MATH 500 INDEPENDENT STUDY OR RESEARCH 1-3 Credits
Study or research in an area of special interest. The number of credit hours is determined by the topic and the amount of work required. Permission of instructor, department chair and academic dean required.
Add Consent: Instructor Consent

MATH 526 OPERATIONS RESEARCH 3 Credits
Game theory, linear programming, simplex method, duality, transportation and assignment problems, introduction to dynamic programming, and queuing theory. Applications of business and industrial perspectives.
Prerequisites: MATH 138 or MATH 151 and MATH 232 or MATH 331
Dual-listed: MATH 426

MATH 530 TOPICS IN MATHEMATICS 1-3 Credits
Topics to meet the needs of students who have completed the regular course of study.
Add Consent: Instructor Consent
Notes: Can be repeated with different emphasis for a maximum of six (6) credit hours.

MATH 533 STATISTICAL METHODS AND DATA ANALYSIS 3 Credits
Prerequisites: MATH 232
Dual-listed: MATH 433

MATH 534 INTRODUCTORY ANALYSIS 3 Credits
Structure and topology of the real number line. Completeness, compactness, connectedness. Rigorous treatment of limits, sequences, series, convergence, functions and continuity, derivatives, and selected topics on measure and integration theory.
Prerequisites: MATH 237
Dual-listed: MATH 434

MATH 535 SAMPLING TECHNIQUES 3 Credits
Statistical estimation methods, sampling techniques, point and interval estimation of population parameters, population size determination, and communication of sample survey results. Applications from business, the natural sciences, and the social sciences.
Prerequisites: MATH 232
Dual-listed: MATH 435

MATH 537 MODERN ALGEBRA 3 Credits
Axiomatic approach to rings, integral domains, polynomials, fields, ideals and factor rings, selected topics in abstract algebra, and an introduction to vector spaces and algebraic coding theory.
Prerequisites: MATH 429
Dual-listed: MATH 437

MATH 538 NUMERICAL ANALYSIS 3 Credits
Prerequisites: MATH 252 and MATH 330
Dual-listed: MATH 438

MATH 539 THEORY OF STATISTICS 3 Credits
Joint distribution concepts, conditional expectations, method of distribution functions, transformation, method of moment-generating functions, order statistics, sampling distributions, central limit theorem, continuous and discrete random variables.
Prerequisites: MATH 151 and MATH 331
Dual-listed: MATH 439

MATH 540 MATHEMATICS EDUCATION STANDARDS 3 Credits
An integrated content/pedagogy course on mathematics teaching, assessment, and curriculum standards, based on major content areas of the K-12 curriculum.
Dual-listed: MATH 440
Requirements: Fifty percent of endorsement completed.

MATH 600 INDEPENDENT STUDY OR RESEARCH 1-3 Credits
Study or research in an area of special interest. The number of credit hours is determined by the topic and the amount of work required.
Add Consent: Instructor Consent
Requirements: Permission of instructor and academic dean required.

MATH 630 MATHEMATICS TOPICS FOR TEACHERS 1-3 Credits
Mathematics topics of interest to classroom teachers at all grade levels. Credit variable with topic.
Notes: Can be repeated with different emphasis for a maximum of six (6) credit hours.

MATH 631 MATHEMATICS FOR MANAGEMENT 3 Credits
Quantitative methods for managerial, educational administration and public policy applications. Topics from discrete math, data analysis and operations research areas.

MATH 634 MATHEMATICS CURRICULUM 3 Credits
Mathematics curriculum in elementary and secondary schools, with emphasis on current trends and issues in mathematics education.
Add Consent: Instructor Consent

MATH 635 SCHOLARLY PROJECT 3 Credits
For students selecting Plan I, as listed under Program Requirements. Scholarly project that involves the student’s research, based on major areas of interest. Designed in consultation with the student’s graduate committee and includes an extensive paper summarizing the project.
Add Consent: Instructor Consent
Notes: Must complete three (3) credit hours.

MATH 636 MATHEMATICS RESEARCH 1-6 Credits
For students selecting Plan II, as listed under Program Requirements. Original investigations in mathematics leading to the master’s thesis.
Add Consent: Instructor Consent
Requirements: Must complete six (6) credit hours; prior to registration, the proposal must be approved by the student’s committee and Dean of Graduate Studies.

MATH 650 MATHEMATICS GRADUATE CURRICULUM 3 Credits
Mathematics curriculum for graduate students, with emphasis on current trends and issues in mathematics education.
Add Consent: Instructor Consent

MATH 655 SCHOLARLY PROJECT 3 Credits
For students selecting Plan II, as listed under Program Requirements. Scholarly project that involves the student’s research, based on major areas of interest. Designed in consultation with the student’s graduate committee and includes an extensive paper summarizing the project.
Add Consent: Instructor Consent
Notes: Must complete three (3) credit hours.

MATH 660 THESIS RESEARCH 1-6 Credits
For students selecting Plan I, as listed under Program Requirements. Original investigations in mathematics leading to the master’s thesis.
Add Consent: Instructor Consent
Requirements: Must complete six (6) credit hours; prior to registration, the proposal must be approved by the student’s committee and Dean of Graduate Studies.