

MATHEMATICS – SECONDARY (6-12) LICENSE, BA

Introduction

Please click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/school-education-human-development/>) to see School of Education & Human Development information.

The Education and Human Development major with a Secondary Mathematics license focuses on engaging Colorado's rapidly diversifying student and family population. It combines cutting-edge research with real classroom experiences. You'll learn from innovative faculty members who are locally, nationally and internationally recognized for their teaching and research in secondary mathematics education. They will provide you with a robust knowledge base and relevant learning experiences in transforming deep content knowledge into learning experiences for youth across multiple cultural contexts as it relates to teaching youth in grades 6 through 12. You'll engage in powerful classroom experiences and benefit from our rich 20-year history of partnering with schools to prepare teachers.

The secondary mathematics program ensures that you will develop deep content knowledge important to become a successful mathematics teacher with courses in calculus, abstract math, statistics and more. You will also be prepared with the methods and foundations coursework that will make you a highly effective, innovative and compassionate secondary mathematics teacher skilled in improving student performance and reaching the needs of today's diverse learners in a variety of school settings. You will have the skills to be a teacher leader. CU Denver graduates often go on to acquire positions in educational leadership as their careers progress.

Program Delivery

- This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend, and online courses.

Declaring This Major

- Click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/school-education-human-development/#policiestext>) to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements (<http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation/>)
- CU Denver Core Curriculum (<http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation-undergraduate-core-requirements/>)
- School of Education and Human Development Graduation Requirements (<http://catalog.ucdenver.edu/cu-denver/undergraduate/schools-colleges-departments/school-education-human-development/#graduationrequirementstext>)

- Click here (<http://catalog.ucdenver.edu/cu-denver/undergraduate/academic-policies-procedures/>) for information about Academic Policies

Program Requirements

- Students must complete a minimum total of 126 semester hours for the EDHD Mathematics - Secondary Education Track.
- Application to the last year of the program, the Professional Year Residency is required. After successfully completing all other Core, major, and elective courses, all students must apply for admission into the Professional Year. Requirements for admission include a 3.0 GPA, positive letters of recommendation, successful evaluations of earlier clinical experiences, and a successful interview. (Students with a lower GPA may be considered under certain conditions. Please visit the SEHD website (<https://education.ucdenver.edu/academic-services/student-resources/undergraduate/>)).
- A minimum of C- is required for all Math content courses.
- A minimum GPA of 2.0, grade of C or better, is required for all major courses applying to EDHD - Secondary Mathematics Education requirements unless otherwise specified.
- Students must complete and maintain a 3.0 minimum grade point average in Professional Year coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
- Transfer courses must be approved by faculty and/or advisor to apply to the major.

Code	Title	Hours
Major Courses		
CLDE 2000	CLDE Foundations ¹	3
EDFN 1000	Equality, Rights & Education	3
or LCRT 2000	Rebels, Villains, & Superheroes: How Children's Literature Shapes Our Identities	
or LCRT 3815	Once Upon a Time: Family Literacies in Culturally Diverse Communities	
HDFR 1010	Life Span Development in Ecological Settings	3
SPED 4030	Understanding (dis)Ability in Contemporary Classrooms ¹	3
SPED 4400	Universal Design for Learning (UDL)	3
EDFN 4010	Social Foundations and Cultural Diversity in Urban Education ¹	3
CLDE 4020	Responsive Classroom Communities ¹	3
EDHD 1930	Community Based Field Experience & Seminar ¹	3
EDHD 2930	Learning & Development Field Experience & Seminar ¹	3
EDHD 3930	Diverse Learners Field Experience & Seminar ¹	3
MTED 4622	Expanding Conceptions of Algebra	3
MTED 4623	Geometrical Ways of Reasoning	3
Content Courses		
A minimum grade of C- or higher is required in each course.		
CSCI 1410 & CSCI 1411	Fundamentals of Computing and Fundamentals of Computing Laboratory	3-4
or MATH 1376	Programming for Data Science	
MATH 1401	Calculus I	4
MATH 2411	Calculus II	4
MATH 2421	Calculus III	4

MATH 3000	Introduction to Abstract Mathematics	3
MATH 3191	Applied Linear Algebra	3
MATH 3382	Statistical Theory	3

MATH Courses

Select two upper-division (3000-level or higher) courses from the following: 6

MATH 3310	Introduction to Real Analysis I	
MATH 3810	Introduction to Probability	
MATH 4010	History of Mathematics	
MATH 4110	Theory of Numbers	
MATH 4140	Introduction to Modern Algebra	
MATH 4409	Applied Combinatorics	

Professional Year Courses

A minimum grade of B- is required in each course.

LCRT 4100	Secondary Literacy Instruction and Assessment	3
STME 4020	Learning and Assessment in STEM: Embracing Design Thinking	3
STME 4030	Exploring Approaches to STEM Education: Making Student Learning Visible	3
UEDU 4040	Planning for Learning	3
UEDU 4050	Capstone: Planning, Instruction & Assessment	3
UEDU 4931	Internship & Lrng Comm I	2
UEDU 4932	Internship & Lrng Comm II	2
UEDU 4933	Internship & Lrng Comm III	6

General Electives

Additional General Electives may be needed to reach the required 126 hours for the BA

Total Hours **91-92**

¹ Courses require a grade of B- or better; all other courses require a grade of C or better.

To review the Degree Map for this program, please visit our website (<https://www.ucdenver.edu/student/advising/undergraduate/degree-maps/sehd/>).