

THE UNIVERSITY OF SCRANTON
COLLEGE OF ARTS & SCIENCES
MATHEMATICAL SCIENCES

About the Program

In addition to being an important and interesting subject in its own right, mathematics is a common tool for professionals and scholars in other STEM disciplines as well as in business and the social sciences. Students who major in mathematical sciences (B.S.) at The University of Scranton come to understand the interconnectedness of mathematics by pursuing a partner discipline.

Outcomes & Opportunities

- Mathematical sciences students choose one of five tracks: Actuarial Science, Biological Sciences, Computer & Information Science, Data Science or Physical Sciences.
- Students are encouraged to pursue internships and co-ops.
- Scranton has outstanding programs in STEM and business fields to complement a degree in mathematical sciences.
- The Loyola Science Center brings the Mathematics Department and Scranton's science departments together, fostering the collaboration that is so essential in an interdisciplinary degree.
- Mathematical sciences graduates are equipped to find employment in fields related to mathematics or to the partner discipline. They may also choose to pursue graduate study.

Among the TOP 10 IN
THE NORTH for 28 years

— U.S. News & World Report's
Best Colleges



SUCCESS AHEAD

admissions.scranton.edu/mathsci

MATHEMATICAL SCIENCES CURRICULUM

General structure shown; individual tracks will vary

	Department & Number - Descriptive Title of Course	Fall Cr.	Spr. Cr.
FIRST YEAR			
MAJOR (GE QUAN)	MATH 114 - (Q) Calculus I – MATH 221 - Calculus II	4	4
COGNATE	COGNATE REQ - Cognate Requirements	3-4.5	3-4.5
EP FYDT-FYOC - GE WRTG	Level I Digital Technology (FYDT) - Level I Oral Communication (FYOC) – WRTG 107 - (FYW) Composition	3	3
GE PHIL - GE T/RS	PHIL 120 - Introduction to Philosophy – T/RS 121 - Theology I: Introduction to the Bible	3	3
GE HUMN	HUMN ELECT - Humanities Electives ^b	3	3
GE FYS	First Year Seminar ¹		
		16-17.5	16-17.5
SECOND YEAR			
MAJOR	MATH 222 - Calculus III – MATH 351 - Linear Algebra	4	3
COGNATE	COGNATE REQ - Cognate Requirements	3-4.5	3-4.5
COGNATE	COGNATE REQ - Cognate Requirement	3	
GE HUMN	HUMN ELECT - Humanities Elective ^b		3
GE S/BH	S/BH ELECT - Social/Behavioral Electives ^b	3	3
GE PHIL - GE T/RS	PHIL 210 - Ethics – T/RS 122 - Theology II: Introduction to Christian Theology	3	3
		16-17.5	15-16.5
THIRD YEAR			
MAJOR	MATH - Major Requirements	3-4	3
MAJOR	MATH - Major Requirements	3	3
COGNATE	COGNATE REQ - Cognate Requirements	3-4.5	3-4.5
COGNATE	COGNATE ELECT - Cognate Electives ^{2,b}	3	3
GE ELECT	FREE ELECT - Free Electives ^{a,b}	3	3
		15-17.5	15-16.5

CONTACT INFORMATION

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1.888.SCRANTON or visit admissions.scranton.edu

	Department & Number - Descriptive Title of Course	Fall Cr.	Spr. Cr.
FOURTH YEAR			
MAJOR	MAJOR ELECT - Major Electives ^{3,b}	3	3
COGNATE	COGNATE REQ - Cognate Requirement	3	
STEM	STEM ELECT - STEM Electives ^{4,a,b}	3	3
GE HUMN	HUMN ELECT - Humanities Elective ^b	3	
GE PHIL - GE T/RS	PHIL ELECT - Philosophy Elective - T/RS ELECT - Theology Elective ^b		3
GE ELECT	FREE ELECT - Free Electives ^{a,b}	3	3
		15	12
		Total: 120-123 Credits*	

¹ The selection of a First Year Seminar is likely to fulfill requirements both for the First Year Seminar and a General Education Requirement. Thus, the First Year Seminar will not add to the total credits for the semester. Talk with your advisor if you have any questions.

² At least two cognate courses totaling at least six credits in addition to specified courses are required. These must be courses that would count toward a major or concentration in an appropriate partner discipline.

³ At least two MATH elective courses totaling at least six credits numbered 299 or higher in addition to specified courses are required.

⁴ At least two STEM Elective courses total minimum of six credits prefixed BCMB, BIOL, CHEM, CMPS, E/CE, EE, ENGR, ESCI, MATH, ME, NEUR, PHYS, or PSIO beyond those already specified are required. The course numbers must be such that the course would count toward a major in the appropriate program.

^a Students in the Actuarial Science track may use STEM electives or free electives to satisfy the natural science (E) GE requirement. This requirement is met by cognate courses in other tracks.

^b Free Electives, STEM Electives, major electives, cognate electives, and/or GE electives may be used to fulfill the GE requirements of two EPW II courses and two (D) courses.

*This credit total reflects the actual range of credits required among the five program tracks. It does not represent the totals of the general semesters outlined in the grid.

The results of the placement tests administered prior to the first semester assist students and their advisors in choosing the proper beginning-level mathematics sequence and the proper entry-level within that sequence. If a course is a prerequisite for a second course, directly or indirectly, and a student receives credit for the second course then that student will not be allowed to register for the prerequisite course. Mathematical Sciences majors are required to take the Math Major Field Test in order to graduate.

Curriculum grid effective for the 2022-23 academic year in accordance with the undergraduate course catalog.