

DEPARTMENT OF MATHEMATICS

Mathematics has traditionally been the language of science and now plays a vital role in the social sciences and business as well. Every field in which quantitative activity is found requires that its workers have a strong background in mathematics. A student well-versed in mathematics will find their skills of use in almost any profession.

Although mathematics is studied for its applications, it also attracts many who are interested in its aesthetic and creative side. A study of mathematics improves one's ability to think about abstract concepts, to conceptualize about hypothetical structures, to reach logical conclusions, and to consider many solution techniques when problem solving.

Majors/Emphases

Students may elect one of four emphases in the mathematics major. The **Mathematics, Actuarial Science, and Statistics emphases** consist of the Math Core courses and an additional 18 to 20 units of required or elective courses in the emphasis. Also, students in these three emphases must complete a writing requirement (ENGLISH 370 or PWP 371 or PWP 372), a computer science programming requirement, and the Math Exit Interview milestone requirement. The **Mathematics Education (BSE)** emphasis consists of the Math Core courses and an additional 28 units of required mathematics courses and 44 units of teaching licensure coursework through the College of Education and Professional Studies. Students in the Mathematics Education emphasis must also complete the Math Exit Interview milestone requirement but not the computer science programming requirement.

An approved minor is required for the Mathematics, Actuarial Science, and Statistics emphases.

¹ There is no Computer Science requirement for the Secondary Education Emphasis.

For more information on the different emphases, including 4-year plans and Math Major FAQ, please visit the department's website: <http://www.uww.edu/cls/departments/math/>.

CORE courses in the Mathematics Major - 20 units

Code	Title	Units
MATH 200	MATHEMATICS: FORM AND FUNCTION	1
MATH 253	CALCULUS AND ANALYTIC GEOMETRY I	5
MATH 254	CALCULUS AND ANALYTIC GEOMETRY II	4
MATH 255	CALCULUS AND ANALYTIC GEOMETRY III	4
MATH 280	DISCRETE MATHEMATICS	3
MATH 355	MATRICES AND LINEAR ALGEBRA	3
Total Units		20

Majors in Mathematics

- Mathematics - Actuarial Science Emphasis (BA/BS) (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/actuarial-science-babs/>)
- Mathematics - Mathematics Emphasis (BA/BS) (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/math-ba-bs/>)

- Mathematics - Statistics Emphasis (BA/BS) (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/mathematics-statistics-emphasis-ba-bs/>)
- Mathematics Education (BSE) (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/mathematics-bse/>)

Minors in Mathematics

- Actuarial Mathematics (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/actuarial-mathematics-minor/>)
- Mathematics (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/mathematics-minor/>)
- Mathematics - Elementary Education (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/mathematics-minor-elementary-education/>)
- Mathematics - Secondary Education (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/mathematics-minor-secondary-education/>)
- Statistics (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/statistics-minor/>)

Certificate in Mathematics

- Mathematics - Middle Grades (<http://uww-public.courseleaf.com/undergraduate/letters-sciences/mathematics/mathematics-middle-grades-certificate/>)