Degree Map

A.S. in Mathematics – Catalog Year 2025-26

The A.S. degree in Mathematics is intended for students who plan to transfer to a 4-year college and university and pursue a bachelor's degree in mathematics or a related field. 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. This degree map is designed for students who place into MA-440. Additional degree maps are available for students who place into other levels of mathematics. Please see the degree website or your advisor for more information.

Courses in **Bold Text** are prerequisites for later courses or only offered in the Fall or Spring semester and should be taken where indicated in the sequence.

Fall Semester #1

Courses	Credits	Prerequisites and Corequisites[1]
ENGL-101 English Composition I (Required Core 1A: English Composition)	3	Complete developmental requirements in English or co-enroll in ENGL-99 or placement
MA-440 Pre-Calculus Mathematics[2] (Required Core 1B - Mathematical & Quantitative Reasoning)	4	Prerequisite: MA-119 and MA-121 (C or better in both) or MA-114 (C or better) or placement
One course from Flexible Core 2A, 2B 2C, or 2D[3]	3	Check individual courses for prerequisites and corequisites
One course from Flexible Core 2A, 2B 2C, or 2D[3]	3	Check individual courses for prerequisites and corequisites
Total credits for the term	**13**	

Spring Semester #1

Courses	Credits	Prerequisites and Corequisites[1]
ENGL-102 English Composition II (Required Core 1A: English Composition)	3	Prerequisite: ENGL-101 or placement
MA-441 Analytic Geometry and Calculus I (Flexible Core 2E: Scientific World)	4	Prerequisite: MA-440 (C or better)
One course from Required Core 1C: Life & Physical Sciences	3-4	Check individual courses for prerequisites and corequisites
Science Laboratory course[4]	0-1	Corequisite: 3-credit Science course in Required Core 1C
One course from Flexible Core 2A, 2B 2C, or 2D[3]	3	Check individual courses for prerequisites and corequisites
Total credits for the term	**14**	

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Summer Session

Courses	Credits	Prerequisites and Corequisites[1]
MA-442 Analytic Geometry and Calculus II (Flexible Core 2E: Scientific World)	4	Prerequisite: MA-441 (C or better)
Total credits for semester	**4**	

Fall Semester #2

Courses	Credits	Prerequisites and Corequisites[1]
MA-443 Analytic Geometry and Calculus III	4	Prerequisite: MA-442 (C or better)
MA-461 Linear Algebra	4	Prerequisite: MA-441
Major Electives – see list below[5]	4	Check individual courses for prerequisites and corequisites
One course from Flexible Core 2A, 2B 2C, or 2D[3]	3	Check individual courses for prerequisites and corequisites
Total credits for the term	**15**	

Spring Semester #2

Courses	Credits	Prerequisites and Corequisites[1]
MA-451 Differential Equations or MA-481 Probability and Statistics	3-4	Prerequisite for MA-451: MA-443 (C or better) Corequisite for MA-481: MA-442
Major Electives – see list below[5]	10-11	Check individual courses for prerequisites and corequisites
Total credits for the term	**14**	
Total credits required for the degree	**60**	

Notes:

1. Prerequisites for a course must be passed before taking the course. Corequisites must be passed before taking the course or taken in the same term as the course.
2. Depending on their incoming math placement, students may be required to complete MA-119 and/or MA-121 (both with a C or better) prior to MA-440. When required by math placement, MA-119 and MA-121 will count as major electives.
3. Students must complete one course from each of Flexible Core 2A, 2B, 2C, and 2D
4. Students who take a STEM variant for Required Core 1C have satisfied this requirement
5. Students planning to pursue Mathematics Education are recommended to take EDUC-101 and EDUC-240.

All students must complete two (2) WI designated classes to fulfill degree requirements

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Major Elective Courses – Complete at least 14 credits of these courses

Major Elective Courses	Credits	Prerequisites and Corequisites
CS-100 Introduction to Computers and Programming	3	Complete developmental requirements in math and English
CS-101 Algorithmic Problem Solving I	4	Corequisite: MA-441
CS-102 Spreadsheet Programming with MS Excel	3	Prerequisite: MA-119 (C or better)
CS-103 Relational Databases	4	Prerequisite: MA-119 (C or better)
CS-201 Computer Organization and Assembly Language	4	Prerequisites: MA-441 and CS-101 (C or better)
CS-203 Algorithmic Problem Solving II in C++	4	Prerequisites: MA-441 and CS-101 (C or better)
CS-204 Algorithmic Problem Solving II in Java	4	Prerequisites: MA-441 and CS-101 (C or better)
EDUC-101 Contemporary Education: Principles and Practices	4	Complete developmental requirements in English or enroll in ENGL-101 and ENGL-99 at the same time
EDUC-240 Middle Childhood and Adolescent Learning and Development	3	Prerequisite: EDUC-101
MA-119 College Algebra	3	Placement or co-enroll in MA-10ALP
MA-121 Trigonometry	1	Corequisite: MA-119
MA-451 Differential Equations	4	Prerequisite: MA-443 (C or better)
MA-471 Introduction to Discrete Mathematics	3	Prerequisite: MA-440
MA-481 Probability and Statistics	3	Corequisite: MA-442
MA-905 Undergraduate Research in Mathematics and/or Computer Science I	2	Prerequisite: MA-440 or Departmental Permission
MA-906 Undergraduate Research in Mathematics and/or Computer Science II	2	Prerequisite: MA-440 or Departmental Permission