

Mathematics Education: Computer Science 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)

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 405 Linear Algebra
Prerequisite: MA 241
 ____ (3) MA 403 Introduction to Modern Algebra (**FALL ONLY**)
Prerequisite: CSC 226
 ____ (3) MA 408 Foundations of Euclidean Geometry *Take Fall Senior Year*
Prerequisite: CSC 226
 ____ (3) ST 311 Introduction to Statistics
 ____ (3) ST 312 Introduction to Statistics II
 ____ (1) ST 307 Introduction to Stat Programming - SAS

Computer Science Specialization (*C or better required*)

- ____ (1) E 115 Computing Environment
 ____ (3) CSC 110 Computer Science Principles (first CSC course)
 ____ (3) CSC 116 Intro Comp Java
 ____ (4) CSC 216 Programming Concepts Java and
 CSC 217 Software Development Fundamentals Lab
 ____ (3) CSC 226 Discrete Math CSC
 ____ (3) CSC 316 Data Structures for Computer Scientists

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 (ECI 305 Equity and Education*USD)

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 _____

Free Electives

- ____ (1) Free Elective _____
 ____ (1) Free Elective _____

C or better required in all courses below unless otherwise stated

SOPHOMORE YEAR

Fall Semester

- ____ (2) EMS 204 Intro to Mathematics Education
B- or better required
 ____ (2) ED 204 Intro to 21st Century Teaching

Spring Semester

- ____ (3) ECI 305 Education and Equity

JUNIOR YEAR

Fall 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 *Prerequisite: ATC*

Spring Semester

- ____ (3) EMS 480 Teaching Mathematics with Technology (**Spring only**)
Prerequisite: EMS 204 with a B- or better; MA 131 or 141
 ____ (3) ECI 416 Teaching Exceptional Students
 ____ (3) EMS 472 Teaching Math Topics in High School

SENIOR YEAR

Fall Semester

- ____ (3) EMS 490 School Math from an Adv. Perspective
 ____ (3) EMS 470 Methods & Materials for Teaching Math

Spring Semester *Prior admission to Professional Semester required*

- ____ (10) EMS 471 Student Teaching (**Spring Only**)
 ____ (2) EMS 495 Senior Seminar (**Spring Only**)

- 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