KINGSBOROUGH COMMUNITY COLLEGE
The City University of New York

CURRICULUM TRANSMITTAL COVER PAGE

Department: Math and Computer Science   **Date:** 01/14/2019

Title Of Course/Degree/Concentration/Certificate: A.S. Computer Science

Change(s) Initiated: (Please check)

☐ Closing of Degree
☐ Closing of Certificate
☐ New Certificate Proposal
☐ New Degree Proposal
☐ New Course
☐ New 82 Course (Pilot Course)
☐ Deletion of Course(s)

☑ Change in Degree or Certificate
☐ Change in Degree: Adding Concentration
☐ Change in Degree: Deleting Concentration
☐ Change in Prerequisite, Corequisite, and/or Pre/Co-requisite
☐ Change in Course Designation
☐ Change in Course Description
☐ Change in Course Title, Number, Credits and/or Hours
☐ Change in Academic Policy
☐ Pathways Submission:
    ☐ Life and Physical Science
    ☐ Math and Quantitative Reasoning
    ☐ A. World Cultures and Global Issues
    ☐ B. U.S. Experience in its Diversity
    ☐ C. Creative Expression
    ☐ D. Individual and Society
    ☐ E. Scientific World

☐ Change in Program Learning Outcomes
☐ Other (please describe):_____

PLEASE ATTACH MATERIAL TO ILLUSTRATE AND EXPLAIN ALL CHANGES

DEPARTMENTAL ACTION

Action by Department and/or Departmental Committee, if required:

Date Approved:_____Signature, Committee Chairperson:_____

If submitted Curriculum Action affects another Department, signature of the affected Department(s) is required:

Date Approved:_____Signature, Department Chairperson:_____

Date Approved:_____Signature, Department Chairperson:_____

I have reviewed the attached material/proposal

Signature, Department Chairperson: _____R. Yau___ 1/16/2019_____

KINGSBOROUGH
COMMUNITY COLLEGE
DREAMS BEGIN HERE

TO: Spring 2019 Curriculum Committee

FROM: Department of Mathematics & Computer Science

DATE: 01/14/2019

RE: Change in Degree Requirements for the A.S. in Computer Science

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The Department of Mathematics & Computer Science is proposing a change in Degree Requirements for the A.S. in Computer Science.

Rationale for Change:

Adjustments to degree requirements per:
1. Credit change for: MAT 1400, MAT 1500, MAT 1600, CS 1200, CS 3500, and CS 3700.
2. Allowing for the option of taking MAT 9A0.
3. Removal of MAT 2100.

Add/Delete/Change	A.S. COMPUTER SCIENCE	
	Department: Mathematics and Computer Sciences	
	HEGIS: 5103.00	
	PROGRAM CODE: 01041	
	CUNY CORE	**CREDITS**
CHANGE	**REQUIRED CORE: (4 Courses, ~~13~~ 12 Credits)**	~~13~~ 12
	When Required Core Courses are specified for a category, they are required for the major	
	ENG 1200 - English Composition I	3
	ENG 2400 - English Composition II	3
CHANGE	Mathematical and Quantitative Reasoning*^:	~~04~~ 3
ADD	**MAT 900 - College Algebra^ or**	
ADD	**MAT 9A0 - Algebra for STEM Majors^ or**	
ADD	**MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or**	
CHANGE (CREDITS)	**MAT 1500 – Calculus I**	3
	Life and Physical Sciences	3
CHANGE	**FLEXIBLE CORE:**	~~20~~ 18
	When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D (Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.	
	A. World Cultures and Global Issues	
	B. U.S. Experience In Its Diversity	
	C. Creative Expression	
	D. Individual & Society	
CHANGE	E. Scientific World*^:	
ADD & CHANGE (CREDITS)	**MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or**	~~04~~ 3
ADD & CHANGE (CREDITS)	**MAT 1500 - Calculus I or**	~~04~~ 3
CHANGE (CREDITS)	**MAT 1600 - Calculus II**	~~04~~ 3
	AND	
CHANGE (CREDITS)	**CS 1200 - Introduction to Computing**	~~04~~ 3
CHANGE	**Major Requirements (7 - 9 Courses, ~~27~~ 24 - 30 Credits)**	
	CS 13A0 - Advanced Programming Techniques	4
	CS 1400 - Computer Organization and Assembly Language Programming	4
CHANGE (CREDITS)	**CS 3500 - Discrete Structures**	~~04~~ 3
CHANGE (CREDITS)	**CS 3700 - Data Structures**	~~04~~ 3
DELETE	~~MAT 2100 - Calculus III~~	4
	MAT 5600 - Linear Algebra	3
	MAT 9100/BIO 9100 - Biostatistics **or**	4

