

**Articulation with Borough of Manhattan Community College (BMCC)**



**THE CITY UNIVERSITY OF NEW YORK  
ARTICULATION AGREEMENT  
Between  
NEW YORK CITY COLLEGE OF TECHNOLOGY  
And  
BOROUGH of MANHATTAN COMMUNITY COLLEGE**

**A. SENDING AND RECEIVING INSTITUTIONS**

Sending College: Borough of Manhattan Community College (BMCC)

Department: Computer Information Systems

Program: Computer Science

Degree: Associate in Science (A.S.)

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

Department: Computer Systems Technology

Program: Data Science

Degree: Bachelor of Science (B.S.)

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

- The AS degree and a minimum GPA of 2.50
- Grade of C or higher in credit-bearing major courses
- Grade of C or higher in freshman composition, its equivalent, or a higher level English course

Students who earn an AS in Computer Science program at BMCC will be accepted into the BS in Data Science under the requirements in effect at the time of admission. To earn a baccalaureate degree, admitted students must earn a minimum of 60 credits of which 34 credits must be taken in residence and 17 in the major..

Students who wish to transfer but do not meet all of the above requirements or are unable to enroll within two years after graduation will receive admission consideration under our standard transfer credit policies.

Total transfer credits granted toward the Bachelor of Science: 60

Total additional credits required at NYCCT to complete Bachelor of Science: 60

Total credits required for the Bachelor of Science in Data Science: 120

### C. REQUIREMENTS OF BMCC AS IN COMPUTER SCIENCE DEGREE TRANSFER CREDITS AWARDED

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 Data Science at NYCCT.

<b>BMCC Associate in Science in Computer Science Degree Requirements</b>	
<b>Required Common Core</b>	
English Composition	6
Mathematical & Quantitative Reasoning <sup>1</sup>	3
Life & Physical Sciences <sup>2</sup>	3
<i>Total Required Common Core</i>	12
<b>Flexible Common Core</b>	
Creative Expression <sup>3</sup>	3
World Culture & Global Issues	3
U.S. Experience in its Diversity	3
Individual & Society	3
Scientific World <sup>4</sup>	6
<i>Total Flexible Core</i>	18
<i>Total Common Core</i>	30
<b>Curriculum Requirements</b>	
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 <sup>5</sup>	6
<i>Total Curriculum Credits</i>	30
<i>Total Program Credits</i>	60

<sup>1</sup>MAT301 is advised to be taken to satisfy the area of Mathematical & Quantitative Reasoning.

<sup>2</sup>PHY215 is advised to be taken to satisfy the area of Life & Physical Sciences.

<sup>3</sup>SPE100 is advised to be taken to satisfy the area of Creative Expression.

<sup>4</sup>CSC101 is advised to be taken to satisfy the area of Scientific World.

<sup>5</sup>Some general electives credits can be satisfied by STEM variants taken in the Common Core.

City Tech agrees to accept the following Borough of Manhattan Community College courses as the equivalent to City Tech courses offered in the Bachelor of Science in Data Science:

<b>City Tech Courses: B.S. in Data Science</b>	<b>Borough of Manhattan Course: Computer Science</b>
CST1100	CSC101
CST1101	CSC215
CST1201	CSC111
CST3513	CSC211
CST3650	CSC331
MAT1575	MAT302
MAT2440	CSC231

**D. SENIOR COLLEGE UPPER DIVISION COURSE REMAINING FOR BACCALAUREATE DEGREE**

Courses students will be required to take at NYCCT after completing AS in Computer Science to earn the BS in Data Science

<b>COLLEGE OPTION REQUIREMENTS</b>		
Public Speaking	COM 1330 or higher. If public speaking already taken, then as advanced liberal arts course	3
Interdisciplinary Course	Any approved interdisciplinary (ID) course	3
<i>Total Common Core &amp; College Option Requirements</i>		<b>6</b>

<b>DISCIPLINE REQUIREMENTS</b>		
MAT2575	Probability and Statistics I	4
MAT2580	Introduction to Linear Algebra	3
CST1204	Database Fundamentals	3
CST2302	Data Management I	3
CST2309	Web Programming I	3
CST2402	Introduction to Data Science	3
CST2410	Introduction to Security	3
CST3502	Data Management II	3
CST3512	Data Mining	3
CST3602	Data Visualization	3
CST4702	Machine Learning	3
CST4802	Information Retrieval	3
CST4812	Natural Language Processing	3
CST4900	Internship	3
	<b>Sub Total</b>	<b>43</b>
Two Electives from the following		
BUS2339	Financial Management	3
BUS2341	Financial Forecasting	3
MED2400	Medical Informatics Fundamentals	3
MED4229	Healthcare Databases	3
BMET4741	Fundamental Healthcare Data Analytics	3
BMET4842	Advanced Healthcare Data Analytics	3
ECON1101	Macroeconomics	3
ECON2301	Money and Banking	3

