL STUDENTS:

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