	MAT 2200/BA 2200 - Business Statistics	
ADD	If not taken for Required Core or Flexible Core:	
ADD & CHANGE (CREDITS)	MAT 1500 - Calculus I	~~04~~ 3
ADD & CHANGE (CREDITS)	MAT 1600 - Calculus II	~~04~~ 3
ADD	Select <u>ONLY ONE</u> (1) of the these two options below based on initial Mathematics Placement:**	3
ADD	OPTION 1:	
ADD	If student's initial Mathematics Placement is below MAT 1500:	
	MAT 1000 - College Trigonometry^	
ADD	OPTION 2:	
ADD	If student's initial Mathematics Placement is MAT 1500:	
ADD & CHANGE (CREDITS)	MAT 2100 - Calculus III	~~04~~ 3
CHANGE	ELECTIVES: 0 - 6 credits sufficient to total 60 credits for the degree.	
	TOTAL:	60
	*This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be necessary.	
ADD	^ Depending on Math placement, students may be required to complete MAT 900, or MAT 9A0, and/or MAT 1400, and/or MAT 1000.	
ADD	**Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correct option.	

Add/Delete/Change	A.S. COMPUTER SCIENCE	
	Department: Mathematics and Computer Sciences	
	HEGIS: 5103.00	
	PROGRAM CODE: 01041	
	<u>CUNY CORE</u>	CREDITS
	<u>REQUIRED CORE:</u> (4 Courses, 12 Credits)	12
	When Required Core Courses are specified for a category, they are required for the major	
	ENG 1200 - English Composition I	3
	ENG 2400 - English Composition II	3
	Mathematical and Quantitative Reasoning* ^:	3
	MAT 900 - College Algebra^ or	
	MAT 9A0 - Algebra for STEM Majors^ or	
	MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or	
	MAT 1500 – Calculus I	
	Life and Physical Sciences	3
	<u>FLEXIBLE CORE:</u>	18
	When Flexible Core Courses are specified for a category, they are required for the major. One course from each Group A to D (Group E is satisfied by the courses shown). No more than two courses can be selected from the same discipline.	
	A. World Cultures and Global Issues	
	B. U.S. Experience In Its Diversity	
	C. Creative Expression	
	D. Individual & Society	
	E. Scientific World*^:	
	MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or	
	MAT 1500 - Calculus I or	
	MAT 1600 - Calculus II	
	AND	
	CS 1200 - Introduction to Computing	
	<u>Major Requirements (7 - 9 Courses, 24 - 30 Credits)</u>	
	CS 13A0 - Advanced Programming Techniques	4
	CS 1400 - Computer Organization and Assembly Language Programming	4
	CS 3500 - Discrete Structures	3
	CS 3700 - Data Structures	3
	MAT 5600 - Linear Algebra	3
	MAT 9100/BIO 9100 - Biostatistics **or**	4
	MAT 2200/BA 2200 - Business Statistics	
	If not taken for Required Core or Flexible Core:	
	MAT 1500 - Calculus I	3
	MAT 1600 - Calculus II	3
	Select <u>ONLY ONE</u> (1) of the these two options below based on initial Mathematics Placement:*	3

	OPTION 1:	
	If student's initial Mathematics Placement is below MAT 1500:	
	MAT 1000 - College Trigonometry^	
	OPTION 2:	
	If student's initial Mathematics Placement is MAT 1500:	
	MAT 2100 - Calculus III	
	ELECTIVES: 0 - 6 credits sufficient to total 60 credits for the degree.	
	TOTAL:	60
	*This program has a waiver to require particular courses in the Common Core, otherwise more than the minimum credits for the degree may be necessary.	
	^ Depending on Math placement, students may be required to complete MAT 900, or MAT 9A0, and/or MAT 1400, and/or MAT 1000.	
	**Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correct option.	