

Mathematics Education: Statistics 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 112, 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 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
Prerequisite: MA 225
- ____ (3) MA 351 Intro Discrete Math *(complete in Junior year)*
Prerequisite: MA 224, 225, 231 or 241

***At most one grade below a C is permitted in the mathematics, statistics, and computer science courses.**

Statistics Specialization *(C or better required)*

- ____ (3) ST 311 Introduction to Statistics
- ____ (3) ST 312 Introduction to Statistics II
- ____ (1) ST 307 Introduction to Stat Programming – SAS
- ____ (3) ST 421 Intro Math Stat I
- ____ (3) ST 422 Intro Math Stat II

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

***At most one grade below a C- is permitted in the courses satisfying the science requirement.**

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 Health & Exercise Course
- ____ (3) _____ Additional Breadth – Choose one GEP Humanities, Social Sciences, or Visual Performing Arts course *(Strongly Recommend ECI 305)*
- ____ (2-3) _____ Interdisc Perspectives
- ____ (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

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) EDP 304 Education Psychology

JUNIOR YEAR

Fall Semester

- ____ (3) ELP 344 School and Society

Spring Semester

- ____ (3) EMS 480 Teaching Mathematics with Technology **(SPRING ONLY)**
Prerequisite: EMS 204 with a B- or better; MA 131 or 141
- ____ (2) ED 311 Classroom Assessment *Prerequisite: ATC*
- ____ (1) ED 312 Classroom Assessment Lab *Prerequisite: ATC*

SENIOR YEAR

Fall Semester

- ____ (3) EMS 472 Teaching Math Topics in High School **(Offered Fall & Spring)**
Co-requisite: EMS 470
Prerequisite: EMS 480 passed with a C or better
- ____ (3) EMS 490 School Math from an Adv. Perspective
- ____ (3) EMS 470 Methods & Materials for Teaching Math
Co-requisite: EMS 472
- ____ (3) ECI 416 Teaching Exceptional Students

Spring Semester *Prior admission to Professional Semester required*

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

Take EMS 480 before the semester in which you take EMS 470/472/490. (Professional Semester 1)

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