#### THE CITY UNIVERSITY OF NEW YORK

## ARTICULATION AGREEMENT

between

# STELLA AND CHARLES GUTTMAN COMMUNITY COLLEGE PROGRAM IN INFORMATION TECHNOLOGY

and

## NEW YORK CITY COLLEGE OF TECHNOLOGY BACHELOR OF TECHNOLOGY IN COMPUTER SYSTEMS

**Effective date**: September 2014

#### A. SENDING AND RECEIVING INSTITUTIONS

**Sending Institution**: Stella and Charles Guttman Community College

**Program**: Information Technology

**Degree**: Associate of Applied Science (A.A.S)

**Receiving Institution**: New York City College of Technology

**Department**: Computer Systems Technology

**Program**: Computer Systems

**Degree:** Bachelor of Technology (B. Tech)

## B. REQUIREMENTS FOR SENIOR COLLEGE PROGRAM

- 1. Students who graduate from Guttman Community College with an Associate Degree in Information Technology and a GPA of 2.0 or above will have fulfilled all Lower Division General Education requirements for the New York City College of Technology Baccalaureate in Computer Systems. Students will be required to meet New York State Liberal Arts requirements and all Upper Division General Education requirements.
- 2. Total transfer credits granted toward the baccalaureate degree: **60 credits**
- 3. Total additional credits required at the senior college to complete baccalaureate degree: **60-69 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 NYCCT's academic policies and curricula. To earn a baccalaureate degree, admitted students must earn a minimum of 60 credits which 34 must be taken in residence. Certification of graduation is assured upon completion of a minimum of 60 credits with a cumulative index of 2.0. This 2.0 index is also required in the major, the minor and/or interdisciplinary program.

## C. COURSE-TO-COURSE EQUIVALENCIES AND TRANSFER CREDIT AWARDED

		NYC College of Technology		
Course Number & Title	Credits	Course Number & Title	Credits	Credits Awarded
Guttman General Education Requiremen	<u>ts</u>			
ENGL 103 Composition I	3	ENGL 1101 English Composition I	3	3
ENGL 203 Composition II	3	ENGL 1121 English Composition II	3	3
MATH 103 Statistics <u>or</u> MATH 103A <u>and</u> MATH 103B	3	MAT 1272 Statistics	3	3
LASC 101 City Seminar I	3	Gen Ed credit under "World Cultures & Global Issues" area	3	3
LASC 102 City Seminar II	3	Gen Ed credit under "U.S. Experience in Its Diversity" area	3	3
SOSC 111 Ethnographies of Work I	3	Gen Ed credit under "Individual and Society" area	3	3
SOSC 113 Ethnographies of Work II	3	Gen Ed credit under "Individual and Society" area (6 <sup>th</sup> flexible)	3	3
LASC 200 The Arts in New York City	3	Gen Ed credit under "Creative Expression" area	3	3
Subtotal	24	Subtotal		24
<u>Information Technology Program Requireme</u> BUSI 102 Introduction to Business	<u>nts</u> 3	DIIC 2425 Dusings Management	3	1 2
BUSI 102 Introduction to Business	3	DUC 2425 Dusings Management	2	2
	3	BUS 2425 Business Management CST 1100 Introduction to	3	3
INFT 102 Hardware & Software	3	CST 1100 Introduction to Computer Systems	3	3
INFT 102 Hardware & Software INFT 201 Networking & Data		CST 1100 Introduction to Computer Systems CST 2307 Networking		
INFT 102 Hardware & Software INFT 201 Networking & Data	3	CST 1100 Introduction to Computer Systems	3	3
INFT 102 Hardware & Software  INFT 201 Networking & Data Communications INFT 202 Database Management &	3	CST 1100 Introduction to Computer Systems CST 2307 Networking	3	3
INFT 102 Hardware & Software  INFT 201 Networking & Data Communications INFT 202 Database Management & Design INFT 203 Introduction to Management	3	CST 1100 Introduction to Computer Systems CST 2307 Networking Fundamentals CST 1204 Database Systems Fundamentals CST 2400 Computer Systems	3	3
INFT 102 Hardware & Software  INFT 201 Networking & Data Communications INFT 202 Database Management & Design INFT 203 Introduction to Management Information Systems	3 3	CST 1100 Introduction to Computer Systems CST 2307 Networking Fundamentals CST 1204 Database Systems Fundamentals CST 2400 Computer Systems Management and Support CST 1101 Problem Solving with	3 3	3 3
INFT 102 Hardware & Software  INFT 201 Networking & Data Communications INFT 202 Database Management & Design INFT 203 Introduction to Management Information Systems INFT 211 Programming I	3 3 3	CST 1100 Introduction to Computer Systems CST 2307 Networking Fundamentals CST 1204 Database Systems Fundamentals CST 2400 Computer Systems Management and Support	3 3 3	3 3 3
INFT 102 Hardware & Software  INFT 201 Networking & Data Communications INFT 202 Database Management & Design INFT 203 Introduction to Management Information Systems INFT 211 Programming I  INFT 221 Web Technologies & Multimedia	3 3 3 3	CST 1100 Introduction to Computer Systems CST 2307 Networking Fundamentals CST 1204 Database Systems Fundamentals CST 2400 Computer Systems Management and Support CST 1101 Problem Solving with Computer Programming CST 2309 Web Programming I CST 2406 Introduction to	3 3 3 3	3 3 3 3
INFT 102 Hardware & Software  INFT 201 Networking & Data Communications INFT 202 Database Management & Design INFT 203 Introduction to Management Information Systems INFT 211 Programming I INFT 221 Web Technologies &	3 3 3 3	CST 1100 Introduction to Computer Systems CST 2307 Networking Fundamentals CST 1204 Database Systems Fundamentals CST 2400 Computer Systems Management and Support CST 1101 Problem Solving with Computer Programming CST 2309 Web Programming I	3 3 3 3	3 3 3 3

