NC STATE College of Education

Mathematics Education: Math Ed and Math Dual Degree (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
____ (3) 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 341 Applied Differential or MA 351 Intro Discrete Math
 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 421 Intro Probability
____ (3) MA 407 Modern Algebra
____ (3) MA 408 Foundations of Euclidean Geometry *Take Fall Senior Year*
 Prerequisite: MA 225
____ (3) MA 425 Math Analysis I
____ (3) ST 370 Probability and Statistics for Engineers

Natural Sciences *(C- or better required)*
____ (4) CH 101/102
____ (4) PY 201 OR PY 205/206
____ (4) BIO 181, BIO 183, CH 201/202, PY 202, or PY 208/209

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

Math Electives
____ (3) _____
____ (3) _____
____ (3) _____
____ (3) _____

C or better required in all courses below unless otherwise stated

SOPHOMORE YEAR	
Fall Semester	**Spring Semester**
	____ (3) EDP 304 Education Psychology
	____ (2) EMS 204 Intro to Mathematics Education *B- or better required*
	____ (2) ED 204 Intro to 21st Century Teaching

JUNIOR YEAR	
Fall Semester	**Spring Semester**
____ (3) ELP 344 School and Society	____ (3) EMS 480 Teaching Mathematics with Technology <u>(SPRING ONLY)</u>
____ (2) ED 311 Classroom Assessment *Prerequisite: ATC*	*Prerequisite: EMS 204 with a B- or better; MA 131 or 141*
____ (1) ED 312 Classroom Assessment Lab	____ (3) EMS 472 Teaching Math Topics in High School
____ (3) ECI 305 Education and Equity	

SENIOR YEAR	
Fall Semester	**Spring Semester** *Prior admission to Professional Semester required*
____ (3) EMS 490 School Math from an Adv. Perspective	____ (12) EMS 471 Student Teaching *(Spring Only)*
____ (3) EMS 470 Methods & Materials for Teaching Math	
Co-requisite: EMS 472	
____ (3) ECI 416 Teaching Exceptional Students	

- **You need to take EMS 472 & 480 *before* the semester in which you take EMS 470 & 490. (Professional Semester 1)**
- **A grade below C is not permitted in MA 141, 241, 242, 225, 341 or 351.**
- **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