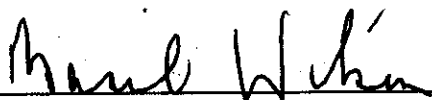


Letter of Articulation
between
John Jay College of Criminal Justice
of the
City University of New York
and
Borough of Manhattan Community College
of the
City University of New York

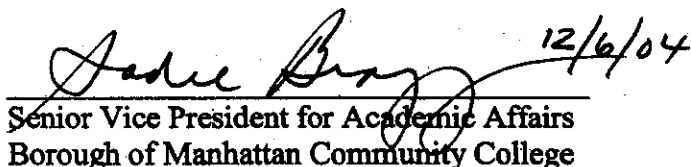
John Jay College of Criminal Justice agrees to accept into the Bachelor of Science degree program in Computer Science students from Borough of Manhattan Community College who successfully complete the Computer Science curriculum described below (see Section B for course equivalencies), thereby receiving an Associate in Science degree. Successful completion of the Computer Science curriculum at Borough of Manhattan Community College includes the attainment of at least a 2.0 overall grade-point average.

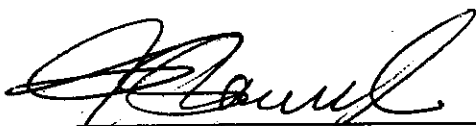
Borough of Manhattan Community College and John Jay College of Criminal Justice agree to present the courses noted in the Computer Science curriculum described below as outlined in each of the colleges' catalogs, and agree to notify each other if curriculum requirements, course numbers, content or catalog descriptions change. Furthermore, the parties involved understand that any change in curriculum requirements, course number, and content or catalog description may require a modification to this agreement.

It is also understood that the Department of Computer Information Systems at Borough of Manhattan Community College will identify Borough of Manhattan Community College students who wish to participate in the articulation, and will recommend the Computer Science program at John Jay College of Criminal Justice to those who successfully complete the Computer Science curriculum.

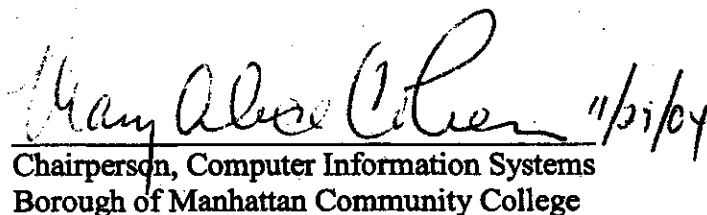


Provost
John Jay College of Criminal Justice

 12/6/04
Senior Vice President for Academic Affairs
Borough of Manhattan Community College



Chairperson, Mathematics and Computer Studies
John Jay College of Criminal Justice

 11/29/04
Chairperson, Computer Information Systems
Borough of Manhattan Community College

Date: 15 Dec 2004

Date: _____

**Borough of Manhattan Community College
The City University of New York**

Section A

**Computer Science Program
Leading to the Associate in Science (A.S) degree**

<u>General Requirements</u>		<u>Credits</u>
ENG 101	English Composition I	3
ENG 201	English Composition II	3
SPE 100	Fundamental of Speech (SPE 102 satisfies this requirement for students whose first language is not English)	3
XXX xxx	Music or Art (Choose from: ART 181, 210, 230, or MUS 110, 220)	1-2
XXX xxx	Social Science (Choose from: ANT 100, ECO 100, HIS 101, HIS 102, PHI 100, POL 100, PSY 100, SOC 100)	3
Total General Credits		13-14

Curriculum CreditsCredits

CSC 110	Computer Programming I	4
CSC 210	Computer Programming II	4
CSC 230	Discrete Structures	3
CSC 310	Assembler Language and Architecture I	3
CSC 330	Data Structures I	3
CSC 410	Assembler Language and Architecture II	3
CSC 430	Data Structures II	3
MAT 301	Analytic Geometry and Calculus II (MAT 206 is a pre-requisite for MAT 301.)	4
MAT 302	Analytic Geometry and Calculus II	4
MAT 303	Analytic Geometry and Calculus III	4
MAT/CSC 470	Mathematical Foundations of Computer Networking	4
PHY 215	University Physics I	4
PHY 225	University Physics II	4
Total Curriculum Credits		47
Total Program Credits		60

**Computer Science Program at
Borough of Manhattan Community College
Course Equivalency Listing for
John Jay College Computer Science Degree**

Section B

General Requirements			General Requirements †		
Course	Description	Crs.	Course	Description	Crs.
ENG 101	English Composition I	3	ENG 101	College Composition I	3
ENG 201	English Composition II	3	ENG 102	College Composition II	3
SPE 100	Fundamentals of Speech	3	SPE 113	Speech Communication	3
XXX xxx	Music or Art (Art 181, 210, 230, or Mus 110, 220)	1-2	ART xxx Or MUS xxx		2
XXX xxx	Social Science (Choose from: ANT 100, ECO 100, HIS 101, HIS 102, PHI 100, POL 100, PSY 100, SOC 100)	3	Equivalent Course Credit		3
	Total General Credits	13-14			14
Curriculum Requirements			Curriculum Requirements		
CSC 110	Computer Programming I	4	MAT 271	Introduction to Computing and Programming	3*
CSC 210	Computer Programming II	4	MAT 272	Object Oriented Computing	3*
CSC 230	Discrete Structures	3	MAT 204	Discrete Structures	3
CSC 310	Assembler Language & Architecture I	3		Elective	3
CSC330	Data Structures I	3		Elective	3
CSC 410	Assembler Language & Architecture II	3		Major Elective (Part 3)	3
CSC 430	Data Structures II (Grade of C or better required)	3	MAT 373	Advanced Data Structures	3**
MAT 470	Mathematical Foundations of Computer Networking**	4	MAT 279	Data Communications and the Internet	3*
MAT 301	Analytic Geometry & Calculus I	4	MAT 241	Calculus I	3*
MAT 302	Analytic Geometry & Calculus II	4	MAT 242	Calculus II	3*
MAT 303	Analytic Geometry & Calculus III	4	MAT 243	Calculus III Major Elective (Part 3)	3*
PHY 215	University Physics I	4	PHY 203	General Physics	4
PHY 225	University Physics II	4	PHY 204	General Physics	4
				General Electives	5
	Total Curriculum Credits	47		Total Curriculum Credits	46
	Total Program Credits	60		Total Program Credits	60

- † The John Jay College Core (37-57 credits) is waived for transfer students with an A.S. in computer science.
* The course at John Jay College carries fewer credits. Excess credits earned will count as general electives.
** The course at John Jay College carries more credits. Students will receive the number of credits earned.

**Courses/Credits Remaining for the
John Jay College B.S. Degree in Computer Science**

Note: Students transferring from BMCC with an A.S. in Computer Science must take the following additional courses to meet the John Jay College Computer Science major requirements.

CS Major Requirements (21 credits)		
Part One Foundation Courses:		Part Three MAT/CSC/Statistics Electives
MAT 374 Programming Languages	3	None
MAT 375 Operating Systems	3	
MAT 377 Computer Algorithms	3	Part Four Applied Specialization ††
Part Two Operations Research		MAT 400 Quantitative Problems in Criminal Justice
MAT 323 Operations Research Models I	3	MAT 404 Internship in MIS
MAT 324 Operations Research Models II	3	MAT 470 Database Systems in Criminal Justice
		3
		3
		3
Total CS Required Credits:	24	
LIT 230, 231, 232 or 233	3	
General Electives	33	
Total Credits	60	

†† Students may select the Public Administration sequence of four courses as the Part IV Applied Specialization sequence