

# **APPENDIX D. ARTICULATION AGREEMENTS (CUNY)**

## **Appendix D.1 Articulation Agreement with BMCC**

**THE CITY UNIVERSITY OF NEW YORK**

**ARTICULATION AGREEMENT**

*between*

**BOROUGH of MANHATTAN COMMUNITY COLLEGE**

*and*

**NEW YORK CITY COLLEGE OF TECHNOLOGY**

**Effective Date: *Upon NYSED approval of the SET degree program***

### **A. SENDING AND RECEIVING INSTITUTIONS**

Sending Institution: Borough of Manhattan Community College (BMCC)

Department: Computer Information Systems

Program: Computer Science (CSC)

Degree: Associate in Science (AS)

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

Department: Computer Engineering Technology

Program: Software Engineering Technology (SET)

Degree: Bachelor of Science (BS)

### **B. REQUIREMENTS FOR SENIOR COLLEGE PROGRAM**

I. Admission requirement for students wishing to transfer to New York City College of Technology's Software Engineering Technology (SET) Bachelor of Science (BS) degree program under this agreement:

- a. The CSC AS degree from BMCC
- b. A minimum CUM GPA of 2.0
- c. Grade of C or better in all CSC major courses

2. Total transfer credits granted toward the baccalaureate degree: 60 credits

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

4. Acceptance into this program will be under the requirements in effect at the time of admission and may be subject to such changes as shall be determined by New York City College of Technology's academic policies and curricula.

5. Certification of graduation at New York City College of Technology requires a cumulative GPA of 2.0. This 2.0 GPA is also required in the SET BS program.

## C. COURSE EQUIVALENCIES OR/AND TRANSFER CREDIT AWARDED

Upon the admission requirements are satisfied, BMCC graduates who complete the Associate in Sciences degree (AS) in Computer Science will receive 60 credits transferred toward the Bachelor of Science (BS) degree in Software Engineering Technology at NYCCT.

### BMCC Associate in Science in Computer Science Degree Requirements

#### Required Common Core

English Composition	6
Mathematical and Quantitative Reasoning <sup>1</sup>	3
Life and Physical Sciences <sup>2</sup>	3
<b>TOTAL REQUIRED COMMON CORE</b>	<b>12</b>

#### Flexible Common Core<sup>3</sup>

Creative Expression <sup>4</sup>	3
Individual and Society	3
Scientific World <sup>5</sup>	6
U.S. Experience in Its Diversity	3
World Cultures and Global Issues	3
<b>TOTAL FLEXIBLE COMMON CORE</b>	<b>18</b>
<b>TOTAL COMMON CORE</b>	<b>30</b>

#### Curriculum Requirements

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
Program Electives <sup>6</sup>	6
General Electives <sup>7</sup>	4
<b>TOTAL CURRICULUM REQUIREMENTS</b>	<b>30</b>
<b>TOTAL PROGRAM CREDITS</b>	<b>60</b>

1. Students are required to take MAT 206 or MAT 301.

2. Students are required to take PHY 215.

3. No more than two courses in any discipline or interdisciplinary field can be used to satisfy Flexible Core requirements.

4. Students are advised to take SPE 100 or SPE 102.
5. Students are required to take CSC 101 and CSC 111.
6. Select 6 credits from CIS 317, CIS 345, CIS 359, CIS 362, CIS 364, CIS 385, CIS 395, CSC 103, GIS 201 or CIS316.
7. These credits can be satisfied by taking STEM variants in the Common Core.

## D. SENIOR COLLEGE COURSES REMAINING FOR BACCALAUREATE DEGREE

The following credits are to be earned at New York City College of Technology.

### General Education:

<b><u>College Option:</u></b>		
Speech/Oral Communication	COM1330 or higher if speech class not taken already. Otherwise an advanced liberal arts course.	3
Interdisciplinary Course	Any	3
<b><u>Program-Specific Degree Requirements:</u></b>		
Probability and Statistics I	MAT2572	4
Introduction to Linear Algebra	MAT2580	3
General education elective		4
<b>Subtotal</b>		<b>17 credits</b>

### Major Courses:

CET1150	Electrical Circuits	3
CET1250	Fundamentals of Digital Systems (current EMT1250)	4
SET2330	Cloud Database Fundamentals	3
SET2440	System Programming	3
SET3510	Software Requirements Engineering	3
SET3530	Cloud Computing & Networking	3
SET3630	Cybersecurity Fundamentals	3
SET4710	Software Testing & Quality Assurance	3
SET4810	Software Capstone Design	3
Technical Electives	Choose any <b>five</b> from the following courses: CET4925 Internet of Things CET4973 Introduction to Artificial Intelligence CET4910 Digital Image Processing CET4915 Agile Testing of Embedded Software CET4920 Introduction to Computer Vision CET4935 Wearable Computing SET4955 Software Engineering Technology in Robotics SET4940 Embedded Operating Systems SET4900 Internship in Software Engineering Technology or other 4-credits CET4900 series technical electives	15
<b>Subtotal (minimum)</b>		<b>43 credits</b>

Note: Students must complete two courses designated as Writing Intensive (WI) at NYCCT for the baccalaureate degree, one in liberal arts and one in the discipline, to meet graduation requirements.

#### **E. SUMMARY OF CREDITS**

Total Credits transferred from BMCC	<b>60</b>
Total Credits to be earned at NYCCT:	
• General Education (including one minimum 4-credit General Education Elective)	<b>17</b>
• Major courses	<b>43</b>
Total Credits required for the SET BS degree:	<b>120</b>