

**KINGSBOROUGH COMMUNITY COLLEGE**  
**The City University of New York**

**CURRICULUM TRANSMITTAL COVER PAGE**

Department: \_\_\_\_\_ Date: \_\_\_\_\_

Title Of Course/Degree/Concentration/Certificate: \_\_\_\_\_

**Change(s) Initiated: (Please check)**

- |   |   |
|---|---|
| <input type="checkbox"/> Closing of Degree            | <input type="checkbox"/> Change in Degree or Certificate                              |
| <input type="checkbox"/> Closing of Certificate       | <input type="checkbox"/> Change in Degree: Adding Concentration                       |
| <input type="checkbox"/> New Certificate Proposal     | <input type="checkbox"/> Change in Degree: Deleting Concentration                     |
| <input type="checkbox"/> New Degree Proposal          | <input type="checkbox"/> Change in Prerequisite, Corequisite, and/or Pre/Co-requisite |
| <input type="checkbox"/> New Course                   | <input type="checkbox"/> Change in Course Designation                                 |
| <input type="checkbox"/> New 82 Course (Pilot Course) | <input type="checkbox"/> Change in Course Description                                 |
| <input type="checkbox"/> Deletion of Course(s)        | <input type="checkbox"/> Change in Course Title, Number, Credits and/or Hours         |
|   | <input type="checkbox"/> Change in Academic Policy                                    |
|   | <input type="checkbox"/> Pathways Submission:   |
|   | <input type="checkbox"/> Life and Physical Science                                    |
|   | <input type="checkbox"/> Math and Quantitative Reasoning                              |
|   | <input type="checkbox"/> A. World Cultures and Global Issues                          |
|   | <input type="checkbox"/> B. U.S. Experience in its Diversity                          |
|   | <input type="checkbox"/> C. Creative Expression                                       |
|   | <input type="checkbox"/> D. Individual and Society                                    |
|   | <input type="checkbox"/> 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: Rina Garmish

TO: Fall 2023 Curriculum Committee

FROM: Prof. Yarmish, Chair, Department of Mathematics & Computer Science

DATE: 9/27/2023

RE: Change in Degree Requirements for Mathematics, A.S.

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

Pathways Flexible Core: Individual & Society

Specify: Strongly suggested: CIS 100 - Digital Society

**Rationale for Change:**

The courses is now *strongly suggested* for the AS degree in Mathematics comprise all technical material.

Constraints under which we operate include: (1) the limited number of credits permitted to the CC's by CUNY policy (60 credits) along with (2) requirements effectively imposed by CUNY senior colleges for seamless transfer of our Mathematics graduates to Bachelor-level Math programs with full Junior status.

As such, there is a dearth of available room (allowed course credit) for the provision to our students of the more global view of the impact of technologies and the newly-digital world to which our majors' own future work will contribute. Moreover, a consideration of privacy concerns and concerns regarding security of data and personal information is of utmost importance for those whose future work may impact those very issues.

A course such as the one proposed will fill this current gap for our students. The inclusion of CIS 100 in the pathways "individuals and society" bucket is most appropriate as a venue for this purpose and will enable our students to take the class without exceeding the 60-credit limitation for the degree.

	<b>A.S. MATHEMATICS</b>	
	Department: Mathematics and Computer Sciences	
	HEGIS: 5617.00	
	PROGRAM CODE: 01041	
	<b>CUNY CORE</b>	<b>CREDITS</b>
	<b>REQUIRED CORE: (4 Courses, 12 Credits)</b>	12
	When Required Core Courses are specified for a category, they are required for the major	
	ENG 1200 - English Composition I	
	ENG 2400 - English Composition II	
	Mathematical and Quantitative Reasoning*^:	
	MAT 9010 - Introduction to Mathematics with College Algebra^ or	
	MAT 9B0 - College Algebra for STEM Majors^ or	
	MAT 900 - College Algebra^ or	
	MAT 1400 - Analytic Geometry and Pre-Calculus Mathematics^ or	
	MAT 1500 - Calculus I	
	Life and Physical Sciences	
	<b>FLEXIBLE CORE:</b>	18
<b>CHANGE:</b>	When Flexible Core Courses are specified for a category, they are required <b>and/or strongly suggested</b> 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	
<b>ADD:</b>	<b>Strongly suggested: CIS 100 - Digital Society</b>	<b>3</b>
	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	
	<b>Major Requirements (8-10 Courses, 24 - 30 Credits)</b>	
	CS 3500 - Discrete Structures	3
	MAT 2100 - Calculus III	3
	MAT 5500 - Differential Equations	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: **	7-8
	OPTION 1:	
	If student's initial Mathematics Placement is below MAT 1500:	
	MAT 1000 - College Trigonometry <sup>^</sup>	3
	AND	
	Select one (1) course from the following:	
	CS 13A0 - Advanced Programming Techniques	4
	MAT 1100 - Finite Mathematics	4
	MAT 3200 - Introduction to Set Theory	4
	MAT 7100 - Applications of Linear Algebra and Vector Analysis	4
	OPTION 2:	
	If student's initial Mathematics Placement is MAT 1500:	
	Select two (2) courses from the following:	4
	CS 13A0 - Advanced Programming Techniques	4
	MAT 1100 - Finite Mathematics	4
	MAT 3200 - Introduction to Set Theory	4
	MAT 7100 - Applications of Linear Algebra and Vector Analysis	4
	<b>ELECTIVES:</b> 1 - 6 credits sufficient to total 60 credits for the degree.	
	<b>TOTAL:</b>	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.	
	<sup>^</sup> Depending on Math placement, students may be required to complete MAT 9010, or MAT 9B0, or MAT 900, and/or MAT 1000, and MAT 1400.	
	**Consultation with the Mathematics Department is HIGHLY recommended to ensure that the student selects the correct option.	

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