

# EDUCATION - CURRICULUM AND INSTRUCTION - MASTER OF ARTS (MA)

The Curriculum & Instruction (C&I) master's degree requires one academic year or more of graduate work beyond the bachelor's degree.

## Program Tracks

### Humanities Education Track

This track is designed to support teachers and other education professionals who are interested in developing greater understanding and expertise in the teaching and learning of the humanities. Courses within this concentration provide opportunities for graduate students to strengthen discipline-specific content knowledge, knowledge for teaching humanities and a multidisciplinary understanding of how content, pedagogy and practice that supports teaching and inquiry focused on humans' social and cultural experience as they navigate institutional, social and political systems, including education. In consultation with the advisor, this degree can be tailored toward students' goals, interests and desired timeline to degree (typically ranging from 1–2 years)

The program serves practicing teachers, educators working with youth in informal and out-of-school settings, as well as individuals with backgrounds in the humanities wishing to learn more about teaching and learning. This track is only offered as a master's degree. Prospective doctoral students interested in the humanities are encouraged to consider the Literacy Studies, or the Educational Foundations, Policy and Practice emphasis of the Education PhD (<https://catalog.colorado.edu/graduate/colleges-schools/education/programs-study/education-doctor-philosophy-phd/>) program.

### STEM Education Track

The CU Boulder School of Education offers this program to support educators and other education professionals who are interested in developing greater understanding of and expertise in education related to STEM (particularly science, mathematics and computational thinking). The program enables teachers, educational designers and scholars to explore and critically analyze educational, pedagogical and curricular strategies designed to support students' STEM learning and identities. Disciplinary connections to critical issues in STEM are strengthened through lesson design and analysis, fieldwork, coursework and research activities. Throughout these experiences, we center equity, democracy and justice as core concerns in STEM education.

The program serves practicing teachers, educational leaders, designers of informal educational settings, as well as individuals with backgrounds in STEM wishing to learn more about teaching and learning. Graduates of our MA program go on to become teacher leaders, instructional designers, curriculum specialists and district administrators.

### MA+ Teacher Licensure

The MA+ teacher licensure program (<https://catalog.colorado.edu/graduate/colleges-schools/education/programs-study/teacher-licensure-program/>) leads to a Colorado initial teaching license in Secondary Math, Science, English or Social Studies plus a master's degree in C&I. This program is for candidates who have earned a bachelor's degree from an accredited institution of higher education and who want to elaborate and deepen the close connections between fieldwork and

coursework to become a teacher. For more information, contact the School of Education.

## Requirements

### General Requirements

#### Program Requirements

Students must successfully complete 30 credit hours of approved coursework while maintaining at least a B (3.0) average in all work attempted while enrolled.

Students develop a degree plan in consultation with their faculty advisor, typically in their first semester. The frequency of individual course offerings varies; therefore, candidates should plan ahead so that the required 30 credit hours are completed within the four-year time limit.

#### Transfer Credit

Transfer credit is defined as any credit earned at another accredited institution, credits earned on another campus of the CU system, or credits earned as a nondegree student within the CU system including the Boulder campus. Students who have transfer credits must complete the transfer-of-credit paperwork approval process.

The maximum amount of work that may be transferred from another accredited institution to CU Boulder is 9 credit hours, and is accepted only after approval of the department chair/program director and under the special conditions outlined in the Graduate School Rules. All courses accepted for transfer must be graduate-level courses. A course in which a grade of B- or lower was received will not be accepted for transfer.

Transfer coursework must have been completed in the five years prior to acceptance to the program. Credit may not be transferred until the student has completed 6 credits of graduate-level coursework as a degree-seeking student on the CU Boulder campus with a 3.0 GPA.

Master's degree students who began CU's Teacher Education Program as undergraduates or as post-baccalaureate students have the following transfer credit options:

- If the student took the courses as an undergraduate, they may be eligible to transfer up to two of their track's eligible transfer courses, depending on when those courses were taken and if the credits did not count towards the degree. Contact the School of Education for more information.
- If the student took the courses as a post-baccalaureate student, they may transfer up to two of their track's eligible transfer courses as electives, as long as the courses were taken within the past five years. Note: Students transferring from secondary programs will transfer seven credits; therefore, they will complete a 31-credit master's degree.

#### Time Limit

The master's degree must be completed within four years.

## Program Tracks

### Humanities Education Track

In addition to the required core courses, students must complete the following track-specific course requirements.

Code	Title	Credit Hours
<b>Learning and Development</b>		
Choose at least 3 credit hours of learning and development courses. Examples of eligible courses include:		3
EDUC 6318	Psychological Foundations of Education	
EDUC 6328	Advanced Child Growth and Educational Development	
EDUC 5105	Teaching for Understanding and Equity	
<b>Foundations of Education Curriculum</b>		
Choose at least 3 credit hours of foundations of education curriculum courses. Examples of eligible courses include:		3
EDUC 5065	Curriculum Theories	
EDUC 5075	Sociology of Education	
EDUC 5085	History of American Education	
EDUC 5726	Introduction to Disciplined Inquiry	
EDUC 6210	Education Policy and the Law	
EDUC 6220	Gender Issues in Education	
EDUC 6325	Anthropology of Education	
EDUC 7055	Philosophy of Education	
EDUC 7446	Policy Issues in Education	
<b>Curriculum and Instruction in Humanities</b>		
Choose at least 12 credit hours of curriculum and instruction in humanities courses. Courses that meet students' goals and interests are chosen in consultation with the advisor. <sup>1</sup>		12
<b>Electives</b>		
Choose at least 9 additional credit hours of courses at the 5000 level or above from within the School of Education, to be chosen in consultation with an advisor. <sup>1,2,3</sup>		9
<b>Capstone Course</b>		
EDUC 6964	Capstone: Inquiry in the Content Areas	3
<b>Total Credit Hours</b>		<b>30</b>

<sup>1</sup> See also "Eligible Transfer Courses" below.

