ARTICULATION AGREEMENT FORM

A. SENDING AND RECEIVING INSTITUTIONS

Sending College: Borough of Manhattan Community College, CUNY
Department: Computer Information Systems
Program: Computer Science
Degree: Associate of Science (A.S.)

Receiving College: John Jay College of Criminal Justice, CUNY
Department: Mathematics and Computer Science
Program: Computer Science and Information Security
Degree: Bachelor of Science (B.S.)

B. ADMISSION REQUIREMENTS FOR SENIOR COLLEGE PROGRAM

- A.S. Degree with a minimum 2.0 overall GPA
- Grade of C or better in all Computer Science course(s)
- Grade of C or better in freshman English composition, its equivalent, or a higher-level English course
- Passing grade in a minimum 3-credit college-level, credit-bearing mathematics course

Total transfer credits granted toward the baccalaureate degree: <u>60</u>

Total additional credits required at the senior college to complete baccalaureate degree: <u>60</u>

Total credits required for the Toxicology Program: <u>120</u>

C. TRANSFER CREDITS AWARDED

Borough of Manhattan Community College (BMCC) graduates who complete the Associate in Sciences degree (A.S.), in Computer Science will receive 60 credits toward the Bachelor of Science (B.S.) degree in Computer Science and Information Security at John Jay College of Criminal Justice (JJC).

BMCC Associate in Science in Computer Science Degree Requirements	
Required Common Core	
English Composition	6
Mathematical & Quantitative Reasoning[1]	3
Life & Physical Sciences[2]	3
Total Required Common Core	12
Flexible Common Core	
Creative Expression[3]	3
World Culture & Global Issues	3
U.S. Experience in its Diversity	3
Individual & Society	3
Scientific World[4]	6
Total Flexible Core	18
Total Common Core	30
Curriculum Requirements	
CSC 111 Introduction to Programming	4
CSC 211 Advanced Programming Techniques	3
CSC 215 Fundamentals of Computer Systems	3
CSC 231 Discrete Structures and Applications to Computer Science	4
CSC 331 Data Structures	3
CSC 350 Software Development	3
MAT 302 Analytic Geometry and Calculus II	4
General Electives[5]	6
Total Curriculum Credits	30
Total Program Credits	60

[1]MAT301 is advised to be taken to satisfy the area of Mathematical & Quantitative Reasoning.
[2]PHY215 is advised to be taken to satisfy the area of Life & Physical Sciences.
[3]SPE100 is advised to be taken to satisfy the area of Creative Expression.
[4]CSC101 is advised to be taken to satisfy the area of Scientific World.
[5]Some general electives credits can be satisfied by STEM variants taken in the Common Core.

*Please see Advisor Recommended (Section D) for courses that must be completed at BMCC in order to complete the Requirements for the Computer Science and Information Security B.S. in two additional years.

D. ADVISOR RECOMMENDED SECTION

Courses that must be completed at BMCC in order to complete the Requirements for the Computer Science and Information Security B.S. at John Jay in two additional years

Course Title and Number
Mathematical and Quantitative Reasoning
Calculus I (MAT301)
Life and Physical Sciences
University Physics I (PHY 215)
Scientific World
Principles of Information Technology and Computation (CSC 101)
Program Core
Introduction to Programming (CSC 111)
Advanced Programing Techniques (CSC 211)
Fundamentals of Computer Systems (CSC 215)
Discrete Structures and Applications to Computer Science (CSC 231)
Data Structures (CSC 331)
Software Development (CSC 350)
Calculus II (MAT 302)

E. SUMMARY OF TRANSFER CREDITS FROM BMCC & CREDITS TO BE COMPLETED AT JJC

	Total Number of Credits Needed for Computer Science and Information Security Program @ JJC	Transfer Credits from BMCC	Credits to be Completed @ JJC
Common Core Requirements	30	30	0
College Option	6	0	6
Computer Science Core Courses	33	15	18
Required Math Courses	9	6	3
Computer Science Electives	3	0	3
Math Electives	3	3	0
Ethics	3	0	3
Capstone Course	6	0	6
General Electives	27	6	21
Total	**120**	**60**	**60**

F. SENIOR COLLEGE COURSES REMAINING FOR BACCALAUREATE DEGREE

Courses students will be required to take at JJC after completing the A.S. in Science at BMCC.

Course Number & Title	Credits
General Education Requirements (from JJC "College Option")	
One 300-level Justice Core course from *Struggles for Justice in the U.S.* or *Justice in Global Perspectives*	3
One course from *Learning from the Past* or *Communications*	3
Total College Option at JJC	**6**
Core Computer Science Courses	
Cryptography and Cryptanalysis (CSCI 360)	3
Operating Systems (CSCI 375)	3
Computer Algorithms (CSCI 377)	3
Computer Networks (CSCI 379)	3
Computer Security and Forensics (CSCI 411)	3
Network Security and Forensics (CSCI 412)	3
Subtotal	**18**
Required Math Courses	
Probability and Mathematical Statistics I (MAT 301)	3
Subtotal	**3**
Elective Course - *Choose one course from:*	
Databases and Data Mining (CSCI 362)	3
Artificial Intelligence (CSCI 376)	3
Selected Topics in Computer Science (CSCI 380)	3
Internship in Computer Information Systems (CSCI 404)	3
Subtotal	**3**
Ethics Requirement	
Ethics in Information Technology (PHI 3XX)	3
Subtotal	**3**
Capstone Courses	
Capstone Experience in Digital Forensics/Cybersecurity I (CSCI 400)	3
Capstone Experience in Digital Forensics/Cybersecurity II (CSCI 401)	3
Subtotal	**6**
College Option: General Education Requirement	6
Major Requirements to be Completed at John Jay	33
Free Electives	21
Total credits at John Jay	60

G. AGREEMENT FOLLOW-UP PROCEDURES

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 faculty from each institution's respective departments or programs, as selected by their chairpersons or program directors.

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

    Each year JJC will provide BMCC with the following information: a) the number of BMCC graduates who applied to the program; b) the number of BMCC students who were accepted into the program; c) the number of BMCC students who enrolled; and d) the aggregate GPA of these enrolled students at JJC.

3. **Sending and receiving college procedures for publicizing agreement (e.g. college catalogs, transfer advisors, websites, etc.):**

    - This articulation agreement will be publicized on the BMCC website and the JJC website.
    - Transfer advisors at BMCC will promote this agreement to eligible students.

Effective Date: Fall 2015