MATHEMATICS 7-12, B.S.

This program has a separate admission process. Please consult the admission requirements for this program on the College of Education page for more information.

Overall GPA of 2.7 Required
120 Overall Credits Required

LIBERAL EDUCATION PROGRAM AND WRITING REQUIREMENTS

Liberal Education Program

Students must complete a comprehensive three-tiered Liberal Education Program (LEP). View all requirements of the tiers on the Liberal Education Program.

While the choice of courses that fulfill the requirements is generally left up to students, courses in the major and/or cognate may also satisfy LEP requirements. These shared courses are recommended below to fulfill both areas, although the course credits are only counted once towards the 120 credits required for graduation.

Tier 1 – Quantitative Reasoning:
MAT 150 – Calculus I (‘C+’ or better)

Tier 2 – American Experience (select one):
HIS 110 – United States History I
HIS 111 – United States History II

Tier 2 - Creative Drive
MAT 260 - Geometry and the Arts

Tier 2 – Mind and Body:
SHE 203 – School Health

Tier 2 - Social Structure, Conflict, and Consensus
EDU 200 - Teachers, Schools, and Society (‘C’ or better)

Tier 3 – Capstone:
MAT 496 – Student Teaching Seminar - Mathematics

Writing Requirements (“W-Courses”)

Three W-courses are required. These may not be taken until after a student has passed ENG 112 — Writing Arguments. W-courses may count toward LEP, major, or cognate requirements, as well as free electives. Course sections that meet this requirement are designated by section numbers ending in “W”.

Transfer students who enter with 60 to 89 credits are required to pass two W-courses, while transfer students who enter with 90 credits or more must pass one W-course.
MAJOR REQUIREMENTS

69 Credits Required

Mathematics Requirements
42 Credits Required
A grade of C+ or better is required in MAT 151. Furthermore, in those MAT courses which the student applies toward the major, he/she must have a minimum GPA of 2.3, no grade below a C-, and in at least 50% of the courses must have a grade of B- or better. Note that for certification candidates, MAT GPA is calculated using MAT 150 and all required MAT courses shown below (this includes replacement grades - only one grade replacement will be dropped). This GPA will be calculated by the Mathematics Certification Coordinator and, in most cases, will not match the area GPA.

Requirements:

• MAT 150 – Calculus I (‘C+’ or better)
• MAT 151 – Calculus II (‘C+’ or better)
• MAT 221 - Intermediate Applied Statistics
• MAT 250 – Foundations of Mathematics: An Introduction (‘C-’ or better)
• MAT 252 – Calculus III (‘C-’ or better)
• MAT 260 - Geometry and the Arts
• MAT 300 – History of Mathematics
• MAT 360 – Foundations of Geometry
• MAT 372 – Linear Algebra (‘C-’ or better)
• MAT 375 – Abstract Algebra I
• MAT 378 – Discrete Mathematics
• MAT 405 – Elementary Mathematics from an Advanced Standpoint
• MAT 408 - Technology for Teaching Secondary Math Education (‘C’ or better)

Education Requirements
27 Credits Required

Requirements:

• EDU 316 - Child Development and Psychology for Educators (‘C’ or better)
• EDU 413 – Secondary Education (‘C’ or better)
• EDU 471 - Supporting English Learners for School Success (formerly IDS 471) (‘C’ or better)
• MAT 490 – Teaching Mathematics in the Secondary School (‘C’ or better)
• MAT 494 – Student Teaching (Mathematics)
• MAT 496 – Student Teaching Seminar (Mathematics)
• RDG 470 - Literacy in the Content Areas (‘C’ or better)
• SED 482 – Teaching Exceptional Students in the Secondary Education Classroom (‘C’ or better)

Non-Course Requirements:
Module 1: Behavioral Difficulties (Social and Emotional Development)
Module 2: Dyslexia Required

COGNATE REQUIREMENTS

15 Credits Required

EDU 200 - Teachers, Schools, and Society ('C' or better)
  HIS 110
  - United History I
    HIS 111
  – United States History II
    SHE 203
  – School Health
Select one:
  CSC 152 – Computer Programming I
  DSC 101 - Data Science II

FREE ELECTIVES

Students must take remaining credits to reach Overall Credits Required (listed above).