MATHEMATICS MAJOR: CONCENTRATION IN SECONDARY EDUCATION

Admission Requirements for the Mathematics Major

Rigorous high school coursework and strong SAT scores with above average grades in mathematics and computer science courses.

Requirements for a Major in Mathematics

Students must complete a core of six mathematics courses and one computer science class and in addition select one of three concentrations.

Code	Title	Credits
MA-200	Calculus I	4
MA-201	Calculus II	4
MA-240	Theory of Proof	4
MA-260	Linear Algebra	3
MA-310	Calculus III	4
MA-470	Capstone Experience	3
Ancillary Course		
CS-135	Programming for Non-CS Majors	3
Total Credits		**25**

MA-200, MA-201 and MA-240 must be completed with grades of at least C- by the end of the sophomore year. A student may only retake any of these courses at most once to increase a grade below C-; and may retake at most two of these courses to increase a grade below C-.

Requirements for the Concentration in Secondary Education

Code	Title	Credits
MA-302	Probability and Statistics	3
MA-309	Topics in Mathematics for Middle and Secondary Teachers	3
MA-340	Modern Geometry	3
MA-405	Abstract Algebra	3
or MA-410	Real Analysis	
MA-360	Number Theory	3
MA-303	Mathematical Modeling	3
Total Credits		**18**

It is recommended that students planning to take the Massachusetts Test for Educator Licensure (MTEL) for high school certification also complete a physics course.

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Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Department of Mathematics: Mathematics Major Concentration in Secondary Education Sample Timeline for Completion of Degree

Year One		
Semester One		**Credits**
LASC	First-Year Seminar (FYS)	3
EN-101	College Writing I	3
MA-200	Calculus I	4
CS-135	Programming for Non-CS Majors (QR)	3
LASC	LASC Elective (GP)	3
	Credits	**16**
Semester Two		
EN-102	College Writing II	3
LASC	LASC Elective (CON)	3
MA-201	Calculus II	4
MA-240	Theory of Proof [1]	4
SELECT	General Elective	3
	Credits	**17**
Year Two		
Semester Three		
MA-310	Calculus III	4
MA-260	Linear Algebra	3
LASC	LASC Elective (NSP)	3-4
LASC	LASC Elective (CA)	3
LASC	LASC Elective (NSP)	3
	Credits	**16-17**
Semester Four		
MA-360	Number Theory	3
MA-303	Mathematical Modeling (or MA Elective)	3
SELECT	General Elective	3
LASC	LASC Elective (NSP LAB)	3
LASC	LASC Elective (USW)	3
	Credits	**15**
Year Three		
Semester Five		
MA-302	Probability and Statistics	3
SELECT	General Elective	3
MA-340	Modern Geometry	3
SELECT	General Elective	3
LASC	LASC Elective (HBS)	3
	Credits	**15**
Semester Six		
MA-405	Abstract Algebra [4]	3
MA-303	Mathematical Modeling [5]	3
LASC	LASC Elective (ICW)	3
SELECT	General Elective	3
LASC	LASC Elective (TLC)	3
	Credits	**15**
Year Four		
Semester Seven		
MA-309	Topics in Mathematics for Middle and Secondary Teachers	3
MA-410	Real Analysis [4]	3
MA-470	Capstone Experience (WAC)	3

SELECT	General Elective	3
LASC	LASC Elective	3
	Credits	**15**
Semester Eight		
SELECT	General Elective	3
LASC	LASC Elective	3
SELECT	General Elective	3
SELECT	General Elective	3
	Credits	**12**
	Total Credits	**121-122**

[1] DualMath/CS majors may substitute Discrete Math I with permission of department.

[4] Only one of MA-405 or MA-410 is required.

[5] If not taken in semester 4.

Once LASC requirements are satisfied, students may select general requirements. Students are required to meet with their department advisor to review their upcoming semester academic choices. A minimum of 120 credits is required for graduation.

Students should consult with their advisors about minoring in secondary education.