MATHEMATICS 7-12, B.S.

The program outline and graduation requirements are listed below. In addition, free electives are selected to reach 120 credits overall and a 2.7 cumulative GPA is required for graduation.

The department website provides an overview of the program, admission requirements (when applicable), faculty biographies, learning outcomes, and careers: https://www.southernct.edu/academics/mathematics/programs

This program is an education preparation program. Please consult the College of Education page for more information about the college admission requirements.

GENERAL EDUCATION REQUIREMENTS

All bachelor’s degree programs include liberal education (LEP) and writing (W) course requirements. Detailed information on these requirements is published in this section of the catalog: https://catalog.southernct.edu/undergraduate/general-information/lep.html.

Writing courses are not additional course requirements, course sections that meet this requirement are designated with a ‘W’ on the class schedule. Courses in the major and/or cognate may also be used to satisfy LEP requirements where noted below (*).

MAJOR REQUIREMENTS (69 Credits)

Mathematics Requirements (42 Credits)

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.

MAT 150 – Calculus I (‘C+’ or better) (T1QR)*
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 (T2CD)*
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)**

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) (T3)*
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 (12 Credits)**

EDU 200 - Teachers, Schools, and Society (‘C’ or better) (T2CC)*
SHE 203 – School Health (T2MB)*
HIS 110 or HIS 111 - United History I or - United States History II (T2AE)*

Select one:
CSC 152 – Computer Programming I
DSC 101 - Data Science II