**Program Transfer Articulation Addendum**
**Bachelor of Science in Chemistry Programs**

This Program Transfer Articulation Addendum (this "Addendum") effective as the date of the last signature below, is entered into pursuant to the Umbrella Program Transfer Agreement (the "Transfer Agreement") dated July 18, 2025, by and between Anne Arundel Community College ("AACC") and Towson University ("TU" and collectively with AACC, the "Parties"), and is incorporated into the Transfer Agreement. Unless specifically modified in this Addendum, all terms and conditions in the Transfer Agreement shall remain in full force and effect. Should any conflict exist between the Transfer Agreement and this Addendum, the terms and conditions of the Transfer Agreement shall prevail.

This Addendum establishes an articulated transfer pathway ("Pathway") in which students from AACC Associate of Science: Science Transfer, Area of Concentration: Chemistry may seamlessly transfer into the following bachelor's degree programs at TU:

- Bachelor of Science in Forensic Chemistry
- Bachelor of Science in Chemistry- Professional Track
- Bachelor of Science in Chemistry

For each degree program listed, a 2+2 Articulation Agreement shall be attached to this Addendum hereto and incorporated herein detailing the course equivalencies, general education, and major requirements, as well as any special admission and other additional requirements, necessary for Science Transfer, Area of Concentration: Chemistry AACC students to transfer into the aforementioned Chemistry programs at TU and successfully complete a bachelor's degree.

For the Pathway included in this Addendum, both Parties agree that faculty representatives from both institutions will meet regularly to engage in ongoing discussion to enhance and strengthen this collaboration, and agree to update the Pathway and/or associated 2+2 Articulation Agreements whenever substantive changes in the degree programs listed occur at either AACC or TU.

[Signatures Appear on Following Page]

[Signature Page to Addendum]

IN WITNESS WHEROF, the Parties hereby have caused this Addendum to be executed by their duly authorized representatives.

**ANNE ARUNDEL COMMUNITY COLLEGE**

By: clay railey
clay railey (Jul 22, 2026 15:14:35 EDT)

**TOWSON UNIVERSITY**

By: _____

**Dr. Clayton Railey III**
Interim Provost/Vice President for Learning

**Date:** 07/22/2026

**Dr. Melanie Perreault**
Provost and Executive Vice President for Academic Affairs

**Date:** 7/24/26

# PROGRAM TRANSFER GUIDE

TOWSON UNIVERSITY

This transfer guide is intended for students pursuing an Arts and Sciences Transfer, Area of Concentration: Chemistry at Anne Arundel Community College who are interested in pursuing a Bachelor's Degree in Chemistry at Towson University. This transfer guide outlines the courses and program requirements a student should follow to satisfy degree requirements at AACC in order to complete both the AACC and TU degrees within a total of 4 years and 123 credits.

## Assoicate of Science: Science Transfer, Area of Concentration: Chemistry

## Bachelor's Degree in Forensic Chemistry

**Effective Term:** Spring 2027

### YEAR 1 - Anne Arundel Community College

| Fall | TU Equivalent | Credits | Spring | TU Equivalent | Credits |
|---|---|---|---|---|---|
| ENG 101 Academic Writing & Research 1* © (TU C | ENGL 102 | 3 | ENG 102 Academic Writing & Research 2 © (TU C | ENGL TLL | 3 |
| MAT 191 Calculus & Analytic Geometry 1* © (TU C | MATH 273 | 4 | MAT 192 Calculus & Analytic Geometry 2* | MATH 274 | 4 |
| SOC 111 - Introduction to Sociology ♦ © (TU Core 6 | SOCI 101 | 3 | CTA 100 - Computing and Information Tech ♦ © (TU | COSC 111 | 3 |
| CHE 111 General Chemistry 1* © (TU Core 7) | CHEM 131/13 | 4 | CHE 112 General Chemistry 2* © (TU Core 8) | CHEM 132/13 | 4 |
| GSS 113 - Women's Health ♦ © (TU Core 13) | HLTH 219 | 3 | | | |
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| **TOTAL CREDITS:** | | 17 | **TOTAL CREDITS:** | | 14 |