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<sup>&</sup>lt;sup>1</sup> Students who demonstrate proficiency in College Algebra choose four 3-credit electives. Students considering transfer to NYC Tech should select MATH 201, Precalculus, as one of those electives as Precalculus (MAT 1375) is a requirement for the baccalaureate degree at NYC Tech. In addition Precalculus satisfies the Flexible Common Core area "Scientific World" at NYC Tech.

Students who do not demonstrate proficiency in College Algebra choose three 3-credit electives. When the student has completed College Algebra he/she is strongly advised to then take Precalculus as one of the electives for the reason stated above.

Total	60		Total	60
Subtotal	9-12		Subtotal	9-12
Independent Project **				
INFT 244 Information Technology	3	Elective Credit	3	3
		Fundamentals		
INFT 223 Programming II <sup>4</sup>	3	CST 1201 Programming	3	3
Information Technology				
INFT 213 Special Topics in	3	Elective Credit	3	3
Technology **				
INFT 204 Internship in Information	3	Elective Credit	3	3
		(MAT 1375 Precalculus)		
		Scientific World area (at Tech)		
MATH 201 Precalculus <sup>3</sup>	3	General Education credit under	4	3
Management				
BUSI 204 Fundamentals of Project		Elective Credit	3	3
	_	(BIO 1101 Biology 1)		
Life in New York City <sup>2</sup>		Life and Physical Sciences area		
BIOL 122 Introduction to Biology:	3	General Education credit under	4	3
Electives, 9 -12 credits *				

<sup>\*</sup>Please see footnotes 1-4 for important information regarding electives.

<sup>\*\*</sup> Students may choose just one of these two electives.

<sup>&</sup>lt;sup>2</sup> Students intending to transfer to a senior college should select BIOL 122 as one of their electives as it satisfies the Required Common Core area, "Life and Physical Sciences." If this Common Core area is not satisfied as part of the Associate Degree program the student will be required to take a course that satisfies it in the senior college.

<sup>&</sup>lt;sup>3</sup> See Footnote #1.

