CREATIVE TECHNOLOGY AND DESIGN - PROFESSIONAL MASTER OF SCIENCE (MS)

Professional Master of Science in Creative Technology and Design

The ATLAS Institute's two-year professional Master of Science in Creative Technology and Design (CTD) program prepares students to become multidisciplinary leaders versed in real-world design challenges and technical know-how. Degrees are granted by the College of Engineering and Applied Science.

The program is built for flexibility: students pursue their passions deeply, whether in UX/UI, product development, interactive media, game design, sustainability, performing arts technology, social impact—or anywhere engineering and creative insight converge.

Through the program's project-based curriculum, students build outstanding portfolios highlighting their ability to bridge stakeholder insights with design skills and technical rigor. Many MS students also choose to embed in one of the ATLAS Institute's research labs to further deepen their experience. ATLAS labs live at the vanguard of innovation in human-computer interaction, biomaterials, fabrication, design, neuroscience and more.

Program Tracks

Students can pursue a track that best aligns with their specialty.

Creative Industries

Students learn to apply a deep design approach to addressing challenges through classes that emphasize technical skills and strategic thinking. From digital tools to industrial design and fabrication to creative performance technology, students take many approaches. They graduate as creative technologists equipped with the experience and portfolio to give them an edge in a broad range of fulfilling careers.

Social Impact

Students focus on applying design expertise to affect systemic change, support underserved communities and improve everyday lives. They learn to transform idealism and passion into meaningful impact, culminating in the final semester with a field-based practicum when students work with NGOs, development agencies, foundations or technology companies to apply social impact interventions to real-world needs.

Interested in joining our vibrant community? Visit the ATLAS Institute's Graduate Programs webpages (https://www.colorado.edu/atlas/academics/) to learn more.

The course code for this program is ATLS.

Requirements

Creative Industries Track

The creative industries track requires a total of 33 credit hours, of which at least 27 must be completed at the 5000 level or above, including the mandatory core courses listed below. In addition, specific focus area requirements must be met. Students must receive a grade of B or higher in all coursework, maintaining a minimum overall GPA of 3.000.

For more information, visit the ATLAS Institute (https://www.colorado.edu/atlas/academics/graduate/ms-technology-media-society/) webpage.

Code	Title	Credit Hours
Core Courses		
ATLS 5420	Professional Seminar: Business of Creativity	3
ATLS 5430	Design Methods	3
ATLS 5650 or ATLS 5660	Introduction to Programming Creative Code	3
ATLS 5410	Creative Technologies	3
ATLS 5440	Design Studio	3
ATLS 6920	Creative Industries Final Project	3

Social Impact Track

The social impact track requires a total of 33 credit hours, of which at least 27 of which must be completed at the 5000 level or above, including the mandatory core courses listed below. In addition, specific focus area requirements must be met. Students must receive a grade of B or higher in all coursework, maintaining a minimum overall GPA of 3.000.

For more information, visit the ATLAS Institute (https://www.colorado.edu/atlas/ictd/) webpage.

Code	Title	Credit Hours
Core Courses		
ATLS 5230	Case Studies in Social Impact	3
ATLS 5240	Technology for Social Impact Laboratory	3
ATLS 5430 or CVEN 5919	Design Methods Global Development for Engineers	3
ATLS 5650 or ATLS 5660	Introduction to Programming Creative Code	3
ATLS 5250	Fieldwork Methods	3
ATLS 5410	Creative Technologies	3
ATLS 6910	Social Impact Practicum	6

Two-Year Plans of Study

Creative Industries Track

Year One

Fall Semester		Credit Hours
ATLS 5420	Professional Seminar: Business of Creativity	3
ATLS 5430	Design Methods	3
ATLS 5650 or ATLS 5660	Introduction to Programming or Creative Code	3
	Credit Hours	**9**
Spring Semester		
ATLS 5410	Creative Technologies	3
Focus Elective 1		3

Focus Elective 2		3
	Credit Hours	**9**
Year Two		
Fall Semester		
Focus Elective 3		3
Focus Elective 4		3
ATLS 5440	Design Studio	3
	Credit Hours	**9**
Spring Semester		
Focus Elective 5		3
ATLS 6920	Creative Industries Final Project	3
	Credit Hours	**6**
	Total Credit Hours	**33**

Social Impact Track

Year One

Fall Semester		Credit Hours
ATLS 5230	Case Studies in Social Impact	3
ATLS 5430 or CVEN 5919	Design Methods or Global Development for Engineers	3
ATLS 5650 or ATLS 5660	Introduction to Programming or Creative Code	3
	Credit Hours	**9**
Spring Semester		
ATLS 5250	Fieldwork Methods	3
ATLS 5410	Creative Technologies	3
Focus Elective 1		3
	Credit Hours	**9**
Year Two		
Fall Semester		
ATLS 5240	Technology for Social Impact Laboratory	3
Focus Elective 2		3
Focus Elective 3		3
	Credit Hours	**9**
Spring Semester		
ATLS 6910	Social Impact Practicum	6
	Credit Hours	**6**
	Total Credit Hours	**33**

Learning Outcomes

By the completion of the program, students will be:

- Positioned to achieve their professional goals both in industry and academic fields.
- Creative problem solvers, able to leverage principles of design and technology to arrive at an effective solution.
- Well versed in a wide range of technologies, able to respond to a complex and rapidly evolving sociotechnical landscape.
- Aware of societal impacts of designs and issues of equity and sustainability.
- Effective communicators of their interdisciplinary contributions as demonstrated through oral, written and visual communication outputs.