ARTICULATION AGREEMENT

A. SENDING AND RECEIVING INSTITUTIONS

Sending College: LaGuardia Community College
Program: Liberal Arts: Mathematics and Science, Applied Math option Degree: Associate of Science (A.S.)

Receiving College: John Jay College of Criminal Justice
Department: Mathematics and Computer Science
Program: Applied Mathematics: Data Science and Cryptography
Degree: Bachelor of Science (B.S.)

B. ADMISSION REQUIREMENTS FOR SENIOR COLLEGE PROGRAM

- Grade of C or better in freshman composition, its equivalent, or a higher-level English course.
- A.S. Degree in Liberal Arts: Mathematics and Science, Applied Math and a minimum GPA of 2.0

Total transfer credits granted toward the baccalaureate degree: 60
Total additional credits required at the senior college to complete baccalaureate degree: 60
Total credits required for the John Jay baccalaureate degree: 120

C. SUMMARY OF TRANSFER CREDITS FROM LaGCC AND CREDITS TO BE COMPLETED AT JOHN JAY

B.S. in Applied Mathematics	Total Credits for the Baccalaureate	Transfer Credits from LAGCC	Credits to be completed at John Jay
General Education Requirements	42	32	10
Major Requirements	51	26	25
Electives	27	2	25
Total	120	60	60

D. COURSE TO COURSE EQUIVALENCIES AND TRANSFER CREDITS AWARDED

LaGuardia Community College (LAGCC) graduates who complete the Associate in Arts (A.S.) degree in Liberal Arts: Mathematics and Science, Applied Math, will receive 60 credits toward the Bachelor of Science (B.S.) degree in Applied Mathematics at John Jay College of Criminal Justice (John Jay) as indicated below.

COURSE TO COURSE EQUIVALENCIES AND TRANSFER CREDIT AWARDED

Sending College LaGuardia Community College		**Receiving College Equivalent John Jay College**		**Credit Granted**
General Education (Liberal Arts, Core Distribution) Courses				
REQUIRED CORE: 12 Credits				
ENG 101 English Composition (ENA 101 depending on placement scores)	3	ENG 101 Composition I	3	3
ENG 102 Writing Through Literature	3	ENG 201 Composition II	3	3
MAT 115 or MAT 117 College Algebra and Trigonometry or Algebra and Trigonometry	3	MAT 105 College Algebra	3	3
Life and Physical Science	3	Life and Physical Science	3	3
FLEXIBLE CORE: 20 Credits				
Creative Expression	3	Creative Expression	3	3
Scientific World: MAT 200 Pre-Calculus	4	Scientific World: MAT 141 Pre-Calculus	4	4
US Experience in its Diversity	3	US Experience in its Diversity	3	3
Individual and Society	3	Individual and Society	3	3
World Cultures and Global Issues	3	World Cultures and Global Issues	3	3
Additional Flexible Common Core: MAT 201 Calculus I	4	Additional Flexible Common Core: MAT 241 Calculus I	4	4

PROGRAM REQUIREMENTS:				
Liberal Arts Mathematics and Science Program Core:				
LMF 101 First Year Seminar Liberal Arts Math and Science	3	General Elective	3	3
LIB 200 Humanism, Science and Technology	3	General Elective	3	3
Mathematics:				
MAT 202 Calculus II	4	MAT 242 Calculus II*	4	4
MAT 203 Calculus III	4	MAT 243 Calculus III/IV*	4	4
MAT 210 Linear Algebra	3	MAT 310 Linear Algebra	3	3
MAT 231 Introduction to Discrete Math	3	MAT 204 Discrete Structures	3	3
Computer Science:				
MAC 101 Introduction to Computer Science	3	CSCI 271 Introduction to Computer Science	3	3
MAC 190 Object-Oriented Programming	3	CSCI 272 Object-Oriented Programming	3	3
Unrestricted Electives				
Elective	2	General Elective	2	2
TOTAL = 60				

*John Jay College is completing revision of the calculus sequence in fall 2020 so that each calculus course will be four credits, to better align to the standard calculus course offerings in CUNY.