<sup>&</sup>lt;sup>4</sup> Students intending to transfer to NYC Tech are strongly advised to select INFT 223, Programming II, as an elective, as its equivalent course, CST 1201, Programming Fundamentals, is a requirement in Tech's baccalaureate degree in Computer Systems.

# D. SENIOR COLLEGE COURSES REMAINING FOR BACCALAUREATE DEGREE

Course Number & Title	Credit s
General Education Requirements (College Option)	5
COM 1330 (Effective Speaking, COM 1335 (Group Communication), or COM	3
1340 (Oral Interpretation of Literature)	
One interdisciplinary Liberal Arts and Science course	3
Gen Ed (College Option) at NYC College of Technology	6
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Remaining Requirements in Major	
Prerequisites and Program Requirements	
Life and Physical Science Requirement (if BIOL 122, Introduction to	0-3
Biology: Life in New York City is not taken at Guttman) <sup>5</sup>	
MAT 1375 Precalculus (if MATH 201, Precalculus, is not taken at	0-3
Guttman)***	
CST 1201 Programming Fundamentals (if INFT 223, Programming II, was	0-3
not taken at Guttman)	
PSY 1101 Introduction to Psychology	3
MAT 2440 Discrete Structures and Algorithms I***	3
MAT 2540 Discrete Structures and Algorithms II***	3
PSY 2404 Personnel and Organizational Psychology	3
CST 2410 Introduction to Computer Security	3
BUS 3525 Strategic Management	3
ENG 3773 Advanced Technical Writing	3
Subtotal	21-30
Computer Systems program-specific Degree Requirement and Electives	
Curriculum Requirements	
CST4800 Project Management	3
CST4900 Internship or CST4905	3
Complete One of Following Four Tracks:	
Database	
CST3504 Database Design	3
CST2406 or CST3606	3
CST3604 Quality Database Implementation	3
CST3613 Application Development with Databases	3
CST4704 Data Warehousing	3
CST4714 Database Administration	3
CST4724 Data On The Web	3
Two Major Electives**	6
Network and Security	
CST2405 or CST2415 * System Administration	3
CST3507 Advanced Single-LAN Concepts	3
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<sup>&</sup>lt;sup>5</sup> If the student has not taken BIOL122, Introduction to Biology: Life in New York City, at Guttman (see footnote #2) s/he will be required to take a course that satisfies the Life and Physical Science Flexible Core requirement at NYC Tech.

CST3610 Network Security Fundamentals	3
CST4707 The LAN-Internet Connection	3
CST4710 Advanced Security Technologies	3
CST4715 Advanced Topics in System Administration	3
CST3523 Task Automation in System Administration	3
One Major Elective**	3
IT Operation	
CST2405 or CST2415 *	3
CST3507 Advanced Single-LAN Concepts	3
CST3610 Network Security Fundamentals	3
CST3605 Virtualization	3
CST3615 Enterprise Applications	3
CST4700 IT Service Management	3
CST4714 Database administration	3
CST4709 Installing and Maintaining Web Servers	3
One Major Elective**	3
Software Development	
CST3513 Object-Oriented Programming	3
CST3519 Advanced Client Technology	3
CST3613 Application Development with Databases	3
CST3606 Object-Oriented Systems Analysis and Design	3
CST4708 Software Development and .NET Framework	3
*CST2301 Multimedia and Mobile Device Programming	3
CST4713 Dynamic Web Development: Servlets and JSP	3
Two Major Electives**	6
Total Major Requirements:	33
Subtotal	33

\*\*\* Any one of these courses satisfies Tech General Education credit under the Scientific World area.

Electives <sup>6</sup>	
CST 3520 Computer Forensics	
CST 4701 Game Programming	
CST 4706 Software Development Methodologies	
CST courses beginning with 35, 36, or 47	

NYC Tech General Education Requirements6Remaining Core Requirements in Major21-30Concentration/Track33

Total Credits earned at Guttman CC: 60
Total Credits to be earned at NYC Tech: 60-69

Total Credits required for B.Tech. degree: 120-129

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<sup>&</sup>lt;sup>6</sup> Credit for Electives is included in each Designated Track. To complete the track they must be chosen from the CST courses.