DATA SCIENCE, BS/MS MATHEMATICS ACCELERATED PROGRAM

To enable high-achieving and motivated students to earn both a bachelor degree in Data Science and a graduate degree in Mathematics in five years, we offer a combined accelerated program. Students in the accelerated program can start to take graduate courses in the senior year and finish both the undergraduate degree in Data Science and the graduate degree in Mathematics in five years.

A student in the BS in Data Science program needs to apply for the accelerated program by the end of the semester prior to the senior year. The admission standard to the Accelerated Program should be consistent with the MS in Math program. Students in the accelerated program should meet the program requirements of both BS in Data Science and MS in Math programs.

- Major in Data Science (https://catalog.roosevelt.edu/undergraduate/health-science/data-analytics-bs/)
- Completion of 60 credit hours of undergraduate course work
- Have and maintain a minimum grade point average of 3.0
- Obtain permission from the MS in Math director to take the required MS in Math courses as an undergraduate. In addition to the specific math courses for the Data Science major, students are required to take MATH 232 CALCULUS II, MATH 233 CALCULUS III, MATH 290 INTRODUCTION TO PROOF, and either MATH 347 PROBABILITY THEORY or MATH 352 ANALYSIS during their undergraduate years as a prerequisite for the graduate degree.
- As part of their undergraduate degree, students must take a minimum of their last 30 credit hours at Roosevelt University or complete a minimum of 60 hours in-residence at Roosevelt University excluding the number hours in the exception request.
- Upon completion of the BS in Data Science, apply to the MS in Math program under the normal admission process. (https://catalog.roosevelt.edu/graduate/admission/)
- At most two grades of C or C+ are allowed in graduate courses; all other graduate coursework must have a grade of B- or higher, with a graduate GPA of at least 3.0.
- The completed degree requires a total of 33 credit hours of graduate coursework (which includes the 9 credit hours of graduate courses taken while an undergraduate).

The student will take the following three MS in Math graduate courses as part of the BS in Data Science. All of the courses will receive credit toward the MS in Math degree once the student is admitted to the MS in Math program.

Code	Title	Credit Hours
MATH 409	DATA MINING	3
MATH 423	GAME THEORY AND APPLICATIONS	3
MATH 466	CRYPTOGRAPHY	3

Your degree map is a general guide suggesting courses to complete each term on the academic pathway to your degree. It is based on the most current scheduling information from your academic program. Your program's degree map is reviewed annually and updated as schedules change (although you retain the same course requirements as long as you are continuously enrolled in your degree program).

Always work closely with your academic advisor to understand curriculum requirements and scheduling, as each student's academic plan can look slightly different.

Year 1

Fall	Credit Hours	Spring	Credit Hours
ENG 101	3	ENG 102	3
FYS 101	1	CST 150	4
BIOL 111 or 112[4]	4	Physical Science[4]	3
MATH 121[5]	3	Ideas of Social Justice	3
Social Science #1	3	MATH 122	3
	14		16

Year 2

Fall	Credit Hours	Spring	Credit Hours
MATH 245	3	MATH 246	3
MATH 217	3	CST 280	3
Humanities course #1	3	MATH 232	5
MATH 290	1	COMM 101	3
MATH 231	5	Experiential Learning #1[3]	3
	15		17

Year 3

Fall	Credit Hours	Spring	Credit Hours
CST 333	3	CST 311	3
CST 387	3	Major Elective 3XX[2]	3
Humanities Course #2	3	Major Elective 3XX[2]	3
MATH 233	3	Humanities Course #3	3
MATH 347 or 352	3	Social Science Course #2	3
	15		15

Year 4

Fall	Credit Hours	Spring	Credit Hours
MATH 409	3	Major Elective 3XX[2]	3
CST 381	3	MATH 423	3
MATH 349 (EXL course)	3	General Elective[1]	3
Major Elective 3XX[2]	3	General Elective[1]	3
Social Science #3	3	MATH 466	3
	15		15

Year 5

Fall	Credit Hours	Spring	Credit Hours
MATH 430	3	MATH 4XX	3
MATH 4XX	3	MATH 4XX or CST 4XX	3

MATH 4XX	3	MATH 4XX or CST 4XX	3
MATH 4XX or CST 4XX	3	MATH 4XX or CST 4XX	3
	12		**12**

Total Credit Hours 146

[1] Or course towards an optional Minor.

[2] Major electives chosen with advisor.

[3] Experiential Learning class must be 200/300 level. Satisfies CORE Experiential Learning requirement.

[4] One Natural Science course must have a lab.

[5] Students should begin the calculus sequence as soon as possible; students who need more support in MATH 121 COLLEGE ALGEBRA may take a corequisite MATH 021 ALGEBRAIC FOUNDATIONS course. Those whose background permits may begin with MATH 122 TRIGONOMETRY AND PRECALCULUS or one of the Calculus courses.