

## APPENDIX I: ARTICULATION AGREEMENTS



### ARTICULATION AGREEMENT FORM

#### A. SENDING AND RECEIVING INSTITUTIONS

*Sending College:* Borough of Manhattan Community College  
*Department:* Social Sciences, Human Services and Criminal Justice  
*Program:* Economics  
*Degree:* Associate in Arts (A.A.)

*Receiving College:* New York City College of Technology  
*Department:* Social Science  
*Program:* Data Analytics/Economics  
*Degree:* Bachelor of Science (B.S.)



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

(e.g., minimum GPA, audition/portfolio)

- Completion of the Associate of Arts degree in Economics
- 2.5 overall GPA

Borough of Manhattan Community College (BMCC) graduates with the associate degree in Economics **who select the electives specified in this articulation agreement** will receive 60 contributory transfer credits toward the Bachelor of Science in Data Analytics/Economics at New York City College of Technology. (See Section C below, Transfer Credit Awarded.) In addition, they will be deemed to have met all Required Core and Flexible Core General Education requirements at New York City College of Technology.

Total transfer credits: **60**

Total contributory credits from associate degree: **60**

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

Total credits required to earn the B.S. in Data Analytics/Economics: **120**

**C. TRANSFER CREDITS AWARDED**

Borough of Manhattan Community College (BMCC) graduates who complete the Associate in Arts (A.A.) degree in Science will receive 60 credits toward the Bachelor of Science (B.S.) degree in Data Analytics/Economics at New York City College of Technology.

<b>Common Core</b>	
<b>Required Common Core</b>	<b>Credits</b>
English Composition	6
Mathematical and Quantitative Reasoning <sup>1</sup>	3
Life & Physical Sciences	3
<b>Flexible Common Core</b>	
Creative Expression <sup>2</sup>	3
Individual & Society	3
US Experience in Its Diversity	6
World Culture & Global Issues	3
Scientific World <sup>3</sup>	8
<b>Total Common Core</b>	<b>30</b>
<b>Major Required Courses</b>	
ECO 201 – Macroeconomics <sup>4</sup>	3
ECO 202 – Microeconomics <sup>4</sup>	3
MAT 209 – Statistics	4
MAT 301 – Analytical Geometry and Calculus I <sup>5</sup>	4
XXX xxx – Social Science Elective <sup>6</sup>	3
XXX xxx – Program Electives <sup>7</sup> ECO 240 – Behavioral Economics <i>and two from the following:</i> ECO 215 – Environmental Economics ECO 223 – Economic History ECO 250 – Money and Banking	9
XXX xxx – General Electives <sup>8</sup> <i>(Please note: These credits will be satisfied by STEM variants taken in the Common Core.)</i>	4
<b>Total Program Credits</b>	<b>60</b>

<sup>1</sup> Students are strongly advised to take MAT 301 or MAT 302 to satisfy this requirement to transfer to City Tech under this agreement.

<sup>2</sup> Students must take SPE 100/102 to satisfy this requirement to transfer to City Tech under this agreement.

<sup>3</sup> Students must take PSY 100 to satisfy this requirement to transfer to City Tech under this agreement.

<sup>4</sup> Students who take ECO 201 and/or ECO 202 to satisfy a Flexible Core requirement will be able to substitute a general elective to satisfy this requirement.

<sup>5</sup> Students, who take MAT 301 to satisfy their Mathematical and Quantitative Reasoning requirement, are advised to take MAT 302 to satisfy this requirement.

<sup>6</sup> Students are strongly advised to take SOC 100 or ANTH 100 to satisfy this requirement to transfer to City Tech under this agreement.

<sup>7</sup> Though there are other courses that will satisfy this requirement at BMCC, the courses listed in this section are the ones transferrable to City Tech that will count towards the B.S. in Data Analytics/Economics. Students must select ECO 240 – Behavioral Economics and any two from the listing above.

<sup>8</sup> Students are advised to use these credits to complete courses that will count towards the B.S. in Data Analytics/Economics at City Tech (see section D – Course Equivalencies).

