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 core requirements.
Learning and Development
Choose at least 3 credit hours of learning and development courses. Examples of eligible courses include:

- EDUC 6318 Psychological Foundations of Education
- EDUC 6328 Advanced Child Growth and Educational Development
- EDUC 5105 Teaching for Understanding and Equity

Foundations of Education Curriculum
Choose at least 3 credit hours of foundations of education curriculum courses. Examples of eligible courses include:

- 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

Curriculum and Instruction in Humanities
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.

- EDUC 5205 Elementary Mathematics Theory and Methods
- 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

Capstone Course
Students are required to take one of the seminar courses in the spring before graduation to complete their capstone.
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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 5050</td>
<td>Knowing and Learning in Mathematics and Science</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5205</td>
<td>Elementary Mathematics Theory and Methods</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5215</td>
<td>Elementary Science Theory and Methods</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5317</td>
<td>Perspectives on Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 5375</td>
<td>Problem-Based Math Instruction</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 5385</td>
<td>Phenomenon-Based Science Instruction</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Credit Hours 30

1. Speak with your advisor about other courses that could satisfy this requirement.
2. See also “Eligible Transfer Courses” below.
3. GRTE courses may not count toward a master’s degree.
4. 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.

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.