### YEAR 2 - Anne Arundel Community College

| Fall | TU Equivalent | Credits | Spring | TU Equivalent | Credits |
|---|---|---|---|---|---|
| CHE 213 Organic Chemistry 1* | CHEM T34 (3: | 4 | CHE 214 Organic Chemistry 2* | CHEM T36/T3 | 4 |
| PHY 211 General Physics 1* | PHYS 241 | 4 | | (336/337) | |
| CJS 111 - Introduction to Criminal Justice © (TU Co | CRMJ 251 | 3 | PHL 142 Ethics ♦ © (TU Core 14) | PHIL 103 | 3 |
| COM 101 Introduction to Mass Media ♦ © (TU Core | MCOM 101 | 3 | PHY 212 General Physics 2* | PHYS 242 | 4 |
| | | | BIO 101 Fundamentals of Biology* | BIOL 200/200 | 4 |
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| **TOTAL CREDITS:** | | 14 | **TOTAL CREDITS:** | | 15 |

### YEAR 3 - Towson University

| Fall | Credits | Spring | Credits |
|---|---|---|---|
| CHEM 220 Analytical Chemistry Lecture* | 3 | ANTH 357 Introduction to Forensic Crime Analysis* | 3 |
| CHEM 220L Analytical Chemistry Lab* | 2 | CHEM 351 Biochemistry* | 3 |
| MATH 237 Elementary Biostatistics* | 4 | FRSC 367 Forensic Chemistry* | 3 |
| CHEM 339 Intermediate Organic Chemistry Lab* | 2 | CRMJ 384 Advanced Criminal Law | 3 |
| BIOL 206/206L Biology II: Introduction to Ecology and Evolution | 4 | FRSC 368 Prof Practices in Forensic Science* | 3 |
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| **TOTAL CREDITS:** | 15 | **TOTAL CREDITS:** | 15 |

### YEAR 4 - Towson University

| Fall | Credits | Spring | Credits |
|---|---|---|---|
| ANTH 457 Advanced Forensic Investigation* | 3 | CHEM 301 Professional Ethics for Scientists © (TU Core 9)* | 3 |
| FRSC 440 Forensic Sci: Emer Nedicine, and Death Analysis* | 3 | Capstone Experience Course (consult TU catalog)* | 3 |
| Forensic Chemistry Track Courses (consult TU catalog)* | 9 | Forensic Chemistry Track Courses (consult TU catalog)* | 9 |
| TU Core 10 © Metropolitan Perspectives | 3 | | |
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| **TOTAL CREDITS:** | 18 | **TOTAL CREDITS:** | 15 |

** Denotes course that must be completed with a grade of C or better* *** Must consult with a TU Academic Advisor* *© Core Curriculum*

***Notes & Recommendations from Towson University:***

*Core 1 at TU is automatically waived for all transfer students.
*Students must follow the course selections outlined in this agreement. Failing to complete the specified courses will require them to fulfill remaining requirements at TU and could jeopardize their ability to earn a bachelor's degree within two years. Courses with the ♦ symbol are recommendations only; consult with advising for alternate options to complete all coursework within four years.
*Course equivalents ending in TLL are general lower-level elective coursework at TU.
*A course number beginning with T or F indicates that it is a lower-level equivalent of an upper-level TU course. These courses will not count toward the TU degree requirement for 32 upper-level units.

**Bachelor's degree requirements for all students:**

- A cumulative grade point average (GPA) of 2.0 is required.
- A C grade (2.0 GPA) or higher is required for all major courses and prerequisites.
- 32 credits of the bachelor's degree must be completed at the upper level (courses numbered 300 or above) at TU

# PROGRAM TRANSFER GUIDE

TOWSON UNIVERSITY

This transfer guide is intended for students pursuing an Arts and Sciences Transfer,Area of Concentration: Chemistry at AACC who are interested in pursuing a Bachelor's Degree in Chemistry-Professional Track at Towson University. This transfer guide outlines the courses and program requirements a student should follow to satisfy degree requirements at AACC in order to complete both the AACC and TU degrees within a total of 4 years and 120 credits.

