Mathematics

Mathematics is among the oldest disciplines. Throughout history, mathematics has spanned the spectrum from pure to applied areas. The ancient Greek mathematicians were interested in problems that ranged from properties of numbers to applications of mathematics to music and astronomy. The department of mathematics, statistics and physics fulfills its mission by offering a broad and representative collection of courses to give students the ability to select, with their advisors, a program that fits their needs and goals. The department of mathematics, statistics and physics offers bachelor's (BA and BS), master's (MS), and doctoral (PhD) degrees.

Note: For ease of description, certain courses in mathematics and statistics are categorized in the following groups (the courses in Group R are required of all majors):

Course	Title	Hours
Group R		
MATH 415	An Introduction to Advanced Mathematics	
MATH 451	Computational Mathematics Using MATLAB	
MATH 511	Linear Algebra	
MATH 547	Advanced Calculus I	
MATH 551	Numerical Methods	
MATH 555	Differential Equations I	
MATH 613	Fundamental Concepts of Algebra	
Group A		
MATH 548	Introduction to Complex Variables	
MATH 615	Elementary Number Theory	
MATH 620	Introduction to Elementary Differential Geometry: A First Course in Curves and Surfaces	
MATH 621	Elementary Geometry	
MATH 625	Elementary Topology	
MATH 640	Advanced Calculus II	
Group B		
STAT 460	Elementary Probability and Mathematical Statistics	
STAT 570	Special Topics in Statistics	
STAT 571	Statistical Methods I	
STAT 572	Statistical Methods II	
STAT 574	Elementary Survey Sampling	
Group C		
MATH 530	Applied Combinatorics	
MATH 553	Mathematical Models	
MATH 580AA	Introduction to Partial Differential Equations	
MATH 646	Introduction to Mathematical Data Analysis	
MATH 655	Differential Equations II	
MATH 657	Optimization Theory	

Students majoring in mathematics should consult closely with their mathematics advisors on any of these programs.

Majors in Mathematics

- Dual/Accelerated Bachelor's to Master's Program in Mathematics (http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/dualaccelerated-bachelors-masters-program-mathematics/)
- BA in Mathematics (http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/mathematics-ba/)
- BS in Mathematics (http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/mathematics-bs/)
- BS in Mathematics — Computing Emphasis (http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/mathematics-bs-computing-emphasis/)
- BS in Mathematics — Data Science Emphasis (http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/bs-mathematics-data-science-emphasis/)
- BS in Mathematics — Statistics Emphasis (http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/mathematics-bs-statistics-emphasis/)
- Departmental Honors in Mathematics (BS) (http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/departmental-honors-mathematics/)

Minors in Mathematics

- Minor in Mathematics (http://catalog.wichita.edu/undergraduate/fairmount-liberal-arts-sciences/mathematics-statistics-physics/mathematics/mathematics-minor/)

Courses in Mathematics

- Mathematics (MATH) (http://catalog.wichita.edu/undergraduate/courses/math/)

Note: Courses numbered 000–099 do not count toward any degree program.