Recommended Course Sequence

The number of credits you take each year will determine when you graduate. To graduate on time, you are strongly encouraged to enroll in at least 30 credits toward your degree during the calendar year, including fall and spring semesters and winter and summer sessions.

A.S. Degree Liberal Arts and Sciences (Mathematics and Science) – TIME QCC (Mathematics Education) - Catalog Year 2016-17

Fall Semester #1-TIME QCC (Mathematics Education) sequence for students starting with MA 441

Courses	Credits	Pre-requisites and co-requisites
ENGL 101 English Composition I (Required Core 1A: English Composition)	3	Pre-req.: BE 112/205 and 122/226 or passing score on CUNY placement, or exemption
MA 441 Analytical Geometry and Calculus I (Required Core 1.B. Mathematical and Quantitative Reasoning)	**4**	Pre-req.: MA 440 with grade of C or better, or placement
MA 471 Discrete Math (Concentration course)	**3**	Pre-requisite: MA 440
INTE 221 Cognitive and Behavioral Learning in Secondary Mathematics (Students who do not take INTE 221 should take an additional Computer Science (CS) or laboratory science course)	**3**	Pre-req.: 2.75 GPA, MA-440 with B or better, recommendation from math instructor; Co-req.: MA 441
Flexible Core 2. D. Individual and Society - SOCY 101 Sociology recommended	**3**	Pre-req.: BE 122/226 or passing score on CUNY placement, or exemption
Total credits for the term	**16**	

Spring Semester #1-TIME QCC (Mathematics Education) sequence for students starting with MA 441

Courses	Credits	Pre-requisites and co-requisites
ENGL 102 English Composition II (Required Core 1A: English Composition II)	3	Pre-req.: ENGL 101 or placement
MA 442 Analytical Geometry and Calculus II (Flexible Core 2.E. Scientific World)	4	Pre-req.: MA 441 with grade of C or better
SP 211 Speech Communication (if taken in Flexible Core 2.B., may choose a concentration course MA 901 Internship in Mathematics Teaching recommended)	2-3	Pre-req. for SP211: remedial speech if required Pre-req. for MA 901: students must have completed 15 credits including MA 440 with a minimum mathematics GPA of 3.0
Flexible Core - One course from 2.A. World Cultures & Global Issues	3	Check individual courses for pre- and co-requisites
HE-101 Introduction to Health Education or HE-102 Health, Behavior and Society	1-2	Co-req. for HE 102: BE 122 or 226 or passing score on CUNY placement, or exemption
Total credits for the term	**13 – 15**	

Fall Semester #2-TIME QCC (Mathematics Education) sequence for students starting with MA 441

Courses	Credits	Pre-requisites and co-requisites
MA 443 Analytic Geometry and Calculus III (Flexible Core 2.E.)	4	Pre-req. for MA 443: MA 442 with C or better
Concentration course(s): MA 461 Linear Algebra OR MA 481 Probability and Statistics (MA 481 offered in spring only)	3-4	Pre-req. for MA 461: MA 442 with C or better Co-req. for MA 481 MA 442
EDUC 101 Contemporary Education: Principles and Practices	4	Pre-req.: BE 122/226 or passing score on CUNY placement, or exemption
Flexible Core one course from 2. C. Creative Expression	3	Check pre-requisites and co-requisites for individual courses
One course from PE 400 or 500 or DAN 100 series	1	none
Total credits for the term	**15 -16**	

Spring Semester #2-TIME QCC (Mathematics Education) sequence for students starting with MA 441

Courses	Credits	Pre-requisites and co-requisites
Required Core 1.C. Life & Physical Sciences CH 151 or 152 or PH 301 recommended	4 - 4.5	Pre-req. for CH 151 and PH 301: MA 119 College Algebra & MA 121 Trigonometry or placement; Pre-req. for CH 152: CH 151
Flexible Core 2.B: U.S. in Its Diversity – recommended HIST 127 Growth of American Civilization I: Colonial Period Through Reconstruction or HIST 128 Growth of American Civilization II: Reconstruction to the Present	3	Pre- or co-req. for HIST courses: ENGL 101
History or Social Science course (if taken in Common Core, additional course in Concentration: MA 451 Differential Equations recommended)	3-4	Check pre- and co-requisites for individual courses Pre-req. for MA 451:MA 443 with C or better
Concentration course: CS 101 Introduction to Computer Science	4	Co-req. for CS 101: MA 441
Total credits for the term	**14**	
Total credits required for the A.S. in Liberal Arts & Sciences – TIME QCC (Mathematics Education) sequence	**60**	

Notes:

1. All students must complete two (2) WI designated classes to fulfill degree requirements.
2. Students in degree programs must complete any required remedial speech courses before graduation.
3. *Students should select one course from each of the four flexible core categories: A, B, C, and D.
4. Students who do not place into MA 441 Analytic Geometry and Calculus I, will need to take pre-requisite credit courses, indicated above, which do not count toward the program requirements. Students who begin with MA 440 will defer the suggested Mathematics courses for one semester. Students can take MA 451 after transfer to a senior college. IF INTE 221 is not taken, students must complete an additional Computer Science (CS) or Laboratory Science course.
5. MA-481 is only offered in the spring semester.
6. ADVISEMENT NOTE: Students must take at least *one two-course sequence* in each of *two different disciplines* (i.e., BI 201, 202; CH 151, 152; PH 301, 302; CS 101, 201, or 203; MA 441, 442). Students should select courses that will best prepare them for the majors they intend to pursue in baccalaureate programs.