## Assoicate of Science: Science Transfer, Area of Concentration: Chemistry

## Bachelor's Degree in Chemistry-Professional Track

**Effective Term:** Spring 2027

### YEAR 1 - Anne Arundel Community College

| Fall | TU Equivalent | Credits | Spring | TU Equivalent | Credits |
|---|---|---|---|---|---|
| ENG 101 Academic Writing & Research 1* © (TU C | ENGL 102 | 3 | ENG 102 Academic Writing & Research 2 © (TU C | ENGL TLL | 3 |
| MAT 191 Calculus & Analytic Geometry 1* © (TU C | MATH 273 | 4 | MAT 192 Calculus & Analytic Geometry 2* | MATH 274 | 4 |
| SOC 111 - Introduction to Sociology ♦ © (TU Core 6 | SOCI 101 | 3 | CTA 100 - Computing and Information Tech ♦ © (TL | COSC 111 | 3 |
| CHE 111 General Chemistry 1* © (TU Core 7) | CHEM 131/13 | 4 | CHE 112 General Chemistry 2* © (TU Core 8) | CHEM 132/13 | 4 |
| GSS 113 - Women's Health ♦ © (TU Core 13) | HLTH 219 | 3 | | | |
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| TOTAL CREDITS: | | 17 | TOTAL CREDITS: | | 14 |

### YEAR 2 - Anne Arundel Community College

| Fall | TU Equivalent | Credits | Spring | TU Equivalent | Credits |
|---|---|---|---|---|---|
| CHE 213 Organic Chemistry 1* | CHEM T34 (3: | 4 | CHE 214 Organic Chemistry 2* | CHEM T36/T3 | 4 |
| PHY 211 General Physics 1* | PHYS 241 | 4 | | (336/337) | |
| HIS 211 - U.S. History through the Civil War ♦ © (TL | HIST 145 | 3 | PHL 142 Ethics ♦ © (TU Core 14) | PHIL 103 | 3 |
| COM 101 Introduction to Mass Media ♦ © (TU Core | MCOM 101 | 3 | PHY 212 General Physics 2* | PHYS 242 | 4 |
| | | | Science and Math Requirement | USEL TLL | 4 |
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| TOTAL CREDITS: | | 14 | TOTAL CREDITS: | | 15 |

### YEAR 3 - Towson University

| Fall | Credits | Spring | Credits |
|---|---|---|---|
| CHEM 220 Analytical Chemistry Lecture* | 3 | CHEM 351 Biochemistry* | 3 |
| CHEM 220L Analytical Chemistry Lab* | 2 | CHEM 323 Inorganic Chemistry* | 5 |
| TU Core 9 © Advanced Writing Seminar | 3 | CHEM 310 Instrumental Analysis* | 4 |
| CHEM 339 Intermediate Organic Chemistry Lab* | 2 | CHEM 346 Theoretical Foundations of Physical Chemistry* | 3 |
| CHEM 345 Principles of Physical Chemistry* | 3 | | |
| CHEM 372 Physical Chemistry Laboratory* | 2 | | |
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| TOTAL CREDITS: | 15 | TOTAL CREDITS: | 15 |

### YEAR 4 - Towson University

| Fall | Credits | Spring | Credits |
|---|---|---|---|
| CHEM 401 Communication Skills in Chemistry* | 1 | Electives** | 12 |
| CHEM 491 Research in Chemistry* | 2 | Approved Major Elective (consult TU catalog)* | 3 |
| Approved Major Elective (consult TU catalog)* | 3 | | |
| TU Core 10 © Metropolitan Perspectives | 3 | | |
| Electives** | 6 | | |
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| TOTAL CREDITS: | 15 | TOTAL CREDITS: | 15 |

*Denotes course that must be completed with a grade of C or better  **Must consult with a TU Academic Advisor  Core Curriculum

***Notes & Recommendations from Towson University:***

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**Bachelor's degree requirements for all students:**

- A cumulative grade point average (GPA) of 2.0 is required.
- A C grade (2.0 GPA) or higher is required for all major courses and prerequisites.
- 32 credits of the bachelor's degree must be completed at the upper level (courses numbered 300 or above) at TU

# PROGRAM TRANSFER GUIDE

TOWSON UNIVERSITY

This transfer guide is intended for students pursuing a Science Transfer at Anne Arundel Community College who are interested in pursuing a Bachelor's Degree in Chemistry at Towson University. This transfer guide outlines the courses and program requirements a student should follow to satisfy degree requirements at AACC in order to complete both the AACC and TU degrees within a total of 4 years and 120 credits.

