

# MIDDLE SCHOOL MATHEMATICS 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 Middle School 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 middle school 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 8. You'll engage in powerful classroom experiences and benefit from our rich 20-year history of partnering with schools to prepare teachers.

The middle school 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 middle 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 Graduation Requirements (<http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation/>)
- CU Denver Undergraduate Core Curriculum (<http://catalog.ucdenver.edu/cu-denver/undergraduate/graduation-undergraduate-core-requirements/>)
- School of Education & 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 Middle School Mathematics 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 see SEHD website.)
- 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 - Middle School 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
<b>Major Courses</b>		
MTED 3040	Mathematics for Elementary Teachers <sup>1</sup>	3
CLDE 2000	CLDE Foundations <sup>1</sup>	3
CLDE 3830	Culturally and Linguistically Responsive Teaching through STEM	3
EDFN 1000	Equality, Rights & Education	3
HDFR 3050	Children's Thinking and Assessment	3
MTED 4621	A World of (Different) Numbers: Quantity and Operation	3
SPED 4030	Understanding (dis)Ability in Contemporary Classrooms <sup>1</sup>	3
SPED 4400	Universal Design for Learning (UDL)	3
EDFN 4010	Social Foundations and Cultural Diversity in Urban Education <sup>1</sup>	3
CLDE 4020	Responsive Classroom Communities <sup>1</sup>	3
EDHD 1930	Community Based Field Experience & Seminar <sup>1</sup>	3
EDHD 2930	Learning & Development Field Experience & Seminar <sup>1</sup>	3
EDHD 3930	Diverse Learners Field Experience & Seminar <sup>1</sup>	3
<b>Content Courses</b>		
A minimum grade of C- or higher is required in each course.		
MATH 2830	Introductory Statistics	3
MATH 1401	Calculus I	4
MATH 2411	Calculus II	4
	or MATH 3191 Applied Linear Algebra	
MATH 3000	Introduction to Abstract Mathematics	3
Select one of the following:		3
MATH 4140	Introduction to Modern Algebra	
MATH 4110	Theory of Numbers	

MATH 4010	History of Mathematics	
MATH 4408	Applied Graph Theory	
<b>Professional Year Courses</b>		
A minimum grade of B- is required in each course.		
LCRT 4100	Secondary Literacy Instruction and Assessment	3
MTED 4300	Curriculum and Methods for Teaching Mathematics	3
MTED 4301	Assessment and Equity in Mathematics Instruction	3
MTED 4622	Expanding Conceptions of Algebra	3
MTED 4623	Geometrical Ways of Reasoning	3
STME 4001	Planning for Learning in Mathematics and Science	3
STME 4051	STEM Capstone: Secondary Education	3
UEDU 4931	Internship & Lrng Comm I	2
UEDU 4932	Internship & Lrng Comm II	2
UEDU 4933	Internship & Lrng Comm III	6
<b>General Electives</b>		
Additional General Electives hours may be needed to reach the required 126 hours for the BA		
<b>Total Hours</b>		<b>87</b>

<sup>1</sup> 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/>).