# CREATIVE TECHNOLOGY AND DESIGN MAJOR

The Creative Technology and Design major is offered by the ATLAS Institute through the College of Engineering and Applied Science. This unique degree infuses creativity and imagination into a technically rigorous engineering curriculum while emphasizing critical thinking, problem-solving, design and creative production. The program attracts designers, makers, tinkerers and builders–those with unorthodox perspectives and unconventional approaches to technology. Teaching diverse and adaptable skills, CTD equips graduates to address a wide range of 21st-century challenges and opportunities.

## CONTACT

**Marisa Pisaneschi**, Program Coordinator
**ctdprogram@colorado.edu**

## LEARN MORE

**colorado.edu/atlas/bsctd**

**ATLAS**



CREATIVE TECHNOLOGY AND DESIGN

CU Engineering & Applied Science
UNIVERSITY OF COLORADO BOULDER

# WHAT IS THE CTD MAJOR?

Students graduating from the Creative Technology and Design (CTD) major are prepared for technical careers in a wide range of creative fields. Through a curriculum that emphasizes project-based coursework, students develop engineering, design and critical thinking skills, making them uniquely versatile—able to tackle complex projects that span several disciplines.

During freshman and sophomore years, students complete the College of Engineering core curriculum along with CTD courses. During junior and senior years, students concentrate electives on one focus area, such as user interface and user experience (UI/UX), sound design, interactive computing, robotics, Internet of Things, physical computing, augmented and virtual reality (AR/VR), or game design. A two-semester capstone course, that includes one major project, completes the major.

CTD students are exposed to regular professional development opportunities, workshops and guest speakers. Many secure internships with industry partners and/or work in research labs. They enter the job market with robust portfolios of technical and creative work.

# CURRICULUM

**Engineering core curriculum (72-77 credits)**: mathematics, natural sciences, engineering and computation, humanities, social sciences & writing
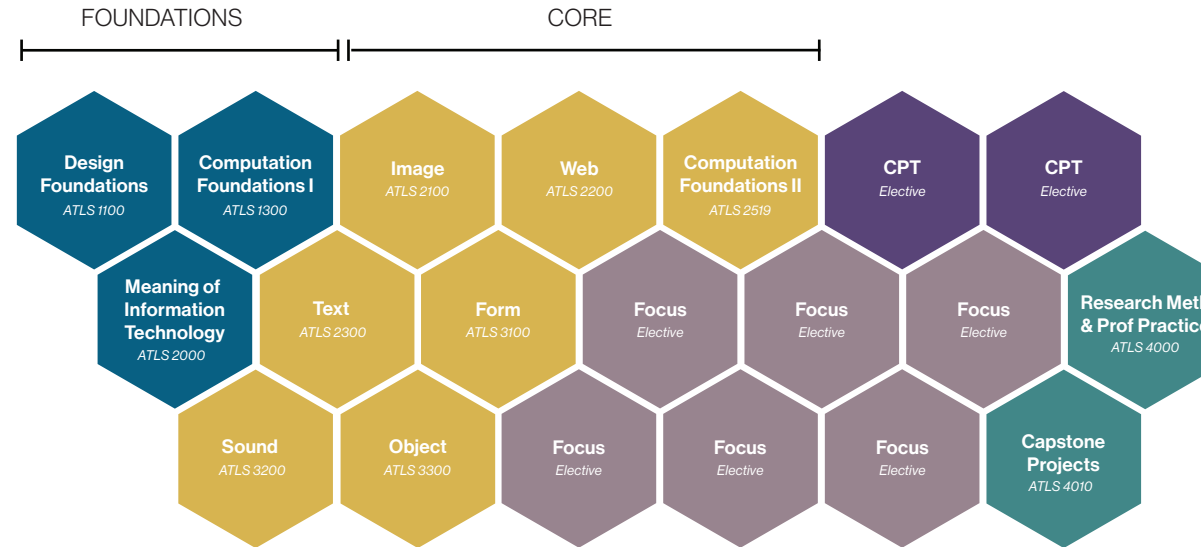
**CTD Foundations (9 credits)**: Design Foundations, Code, Meaning of Information Technology (MIT)

**CTD Core (18 credits)**: Image, Web, Text, Form, Sound, Object

**Focus Electives (18 credits)**: At least 12 of the 18 credits must be upper-division courses, and 12 of the 18 credit hours must be ATLAS courses.

**Critical Perspectives in Technology Electives (6 credits)**: At least 3 of 6 must be upper-division courses.

**Capstone Sequence (ATLS 4000 & 4010  8 credits)**: Two classes that culminate with a major thesis project.

FOUNDATIONS | CORE

- Design Foundations ATLS 1100
- Computation Foundations I ATLS 1300
- Image ATLS 2100
- Web ATLS 2200
- Computation Foundations II ATLS 2519
- CPT Elective
- CPT Elective
- Meaning of Information Technology ATLS 2000
- Text ATLS 2300
- Form ATLS 3100
- Focus Elective
- Focus Elective
- Focus Elective
- Research Meth & Prof Practice ATLS 4000
- Sound ATLS 3200
- Object ATLS 3300
- Focus Elective
- Focus Elective
- Focus Elective
- Capstone Projects ATLS 4010

# EXPLORE CTD & ENGINEERING

College of Engineering tours and informational sessions, including tours of ATLAS research labs and studios, are offered throughout the year. A schedule of events for prospective students is online:
**colorado.edu/engineering/admissions**

Prospective CTD students are also encouraged to email questions directly to CTD program staff:
**ctdprogram@colorado.edu**

# CAREERS

Graduates are prepared for a wide spectrum of existing and emerging fields:

- interactive design
- user interface and user experience design
- augmented and virtual reality
- digital content production
- web design and development

- computer graphics and visual communication
- game design
- digital sound and electronic music
- mobile app design and development

*"The Creative Technology and Design program develops students with a unique combination of the discipline of engineering, the complexities of software and hardware development, and the flexibility to design for the unpredictable future with uninhibited confidence."*

**Beth Galetti**
Senior Vice President,
Human Resources, Amazon
and parent of CTD alumna

# HOW TO APPLY

Students wishing to apply should follow the College of Engineering and Applied Science application process prescribed by the CU Boulder Office of Admissions:
**colorado.edu/admissions**

**Early Action Deadline: Nov. 15**
**Regular Decision Deadline: Jan. 15**