E. **REMAINING CREDITS FOR THE BACCALAUREATE DEGREE**

B.S. in Applied Mathematics

Course	Course Title	Gen Ed	Credits
College Option	300 Justice Core	Gen Ed	3
College Option	Learning from the Past or Communications	Gen Ed	3
MAT 301	Probability and Mathematical Statistics I		3
MAT 351	Introduction to Ordinary Differential Equations		3
CSCI 373	Advanced Data Structures		3
Concentration (Select one concentration and complete all 4 courses)			12
Option A: Data Science			
MAT 455	Data Analysis		
CSCI 362	Databases and Data Mining		
MAT 302	Probability and Mathematical Statistics II		
MAT 367	Multivariate Analysis		
Option B: Cryptography			
MAT 460	Mathematical Cryptography		
CSCI 360	Cryptography and Cryptanalysis		
MAT 341	Advanced Calculus I		
MAT 410	Abstract Algebra		
Electives (Complete Two Courses):			6
MAT 323	Operations Research Models I		
MAT 324	Operations Research Models II		
MAT 352	Applied Differential Equations		
MAT 365	The Mathematics of Signal Processing		
MAT 371	Numerical Analysis		
MAT 380	Selected Topics in Mathematics		
MAT 442	Advanced Calculus II		
	General Electives (Consult with an Advisor)		27

Total Transfer Credits Applied to Program		60
Total Credits Required after Transfer		60
Total Credits Required for Degree		**120**

F. ARTICULATION AGREEMENT FOLLOW-UP PROCEDURE

1. Procedures for reviewing, updating, modifying or terminating agreement:

When either of the degree programs involved in this agreement undergoes a change, the agreement will be reviewed and revised accordingly by representatives from each institution's respective departments, selected by their chairpersons/program directors.

2. Procedures for evaluation agreement, i.e., tracking the number of students who transfer under the articulation agreement and their success:

Each semester John Jay will provide LAGCC with the following information: a) the number of LAGCC students who applied to the program; b) the number of LAGCC students who were accepted into the program; c) the number of LAGCC students who enrolled; and d) the aggregate GPA of these enrolled students.

3. Sending and receiving college procedures for publicizing agreement, e.g., college catalogs, transfer advisers, Websites, etc.:

This articulation agreement will be publicized on the LAGCC website, and on John Jay's website. Transfer advisors at LAGCC will promote this agreement with eligible students.

Effective Date: Spring 2021
LaGuardia Community College:

Review Date: Spring 2022
John Jay College of Criminal Justice:

10/7/20

Dr. Paul Arcario Date
Provost & Sr. Vice President for Academic Affairs

Dr. Yi Li Date
Provost & Vice President for Academic Affairs

10/06/2020

Dr. Abderrazak Belkharraz Idrissi Date
Chairperson, Mathematics, Engineering & Computer Science Department

Dr. Douglas Salane Date
Chairperson, Mathematics and Computer Science Department

Effective Date: Spring 2021 **Review Date: Spring 2022**

LaGuardia Community College:

Dr. Nireata Seals Date
Interim Provost & Sr. Vice President for Academic Affairs

Dr. Abderrazak Belkharraz Date
Chairperson, Mathematics, Engineering & Computer Science Department

John Jay College of Criminal Justice:

J-2. 9/22/2020

Dr. Yi Li Date
Provost & Vice President for Academic Affairs

Douglas Salane Digitally signed by Douglas Salane DN: cn=Douglas Salane, o=John Jay College, ou=Math & CS Dept., email=dsalane@jjay.cuny.edu, c=US Date: 2020.09.22 13:44:01 -04'00'

Dr. Douglas Salane Date
Chairperson, Mathematics and Computer Science Department