

MATHEMATICS/STATISTICS AND EDUCATIONAL STUDIES: *DEPARTMENT-SPECIFIC REQUIREMENTS CHART; ELEMENTARY*

[CERTIFICATION IS ANOTHER OPTION](#)

	Course Special Major <i>Mathematics/Statistics and Educational Studies</i>	Special Major <i>Mathematics and Educational Studies, Secondary Teacher Certification</i>	<i>Mathematics Major and Educational Studies Minor, Secondary Teacher Certification</i>
Mathematics /Statistics Requirements (<i>MATH</i>)	Total: 7 credits — MATH 063:Real Analysis I <i>or</i> MATH 067:Modern Algebra I — 6 other MATH/STAT courses of choice, one of which must be numbered 044 or higher.	Total: 7 credits* — First semester calculus (MATH 015) — Second semester calculus (MATH 025 or 026) — Linear algebra (MATH 027, 028, 028S) — Discrete mathematics (MATH 029, 059, 069, 079) — Geometry (MATH 055 or 075) — Modern algebra (MATH 67) — Probability/statistics (STAT 011, 031, 061, 111 or MATH 105)	Total: 10 credits*+ — First semester calculus (MATH 015) — Second semester calculus (MATH 025 or 026) — Linear algebra (MATH 027, 028, 028S) — Several variable calculus (MATH 033, 034, 035) — Discrete mathematics (MATH 029, 059, 069, 079) — Geometry (MATH 055 or 075) — Intro to Real Analysis (MATH 63) — Modern algebra (MATH 67) — Probability/statistics (STAT 011, 031, 061, 111 or MATH 105) — 1 credit of choice
Thesis (<i>EDUC/MATH</i>)	Total: 1 credit — Thesis or project	Total: 1 credit — Thesis (double-credit is also an option)	Total: 0.5 credit — MATH 097: Senior Conference
Strongly Recommended	N/A	— CPSC 021: Introduction to Computer Science — MATH courses on modeling/applications — Other discipline courses that use math — Work as a tutor, PIRATE, or Math Images Project member	— CPSC 021: Introduction to Computer Science — MATH courses on modeling/applications and/or at least one natural or social science course with significant math content — Work as a individual tutor or for the math clinic — PIRATE — Math Images Project
Educational Studies Requirements	Total: 5 credits in Educational Studies	Total: 9.5 credits in Educational Studies Refer to description of general Educational Studies Secondary Certification Requirements.	Total: 9.5 credits in Educational Studies Refer to description of general Educational Studies Secondary Certification Requirements.

Additional Notes:

* Students must receive a grade of C or better in all MATH courses taken. Student may prove that they have met some of these requirements by their performance on the department placement exam.

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

1. This chart lists only the Mathematics/Statistics Department requirements for special majors and/or secondary certification. The required Educational Studies courses are described elsewhere.
2. Occasionally departments have special offerings that may fulfill the required content. Please meet with your advisor or department chair to discuss such opportunities.
3. The Department of Educational Studies works closely with each individual student to determine a semester-by-semester plan.
4. 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.