## Assoicate of Science: Science Transfer, Area of Concentration: Chemistry

## Bachelor's Degree in Chemistry

**Effective Term:** Spring 2027

### YEAR 1 - Anne Arundel Community College

| Fall | TU Equivalent | Credits | Spring | TU Equivalent | Credits |
|---|---|---|---|---|---|
| ENG 101 Academic Writing & Research 1* © (TU C | ENGL 102 | 3 | ENG 102 Academic Writing & Research 2 © (TU C | ENGL TLL | 3 |
| MAT 191 Calculus & Analytic Geometry 1* © (TU C | MATH 273 | 4 | MAT 192 Calculus & Analytic Geometry 2* | MATH 274 | 4 |
| SOC 111 - Introduction to Sociology ♦ © (TU Core 6 | SOCI 101 | 3 | CTA 100 - Computing and Information Tech ♦ © (TL | COSC 111 | 3 |
| CHE 111 General Chemistry 1* © (TU Core 7) | CHEM 131/13 | 4 | CHE 112 General Chemistry 2* © (TU Core 8) | CHEM 132/13 | 4 |
| GSS 113 - Women's Health ♦ © (TU Core 13) | HLTH 219 | 3 | | | |
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| **TOTAL CREDITS:** | | 17 | **TOTAL CREDITS:** | | 14 |

### YEAR 2 - Anne Arundel Community College

| Fall | TU Equivalent | Credits | Spring | TU Equivalent | Credits |
|---|---|---|---|---|---|
| CHE 213 Organic Chemistry 1* | CHEM T34 (3: | 4 | CHE 214 Organic Chemistry 2* | CHEM T36/T3 | 4 |
| PHY 211 General Physics 1* | PHYS 241 | 4 | | (336/337) | |
| HIS 211 - U.S. History through the Civil War ♦ © (TL | HIST 145 | 3 | PHL 142 Ethics ♦ © (TU Core 14) | PHIL 103 | 3 |
| COM 101 Introduction to Mass Media ♦ © (TU Core | MCOM 101 | 3 | PHY 212 General Physics 2* | PHYS 242 | 4 |
| | | | Science and Math Requirement | USEL TLL | 4 |
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| **TOTAL CREDITS:** | | 14 | **TOTAL CREDITS:** | | 15 |

### YEAR 3 - Towson University

| Fall | Credits | Spring | Credits |
|---|---|---|---|
| CHEM 220 Analytical Chemistry Lecture* | 3 | CHEM 351 Biochemistry* | 3 |
| CHEM 220L Analytical Chemistry Lab* | 2 | CHEM 323 Inorganic Chemistry* | 5 |
| TU Core 9 © Advanced Writing Seminar* | 3 | TU Core 10 © Metropolitan Perspectives | 3 |
| CHEM 339 Intermediate Organic Chemistry Lab* | 2 | Electives** | 4 |
| CHEM 345 Principles of Physical Chemistry* | 3 | | |
| CHEM 372 Physical Chemistry Laboratory* | 2 | | |
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| **TOTAL CREDITS:** | 15 | **TOTAL CREDITS:** | 15 |

### YEAR 4 - Towson University

| Fall | Credits | Spring | Credits |
|---|---|---|---|
| Group A Elective (see notes)* | 3 | Group B Elective (see notes)* | 3 |
| Electives** | 12 | Electives** | 12 |
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| **TOTAL CREDITS:** | 15 | **TOTAL CREDITS:** | 15 |

*Denotes course that must be completed with a grade of C or better  **Must consult with a TU Academic Advisor  Core Curriculum

***Notes & Recommendations from Towson University:***

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*A course number beginning with T or F indicates that it is a lower-level equivalent of an upper-level TU course. These courses will not count toward the TU degree requirement for 32 upper-level units.
*Students must complete a minimum of 6 units of approved major-related electives. At least 2 units must be selected from Elective Group A in the TU catalog. The remaining units can be selected from either Elective Group A or Elective Group B.

**Bachelor's degree requirements for all students:**

- A cumulative grade point average (GPA) of 2.0 is required.
- A C grade (2.0 GPA) or higher is required for all major courses and prerequisites.
- 32 credits of the bachelor's degree must be completed at the upper level (courses numbered 300 or above) at TU