

MATHEMATICS EDUCATION PROGRAM GUIDELINES BACHELOR OF SCIENCE IN EDUCATION (MATH2 BS)

These guidelines summarize the requirements for a Bachelor of Science and partial completion of Connecticut certification requirements in mathematics education (Grades 7-12) for students following the 2018-2019 requirements.

1. Complete the GENERAL EDUCATION REQUIREMENTS listed in the Academic Regulations of the University of Connecticut Undergraduate Catalog 2018-2019. In addition to the General Education Requirements (Content Areas 1-4), students must take a course in U.S. History. Courses in Content Areas 1-3 must be in different departments.
2. Complete a SUBJECT AREA MAJOR in Mathematics consisting of a minimum of 36 credits in mathematics and related areas. Students are required to complete 30 credits in 2000's-4000's level mathematics courses. Students should fulfill this requirement with the completion of:

MATH 2110Q, 2210Q, 2360Q, 2410Q, 2710, 2720W, 3160, 3230, 3240, AND 3710

In addition, students are required to take one (1) statistics course from the following: STAT 1000Q or 1100Q. The remaining three (3) credits should be selected from mathematics or areas related to mathematics. Suitable related areas include:

Mathematics, Statistics, Computer Science, Physical or Natural Science, Philosophy (Logic).

Up to six (6) credits of 1000's level courses may be included as part of the 36 credits with prior consent of the faculty advisor.

3. Complete the following PROFESSIONAL EDUCATION REQUIREMENTS:

EDCI 3100/W – Multicultural Education, Equity and Social Justice	3 credits
EPSY 3010 – Educational Psychology	3 credits
EGEN 3100 – Seminar/Clinic: The Student as Learner	3 credits
EPSY 3110 – Exceptionality	2 credits
EDCI 3212 – Introduction to Secondary Methods and Clinic - Mathematics	3 credits
EDCI 4010 – Teaching Reading and Writing in the Content Areas	2 credits
EDCI 4210W – Instruction and Curriculum in the Secondary School	3 credits
EPSY 3125 – Classroom and Behavior Management	3 credits
EGEN 4100 – Seminar/Clinic: Methods of Teaching	3 credits
EPSY 4010 – Assessment of Learning	2 credits
EDCI 4250 – Directed Student Teaching	9 credits
EGEN 4110 – Seminar/Clinic: Analysis of Teaching	3 credits

Students must earn at least 120 credits.

MASTER OF ARTS IN CURRICULUM AND INSTRUCTION

To earn the University of Connecticut's institutional recommendation for teacher certification, students must additionally successfully complete the requirements for the Master of Arts in Curriculum and Instruction including a minimum of thirty (30) credits (two full-time semesters) of graduate level course work. Requirements are anticipated to include at least:

Content Pedagogy: EDCI 5450 – Teaching and Learning Mathematics in the Secondary School (3 credits)

Curriculum Electives and/or Graduate Liberal Arts: (6 credits)

Language and Cultural Diversity in Education: (3 credits)

Choose one: EDCI 5700 – Foundations of Bilingual Education, EDCI 5705 – Curricular Issues in Bilingual Education, EDCI 5715 – Bilingualism and Second Language Acquisition, EDCI 5720 – Bilingual Education and Biliteracy, EDCI 5740 – Latinos and U.S. Education, EDCI 5742 – Sheltered English Instruction for English Language Learners, EDCI 5750 – Language Diversity and Literacy, EDCI 5830 – Theory & Practice of Intercultural Education, EDCI 5875 – Multicultural Education, EDCI 5890 – Educational Linguistics, EDCI 5895 – Language Ideology & Education, CLCS 5306/GERM 5305: Development of Intercultural Competence in Education

Leadership: EDLR 5015 – Teacher Leadership and Organizations (3 credits)

Practicum: EDCI 5092 (3 credits fall) and EDCI 5093 (4 credits spring)

Seminar: EDCI 5094 (3 credits fall) and EDCI 5095 (3 credits spring)

Research: EPSY 5195 (1 credit fall and 1 credit spring)

Technology: EPSY 5221 – Wise Integration of Technology into Teaching and Learning Environments (1-3 credits)

MATHEMATICS EDUCATION SAMPLE SEMESTER SEQUENCE

This is a SAMPLE sequence. Any course can be taken in an alternate semester (if offered). Pay attention to mathematics courses only offered in the fall and courses that are prerequisites for others. Requests for substitutions of required mathematics courses may be considered with compelling reasons.

SEMESTER 1

ENGL 1010 or 1011	4
MATH 1131Q – Calculus I	4
Content Area 1	3
PSYC 1100 – Psychology (Also fulfills CA 3)	3

SUMMER

*FOREIGN LANGUAGE	8
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SEMESTER 3

Content Area 4	3
MATH 2110Q – Multivariable Calculus	4
MATH 2210Q – Applied Linear Algebra	3
STAT 1000Q or 1100Q – Statistics	4
EPSY 3010** – Educational Psychology	3

SEMESTER 5

Content Area 2	3
EDCI 3100/W – Multicultural Education, Equity & SJ	3
EPSY 3110 – Exceptionality (fall or spring junior year)	2
EGEN 3100 – Seminar/Clinic	3
MATH 3240 – Introduction to Number Theory	3
MATH 3710 – Introduction to Mathematical Modeling	3

SEMESTER 7

EPSY 3125 – Classroom and Behavior Management	3
EDCI 4210W – Instruction & Curric. in Secondary School	3
EGEN 4100 – Seminar/Clinic	3
MATH 3230 – Abstract Algebra I	3
MATH or Related course (if enrolled in dual degree)	3

SEMESTER 2

MATH 1132Q – Calculus II	4
MATH 2360Q – Geometry	3
Content Area 3 Lab (PHYS suggested)	4
Content Area 4	3

SEMESTER 4

HIST 1501 or 1502 – US History (Also fulfills CA 1)	3
Content Area 2	3
MATH 2410Q – Elementary Differential Equations	3
MATH 2710 – Transition to Advanced Mathematics	3
MATH or Related course (if enrolled in dual degree)	3

SEMESTER 6

EDCI 3212 – Intro. to Secondary Methods & Clinic	3
EPSY 3110 – Exceptionality (fall or spring junior year)	2
EDCI 4010 – Teaching Reading & Writing in the Content Areas	2
MATH 2720W – History of Mathematics	3
MATH 3160 – Probability	3

SEMESTER 8

EPSY 4010 – Assessment of Learning	2
EDCI 4250 – Directed Student Teaching	9
EGEN 4110 – Seminar/Clinic	3

*If the student completed less than three (3) years of a single foreign language in high school.

**Students should take EPSY 3010 prior to semester 5, if possible, but no later than semester 6. The course is available fall, spring, summer and online.

Lower division requirements have been selected to assist students with completing the general education requirements, including two W courses (one must be 2000-level or above and associated with the student's major) and two Q courses (one Q course must be from Mathematics or Statistics).

SEMESTER 9 (Master's)

EDCI 5092 – Practicum	3
EDCI 5094 – Seminar	3
EPSY 5195 – Research course	1
EPSY 5221 – Wise Technology (either semester)	1-3
Diversity course (either semester)	3
EDLR 5015 – Leadership (either semester)	3
Elective	3-6

SEMESTER 10 (Master's)

EDCI 5093 – Practicum	4
EDCI 5095 – Seminar	3
EPSY 5195 – Research Course	1
EPSY 5221 – Wise Technology (either semester)	1-3
Diversity course (either semester)	3
EDLR 5015 – Leadership (either semester)	3
Elective	3-6
EDCI 5450 – Teaching & Learning of Math in Secondary School	3