



NEW YORK CITY COLLEGE OF TECHNOLOGY

OF THE CITY UNIVERSITY OF NEW YORK

300 JAY STREET x BROOKLYN

NEW YORK 11201-2983

Chemistry Department

Academic Complex – A516, Tel: (718) 260-5853

Articulation Agreement between La Guardia Community College (A.S in Physical Sciences: Chemistry Track) and New York City College of Technology (BS in Applied Chemistry)

Sending College: La Guardia Community College (LaGCC)

Department: Natural Sciences Department

Program: Physical Sciences: Chemistry Track

Degree: Associate in Science (AS)

Receiving College: New York City College of Technology (NYCCT)

Department: Chemistry Department

Program: Applied Chemistry

Degree: Bachelor of Science (BS)

B. ADMISSION REQUIREMENTS FOR SENIOR COLLEGE PROGRAM

The Chemistry Department of New York City College of Technology (NYCCT) agrees to accept into the Bachelor of Science program in Applied Chemistry students from LaGuardia Community College (LaGCC) who successfully complete an Associate in Science in Physical Sciences and are admitted into the college. Completion of the curriculum includes the attainment of at least a 2.5 overall grade-point average.

NYCCT and LaGCC agree to offer the courses noted in the BS program in Applied Chemistry (NYCCT) and AS in Physical Sciences: Chemistry Track program at La Guardia Community College (LaGCC), as described in this agreement, and as outlined in each college's course catalog. Each college agrees to notify the other if course numbers, content, or catalog descriptions change. Furthermore, the parties involved understand that any change in course number, content, or catalog description may require a modification to this agreement.

Total transfer credits granted toward the baccalaureate degree: 60

Total additional credits required at the senior college to complete baccalaureate degree: 60

C. COURSE EQUIVALENCIES AND TRANSFER CREDIT AWARDED

Students transferring from LaGCC with an AS in Physical Sciences shall enter the BS Program in Applied Chemistry at NYCCT as third year students. The following courses, totaling 60 credits, will be transferred to NYCCT as described below.

LaGuardia Community College		New York City College of Technology	
Common Core Requirements	Credits	Transfer Credit	Transfer Credit Granted
Required Common Core: ENG 101 English Composition I ENG 102 English Composition II or ENG 259	6	ENG 1101 English Composition I ENG 1121 English Composition II	6
Mathematical and Quantitative Reasoning: Note: Students in this program at LaGCC have the option to choose between: MAT115 College Algebra and Trigonometry and MAT117 Algebra and Trigonometry	3	MAT 1275 College Algebra and Trigonometry ¹	3
Life and Physical Sciences SCC201 General Chemistry I	4	Life and Physical Sciences CHEM 1110 General Chemistry I	4
Flexible Common Core: World Cultures and Global Issues	3	World Cultures and Global Issues	3
US Experience in its Diversity	3	US Experience in Diversity	3
Creative Expression	3	Creative Expression	3
Individual and Society	3	Individual and Society	3
Scientific World SCC202 General Chemistry II MAT200 PreCalculus I	4 4	Scientific World CHEM 1210 General Chemistry II MAT 1375 PreCalculus ¹	4 4
Subtotal	33	Subtotal	33
Requirements for the Major	Credits	Transfer Credit	Credits
MAT201- Calculus I	4	MATH 1475	4
MAT202 - Calculus II	4	MATH 1575	4
SCP231 General Physics I	4	PHYS 1441 ¹	4
SCC251 – Organic Chemistry I	5	CHEM 2223	5
SCC252 – Organic Chemistry II	5	CHEM 2323	5
SCP 211 – Research Methods in Physical Sciences ²	3	Elective	3
NSF101 – First Year Seminar for Natural Sciences ²	2	Elective	2
Total Credits for Degree	60	Total	60

² WI courses at LaGuardia

¹MAT 1275, MAT 1375 are 4-credit courses, while PHYS 1441 is a 5-credit course at NYCCT

²These courses are not required by the Applied Chemistry BS degree; students will receive electives credits

D. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE

Course and Title	Credits
Program Specific Degree Requirements	
CHEM 3222 Physical Chemistry: Thermodynamics and Kinetics	4
CHEM 3312 Analytical Chemistry	5
CHEM 3412 Instrumental Methods of Analysis	5
CHEM 3622 Inorganic Chemistry	4
CHEM 4312 Instrumental Chromatography	4
CHEM 4323 Advanced Laboratory Applications in Advanced Spectroscopy	2
BIO 1101 General Biology I	4
BIO 3601 Biochemistry	4
CHEM 4901 Internship/Research in Applied Chemistry I	3

The following courses may be required if not taken at the Associate level at LaGCC:	5
PHYS 1441 General Physics I: Calculus Based	5
PHYS 1442 General Physics II: Calculus Based	
College Option Requirements³	
One course in speech/ oral communication ⁴	3
One interdisciplinary liberal arts and sciences course	3
Elective Credits to equal or exceed 120 credits at City Tech^{5,6}	
Choose courses from the following list to bring total number of credits to 120. The choice of electives, to be made in close consultation with the Program Coordinator or Academic Advisor, should ideally reflect the student's interests, post-baccalaureate study plans, and career goals.	
BIO 2311 Anatomy and Physiology I (Lecture and Laboratory)	4
BIO 2312 Anatomy and Physiology II (Lecture and Laboratory)	4
BIO 3302 Microbiology (Lecture and Laboratory)	4
BIO 3350 Elements of Bioinformatics (Lecture and Laboratory)	4
BIO 3352 Bioinformatics (Lecture and Laboratory)	4
BIO 3356 Molecular Modeling in Biology	3
BIO 3524 Nutrition	2
BIO 3526 Pathophysiology	3
BIO 3620 Molecular and Cell Biology (Lecture and Laboratory)	4
CHEM 2411 Special Topics	4
CHEM 4902 Internship Research in Applied Chemistry II	3
CHEM 4822 Medicinal Chemistry	3
CST 2403 Introductory C++ Programming Language Part I	3
CST 3503 C++ Programming Part II	3
MAT 2071 Introduction to Proofs and Logic	4
MAT 2440 Discrete Structures and Algorithms I	3
MAT 2540 Discrete Structures and Algorithms II	3
MAT 2572 Probability and Mathematical Statistics I	4
MAT 2580 Introduction to Linear Algebra	3
MAT 2588 The Mathematics of Finance	3
MAT 2630 Applied Mathematics Technology--Numerical Analysis	3
MAT 2675 Calculus III	4
MAT 2680 Differential Equations	3
MAT 3021 Number Theory	4
MAT 3050 Geometry I	4
MAT 3075 Introduction to Real Analysis	4
MAT 3080 Modern Algebra	4
MAT 3672 Probability and Mathematical Statistics II	4
MAT 3770 Mathematical Modeling I - Optimization	3
MAT 3772 Stochastic Models	3
MAT 3777 Applied Mathematics: Applications of the Wave Equations	3
MAT 3787 Applied Mathematics - Finite Fields	3
MAT 3788 Applications of the Heat Equation for Financial Mathematics	3
MAT 3880 Introduction to Partial Differential Equations using Mathematical Models in Biology	3
MAT 4030 History of Mathematics	3
MAT 4050 Geometry II	3
MAT 4672 Computational Statistics with Applications	3

MAT 4788 Financial Risk Modeling	3
MAT 4872 Probability and Mathematical Statistics III	4
MAT 4880 Mathematical Modeling II	3
PHYS 2601 Introduction to Research (Lecture and Laboratory)	3
PHYS 2603 Physical Principles of Medical Imaging	3
PHYS 2605 Introduction to Laser Physics and Photonics	4
PHYS 2607 Introduction to Quantum Mechanics	3
PHYS 2609 Introduction to Quantum Computing	4

Writing Intensive Requirement

Students at New York City College of Technology must complete two courses designated WI for the baccalaureate level, one from liberal arts and one from the major.

³Complete lists of liberal arts and sciences courses and advanced liberal arts courses, as well as semester-specific lists of interdisciplinary courses and writing intensive courses, are available online at the City Tech Pathways website.

⁴Students who have already met this requirement may choose any other liberal arts and science course in its place.

⁵The number of free elective credits will vary depending upon the program-specific courses students use to meet Common Core requirements.

⁶Some of these elective courses have pre-and co-requisites that should be taken as part of the flexible core and college option choices.

Effective: Fall 2021