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.southerncst.edu/academics/mathematics/programs

This is also a teacher/educator preparation program that prepares students for teacher certification in the state of Connecticut. For more information about admission to these programs, please visit Admissions>>Teacher/Educator Preparation Programs.

In addition, candidates recommended for certification must meet the requirements listed below and in effect on the date the CSDE receives the certification application. For more information about these additional CSDE requirements, please visit Degree Requirements>>Teacher/Educator Preparation Programs.

GENERAL EDUCATION REQUIREMENTS

All bachelor’s degree programs include liberal education (LEP) and writing (W) course requirements. To review more detailed information regarding these requirements, please visit Degree Requirements >>General Education (LEP) Requirements. 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 225 – Introduction to Exceptionalities (‘C’ or better)

**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