#### D. COURSE EQUIVALENCIES

<b>BMCC Course</b>	<b>Credits</b>	<b>City Tech Course</b>	<b>Credits</b>
ANT 100 – Introduction to Anthropology	3	ANTH 1101 – Introductory Anthropology	3
ECO 201 – Macroeconomics	3	ECON 1101 – Macroeconomics	3
ECO 202 – Microeconomics	3	ECON 1401 – Microeconomics	3
ECO 215 – Environmental Economics	3	ECON 2205 – Environmental Economics	3
ECO 223 – Economic History	3	ECON 2705 – Economic History	3
ECO 243 – Behavioral Economics	3	ECON 2820 – Behavioral Economics	3
ECO 250 – Money and Banking	3	ECON 2301 – Money and Banking	3
ENG 101 – English Composition I	3	ENG 1101 – English Composition I	3
ENG 201 – Introduction to Literature	3	ENG 1121 – English Composition II	3
MAT 209 – Statistics	4	MAT 1272 – Statistics	4
MAT 301 – Analytic Geometry & Calculus I	4	MAT 1475 – Calculus I	4
MAT 302 – Analytic Geometry & Calculus II	4	MAT 1575 – Calculus II	4
PSY 100 – Introduction to Psychology	3	PSY 1101 – Introduction to Psychology	3
SOC 100 – Introduction to Sociology	3	SOC 1101 – Elements of Sociology	3
SPE 100/102 – Fundamentals of Speech	3	COMM 1220 – Public Speaking	3

#### E. SENIOR COLLEGE UPPER DIVISION COURSES REMAINING FOR BACCALAUREATE DEGREE<sup>9</sup>

<b>College Option Requirements<sup>10</sup></b>	<b>Credits</b>
Any Liberal Arts Course	3
Interdisciplinary Course (must be WI)	3

<b>Major Requirements</b>	<b>Credits</b>
<b><i>Required Courses in Discipline</i></b>	
ECON 2101 - Intermediate Macroeconomics	3
ECON 2201 - Introductory Econometrics	3
ECON 2401 - Intermediate Microeconomics	3
ECON 3101 - Applied Macroeconomics	3
ECON 3201 - Advanced Topics in Econometrics	3
ECON 3401 - Applied Microeconomics	3
ECON 3301 – Visualizing and Mapping Economics Data	3
ECON 3801 – Introduction to Statistical Learning in Social Sciences	3
ECON 4201 – Internship	3
<b><i>Subtotal</i></b>	<b>27</b>
<b><i>Required Courses in Curriculum</i></b>	
CST 1100 – Introduction to Computer Systems	3
CST 1101 – Problem Solving with Computer Programming	3
CST 1201 – Programming Fundamentals	3
CST 1204 – Database Fundamentals	3
CST 2402 – Introduction to Data Science	3
MAT 1575 – Calculus II	0-4
MAT 2580 – Introduction to Linear Algebra	3
<b><i>Subtotal</i></b>	<b>18-22</b>
<b><i>Advised Electives</i></b>	
SOC 3303 – Sociology of Numbers	3
PHIL 2202 – Symbolic Logic	3
<b><i>Subtotal</i></b>	<b>6</b>
<b><i>General Electives</i></b>	
	<b>0-3</b>
<b><i>Total credits to be taken at City Tech</i></b>	<b>60-61</b>
<b><i>Total credits transferred from BMCC</i></b>	<b>60</b>
<b><i>Total Credits Needed for the Baccalaureate Degree</i></b>	<b>120</b>

<sup>9</sup> In addition to requirements of the AA degree, City Tech bachelor's degree students are required to take one Writing Intensive (WI) course in the Major and one WI course in the liberal arts and sciences. **All graduates must also satisfy CUNY Pathways requirements.**

<sup>10</sup> Complete lists of liberal arts and sciences courses and advanced liberal arts and sciences courses, as well as semester-specific lists of interdisciplinary courses, are available online at the City Tech Pathways website

## J. ARTICULATION 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, selected by their chairpersons and/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 New York City College of Technology will provide BMCC with the following information: a) the number of BMCC students 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.
  
3. *Sending and receiving college procedures for publicizing agreement, e.g., college catalogs, transfer advisers, Websites, etc.:*  
This articulation agreement will be publicized on BMCC's website, and the New York City College of Technology's website. Transfer advisors at BMCC will promote this agreement with eligible students.

BMCC students who plan to transfer into the Data Analytics/Economics degree program at New York City College of Technology are advised to choose the listed of program requirements indicated in this document in order to satisfy the requirements for the A.A. degree in Economics at BMCC and to ensure that the maximum number of credits are transferred to satisfy the Data Analytics/Economics program requirements at New York City College of Technology. Refer to the college website for a list of the general requirements for the A.A. degree.

**Effective date:** Fall 2020