

MATHEMATICS AND EDUCATIONAL STUDIES: *DEPARTMENT-SPECIFIC REQUIREMENTS CHART*

	Course Major: Mathematics and Educational Studies	Course Educational Studies Major, Secondary Math Teacher Certification	Course Major: Mathematics and Educational Studies, Secondary Math Teacher Certification	Mathematics Major and Educational Studies Minor, Secondary Math Teacher Certification
Mathematics /Statistics Requirements (MATH)	Total: 7 credits – MATH 063: Real Analysis I <u>or</u> MATH 067: Modern Algebra I – 6 other MATH/STAT courses of choice, one of which must be numbered 044 or higher.	Placement or credit* in one course of each of the following categories: – First semester calculus (MATH 015) – Second semester calculus (MATH 025) – Linear algebra (MATH 027, 028) – Discrete mathematics (MATH 039, 069) – Several variable calculus (MATH 033, 034, 035) – Geometry (MATH 065, 105) – Modern algebra (MATH 067, 102) – Probability/statistics (STAT 011, 021, 051, 061, 111)	Total: 7 credits* in Math/Stat which must include placement or credit in one course of each of the following categories: – First semester calculus (MATH 015) – Second semester calculus (MATH 025) – Linear algebra (MATH 027, 028) – Discrete mathematics (MATH 039, 069) – Several variable calculus (MATH 033, 034, 035) – Geometry (MATH 065, 105) – Modern algebra (MATH 067, 102) – Probability/statistics (STAT 011, 021, 051, 061, 111)	Total: 10 credits** in Math/Stat which must include placement or credit in one course of each of the following categories: – First semester calculus (MATH 015) – Second semester calculus (MATH 025) – Linear algebra (MATH 027, 028) – Discrete mathematics (MATH 039, 069) – Several variable calculus (MATH 033, 034, 035) – Geometry (MATH 065, 105) – Modern algebra (MATH 067, 102) – Probability/statistics (STAT 011, 021, 051, 061, 111) – Intro to Real Analysis (MATH 063)
Senior Thesis or Exercise	Total: 1 credit – EDUC/MATH Thesis or project	Total: 1 or 2 credit – EDUC Thesis	Total: 1 credit – EDUC/MATH Thesis (double-credit is also an option)	Total: 0 credit – MATH 097: Senior Conference; must be taken fall and spring of senior year.
Strongly Recommended	N/A	– CPSC 021: Introduction to Computer Science – MATH courses on modeling/applications – Work as an individual tutor for one or more math/stat courses – Works as a pi-rate, muse, or math/stat clinician – Other discipline courses that use math	– CPSC 021: Introduction to Computer Science – MATH courses on modeling/applications – Work as an individual tutor for one or more math/stat courses – Works as a pi-rate, muse, or math/stat clinician – Other discipline courses that use math	– CPSC 021: Introduction to Computer Science – MATH courses on modeling/applications – Work as an individual tutor for one or more math/stat courses – Works as a pi-rate, muse, or math/stat clinician – Other discipline courses that use math
Educational Studies Requirements	Total: 5 credits in Educational Studies	10-11 credits in Educational Studies: Refer to Secondary Certification Educational Studies Courses. (Does not include thesis.)	Total: 9.5 credits in Educational Studies: Refer to Secondary Certification Educational Studies Courses.	Total 9.5 credits in Educational Studies: Refer to Secondary Certification Educational Studies Courses.

* Students must receive a grade of C or better in all MATH courses taken. Students may prove that they have met some of these requirements by credit for or placement out of some of the course(s) listed; students should speak to their math advisor about options and/or special or new offerings that may meet certification requirements.

+ Only 5 credits numbered below 036 may count toward the Mathematics Major.

Refer to the next page for additional notes.

Additional Notes:

1. This chart lists only the Mathematics Department requirements for majors in *Mathematics & Educational Studies* and/or for secondary mathematics certification. The required Educational Studies courses are described elsewhere.
2. The Department of Educational Studies works closely with each individual student to determine a semester-by-semester plan.
3. Please see the Chair of the Department of Educational Studies to design a plan that includes Honors.

Mission Statement for Mathematics Certification Program

The Mathematics K-12 certification program engages students in the investigation of educational theory, policy, research and practice. Candidates for certification develop their pedagogical content knowledge in Mathematics as well as their general knowledge of the subject. The program encourages undergraduates to think critically and creatively about the processes of teaching and adolescent learning and about the place of education in society. The program is committed to preparing students to employ evidence-based practice. Instructional practice, including the use of technology and assessments, are designed to enable preservice teachers to meet the needs of all students, including those with learning differences, and with consideration for racial, ethnic, linguistic and/or social economic diversity.