<sup>2</sup> GRTE courses may not count toward a master's degree.

<sup>3</sup> Students may deepen their content knowledge in the humanities disciplines by taking a maximum of 6 credit hours of courses in the College of Arts & Sciences at the 3000 level or above that are taught by graduate faculty.

#### Eligible Transfer Courses

See the Transfer Credit (p. 1) section for details.

Code	Title	Credit Hours
EDUC 5205	Elementary Mathematics Theory and Methods	3
EDUC 5215	Elementary Science Theory and Methods	3
EDUC 5316	Nature of Social Studies and Social Studies Education	3
EDUC 5355	Secondary Social Studies Methods II	3
EDUC 5365	Secondary English Methods II	3

#### Capstone Course

During the final spring semester prior to graduation, students must enroll in the capstone course, EDUC 6964 Capstone: Inquiry in the Content Areas. This course is only offered once a year. The Capstone course is a

graduation requirement and requires the submission of a paper or project reviewed by faculty to successfully complete graduation and course requirements.

#### STEM Education Track

In addition to the required core courses, students must complete the following track-specific course requirements.

Code	Title	Credit Hours
<b>Learning and Development</b>		
Choose at least 3 credit hours of learning and development courses. Examples of eligible courses include but are not limited to: <sup>1</sup>		3
EDUC 5050	Knowing and Learning in Mathematics and Science	
EDUC 5105	Teaching for Understanding and Equity	
EDUC 6318	Psychological Foundations of Education	
EDUC 6328	Advanced Child Growth and Educational Development	
<b>Foundations of Education Curriculum</b>		
Choose at least 3 credit hours of foundations of education curriculum courses. Examples of eligible courses include but are not limited to:		3
EDUC 5005	Advanced Social Foundations of Education	
EDUC 5075	Sociology of Education	
EDUC 5085	History of American Education	
EDUC 5301	Queer(ing) Topics in Education	
EDUC 5425	Introduction to Bilingual/Multicultural Education	
EDUC 5726	Introduction to Disciplined Inquiry	
EDUC 6325	Anthropology of Education	
<b>Curriculum and Instruction in Mathematics and Science</b>		
Choose at least 12 credit hours of curriculum and instruction in mathematics and science courses. Eligible courses include but are not limited to: <sup>2</sup>		12
EDUC 5317	Perspectives on Mathematics	
EDUC 5460	Teaching and Learning Physics	
EDUC 5706	Assessment in Mathematics and Science Education	
EDUC 5815	Teaching K-12 Mathematics: Number Sense	
EDUC 5821	Teaching K-12 Mathematics: Algebraic Thinking	
EDUC 5822	Teaching and Learning Chemistry	
EDUC 5833	Teaching and Learning Earth Systems	
EDUC 5835	Teaching K-12 Mathematics: Geometry & Measurement	
EDUC 5850	Teaching K-12 Mathematics: Probability & Statistics	
EDUC 6811	Teaching & Learning Biology In the Classroom	

Code	Title	Credit Hours
<b>Capstone Course</b>		
Students are required to take on one of the seminar courses in the spring before graduation to complete their capstone.		3

EDUC 5177	Seminar in Curriculum and Policy in Mathematics & Science Education
EDUC 5178	Seminar on Learning in Math & Science Education
EDUC 5179	Seminar on Teaching and Teacher Education in Math and Science Education

**Electives**

Choose at least 9 additional credit hours of courses at the 5000 level or above from within the School of Education, to be chosen in consultation with your advisor. <sup>2,3,4</sup> 9

**Total Credit Hours** 30

- <sup>1</sup> Speak with your advisor about other courses that could satisfy this requirement.
- <sup>2</sup> See also "Eligible Transfer Courses" below.
- <sup>3</sup> GRTE courses may not count toward a master's degree.
- <sup>4</sup> Students may deepen their content knowledge in the mathematics or science disciplines by taking a maximum of 6 credit hours of courses in the College of Arts & Sciences at the 3000 level or above that are taught by graduate faculty.

**Eligible Transfer Courses**

See the Transfer Credit (p. 1) section for full details.

Code	Title	Credit Hours
EDUC 5050	Knowing and Learning in Mathematics and Science	3
EDUC 5205	Elementary Mathematics Theory and Methods	3
EDUC 5215	Elementary Science Theory and Methods	3
EDUC 5317	Perspectives on Mathematics	3
EDUC 5375	Problem-Based Math Instruction	4
EDUC 5385	Phenomenon-Based Science Instruction	4

**Comprehensive Exam**

During the final Spring semester prior to graduation, students must enroll in a content seminar course (EDUC 5177, EDUC 5178 or EDUC 5179). The course is a graduation requirement and requires the completion of a paper or project reviewed by faculty to successfully complete graduation and course requirements.

**Learning Outcomes**

MA students in Curriculum & Instruction will:

- Develop greater understanding and expertise in teaching and learning within and/or across content domains (e.g., Humanities, Literacy, STEM Education).
- Demonstrate professional integrity through ethical conduct, reflection and leadership.
- Collect and analyze information from research and practice to inform decisions and enhance equitable teaching and learning for all students.
- Make educational decisions based on deep engagement with educational scholarship, perspectives and data.
- Understand the importance of partnering with and centering the knowledge of families and communities, particularly those that

have experienced histories of marginalization, to work toward social change and educational justice.

- Draw on disciplinary knowledge, perspectives and practices to broaden opportunities personal and social transformation