NC STATE College of Education

Mathematics Education: Mathematics Specialization (9-12)

Intro to Education *(C or better required)*
____ (2) ED 100 (Fall Freshmen) OR
____ (2) ED 150/151-SAY Village (Fall & Spring Freshmen)

Introduction to Computing
____ (1) E 115 or COS 100

Programming Elective
____ (3) CSC 110, CSC 112, CSC 114, CSC 116, or MA 116
     C or better required – recommend MA 116

English and Communication
____ (4) ENG 101 Academic Writing & Research
     C- or better required
____ (3) COM 112 Interpersonal Communication

Mathematical Sciences *(C or better required)*
____ (4) MA 141 Calculus I
____ (4) MA 241 Calculus II
     Prerequisite: MA 141 with grade of C- or better
____ (4) MA 242 Calculus III
     Prerequisite: MA 241 with grade of C- or better
____ (3) MA 351 Intro Discrete Math (FALL ONLY)
     MA 341 is an approved substitution. Recommended take Junior year
     Prerequisite: MA 224, 225, 231 or 241..
____ (3) MA 225 Foundations of Advanced Math
     Prerequisite: MA 241
____ (3) MA 405 Linear Algebra
     Prerequisite: MA 241
____ (3) MA 403 Introduction to Modern Algebra (FALL ONLY)
     Prerequisite: MA 225
____ (3) MA 408 Foundations of Euclidean Geometry *Take Fall Senior Year*
     Prerequisite: MA 225
____ (3) Mathematics Elective _____ *(see degree audit)*
____ (3) Mathematics Elective _____ *(see degree audit)*
____ (3) ST 311 Introduction to Statistics
____ (3) ST 312 Introduction to Statistics II
____ (1) ST 307 Introduction to Stat Programming - SAS

Natural Sciences
____ (4) CH 101/102 and ____ (4) CH 201/202
     OR
____ (4) BIO 181 and ____ (4) BIO 183
     OR
____ (4) PY 205/206 and ____ (4) PY 208/209
     OR
____ (4) PY 211 and ____ (4) PY 212

____ (3) _____ GEP Natural Science course

GEP Courses
____ (3) _____ Choose a course from the GEP Humanities list
____ (3) _____ Choose a course from the GEP Humanities list
____ (1) _____ Any 100 level Health & Exercise Studies
____ (1) _____ Any HE Course
____ (3) _____ Additional Breadth – Choose one GEP Humanities, Social
Sciences, or Visual Performing Arts course *(Strongly Recommend ECI 305)*
____ (2-3)_____ Interdisc Perspectives

USD and GK may "double-count" for both co-req and another GEP Requirement
____ US Diversity Co-Requisite _____
____ Global Knowledge Co-Requisite _____

____ Foreign Language Proficiency

C or better required in all courses below unless otherwise stated

SOPHOMORE YEAR	
Fall Semester	**Spring Semester**
____ (2) EMS 204 Intro to Mathematics Education *B- or better required* ____ (2) ED 204 Intro to 21st Century Teaching	____ (3) ECI 305 Education and Equity

JUNIOR YEAR	
Fall Semester	**Spring Semester**
____ (3) ELP 344 School and Society ____ (3) EDP 304 Education Psychology ____ (2) ED 311 Classroom Assessment *Prerequisite: ATC* ____ (1) ED 312 Classroom Assessment Lab	____ (3) EMS 480 Teaching Mathematics with Technology (SPRING ONLY) *Prerequisite: EMS 204 with a B- or better; MA 131 or 141* ____ (3) EMS 472 Teaching Math Topics in High School ____ (3) ECI 416 Teaching Exceptional Students

SENIOR YEAR	
Fall Semester	**Spring Semester** *Prior admission to Professional Semester required*
____ (3) EMS 490 School Math from an Adv. Perspective ____ (3) EMS 470 Methods & Materials for Teaching Math *Co-requisite: EMS 472*	____ (10) EMS 471 Student Teaching *(Spring Only)* ____ (2) EMS 495 Senior Seminar

Take EMS 472 & 480 *before* the semester in which you take EMS 470 & 490. (Professional Semester 1)
At most one grade below a C- is permitted in the courses satisfying the science requirement.
At most one grade below a C is permitted in the mathematics, statistics, and computer science courses.

Completed _____ out of 4.5
PROFESSIONAL GROWTH UNITS (PGU's): must earn 4.5 PGU's by graduation. Register for sessions and track PGU's in SAGE → "Professional Development" tab
PGU events and details can be found at: **https://ced.ncsu.edu/academics/professional-education/professional-development/**

ATC REQUIREMENTS (Admission to Teacher Candidacy): ____ENG 101 ____2 Math courses ____EMS 204/ED 204 ____GPA at least 2.75 ____Praxis I
Must have met ATC in order to register for ED 311/312. View your progress in SAGE → "Gateways" tab