



Purpose:

To support the curriculum and research goals of faculty and students in the Department of Mathematics & Statistics. The M.S. degree in mathematics is offered either with no concentration, or with one of six possible concentrations (i.e., four of the concentrations being in statistics, one in discrete mathematics, and one is in scientific computing).

The concentrations in statistics are programs designed for persons who wish to prepare for careers as professional statisticians in industry, business, or government. These programs provide advanced training in applied statistics for those who are presently working in areas that use statistics, as well as for those who plan to enter these areas. The programs present an balance among the broad range of statistical techniques, mathematical methods, and computation.

The concentration in discrete mathematics and scientific computing are designed to combine mathematics with selected areas of computer science.

The Master of Arts for Teachers (M.A.T.) degree program provides advanced training for secondary school teachers of mathematics. This program combines advanced work in both mathematics and education to deepen, strengthen, and broaden the student's understanding of mathematics and the teaching of mathematics.

General Collection Guidelines:

- a. Languages: English is the primary language of the collection.
- b. Treatment of Subject: Research and graduate materials are of main focus. Consideration to maintaining a strong undergraduate collection is also encouraged. Biography and general interest material will be selectively purchased. Upper division textbooks will be acquired.
- c. Types of Materials: Selection will include monographs and periodicals, encyclopedias, dictionaries, compendia, treatises, proceedings/transactions of conference/congresses/symposia, and data collections. Audio-visual materials as well as CD-ROM products and interactive video will be acquired when needed.
- d. Date of Publication: Primarily current imprints will be selected. Some retrospective acquisition of classic or standards works not already in the collection.
- e. Types of Materials: Periodicals are of primary importance. Selection will also include monographs, treatises, compendia, and proceedings/transactions of the conferences/congresses/symposia of major societies and associations. Only occasional acquisition of media.

Biostatistics	3C (ALL)
Bioinformatics	
Mathematics Education	
Matrix (Analysis, Theory)	
Bifurcation Theory	
Combinatorics	
Graph theory	
Computational Algebra/Algebraic Geometry	
Computational Statistics	
Multivariate/Numerical Analysis	
Operator Theory	
Inverse and Ill posed Problem Theory	
Qualitative Theory of Differential Equations	
Probability Theory	
Dynamic Systems	
Computer Graphics	
Real Analysis	
Harmonic Analysis	
Linear Statistical Analysis	
Numerical Approximation	
Differential Equations	
Numerical Calculus	
Applied Multivariate Statistics	
Time Series Analysis	
Experimental Designs	
Computational Methods in Statistics	
Analysis of Qualitative Data	
Sample Surveys	
Numerical Analysis	

The following subject areas will also be acquired at collection level:

Linear Algebra	3A
Mathematical Statistics	3A
Calculus	3A

November 2, 2006 / Robert Tomaszewski