The BXA Intercollege Degree Programs provide an educational path for students whose goals are best achieved by integrating creative and academic work. Within Carnegie Mellon University’s world-renowned interdisciplinary environment, these students make their mark — their X — that defines an individualized education and career path. Here, academics and arts intersect in innovative opportunities.

**Challenge Definitions with a Multidisciplinary Perspective**

In our BXA programs, you’ll gain access to multidisciplinary courses that help you to create new ideas and challenge definitions. The X in BXA represents this — the variable that changes depending on the academic unit you choose to integrate with your College of Fine Arts concentration. Here, you’ll plot a course to discovery with classes that pique your interest and motivate your mind — arts blended with computer science, engineering, humanities or science. These degrees are uniquely Carnegie Mellon.

You’ll also engage in a Capstone Project that’s an essential component of your undergraduate experience, showing how success can be measured not just by your final output, but also by the process it takes to get there. You’ll work through your BXA Capstone alongside BXA faculty and an expert in your chosen field of interest. Many of these projects are successfully funded by grants.

**Did you know?**

Since 2008, 13 BXA students and alumni have been **AWARDED FULBRIGHT FELLOWSHIPS** to research and teach in Argentina, Finland, India, Indonesia, Malaysia, Mongolia, Netherlands, Serbia, Scotland, Spain, Thailand, Turkey and the United Kingdom.

Ninety percent of the 2022 BXA graduates achieved **UNIVERSITY AND/OR COLLEGE HONORS**.

BCSA seniors who present their Capstone Project at the **MEETING OF THE MINDS UNDERGRADUATE RESEARCH SYMPOSIUM** have the opportunity to win the Armero Award for Inclusive Creativity competition prize.

**Incoming Class**

**FALL 2022**

16

**Programs**

**Bachelor of Computer Science and Arts (BCSA)**

This program provides an ideal technical, critical and conceptual foundation for students pursuing fields that comprehensively meld technology and the arts, such as game design, computer animation, computer music, interactive stagecraft, robotic art and other emerging media. It integrates interests in the College of Fine Arts and School of Computer Science.

**Bachelor of Engineering Studies and Arts (BESA)**

This program weaves together coursework in the College of Engineering and College of Fine Arts. Students apply knowledge from dual fields to advance maker culture in novel and creative ways. Alternatively, students enrolled in the College of Engineering may obtain an additional major in Engineering and Arts (EA).

**Bachelor of Humanities and Arts (BHA)**

This program is tailored to students looking to pursue an interest in the College of Fine Arts while also pursuing an area of study within the Dietrich College of Humanities and Social Sciences. The program provides the flexibility for students to delve into their concentrations or explore other areas in which they may be interested.

**Bachelor of Science and Arts (BSA)**

This program is for students who wish to combine the rigorous science education of the Mellon College of Science with the artistic and technical resources of the College of Fine Arts. Students fuse their arts passion with a concentration in biological sciences, chemistry, environmental and sustainability studies, mathematical sciences, neurobiology or physics.
**Curriculum Overview**

You'll begin your education taking academic courses and creative studios alongside majors in your disciplines. In the spring, the BXA first-year interdisciplinary seminar introduces arts-based research and modes of representation across media through the Cabinet of Wonder/Wunderkammer model. BXA-specific courses in the second and third year will provide the guidance, structure, theory and research methods you'll rely upon as you bring together your two chosen concentrations.

In your fourth year, you'll complete a two-semester, research-intensive Capstone Project. Capstones range from papers, performances and games to apps, installations, business plans and beyond. The goal of the Capstone is to show how you've woven together the interdisciplinary elements of your coursework into an integrated project. It provides a concrete representation of your work that you'll present at the annual Meeting of the Minds Undergraduate Research Symposium, held each May.

Along the way, you'll receive advising support from various academic areas. In addition to a primary BXA advisor, you'll stay in contact with a College of Fine Arts advisor and an advisor in your academic concentration. Additional opportunities for growth include research and extracurricular activities within the university and Pittsburgh communities. BXA students are encouraged to study abroad to expand their interdisciplinary experience. On average, over one-third of BXA graduating seniors have studied abroad.

**Student Capstones and Research**

**Autobach**

Music composition has long been considered a purely artistic act. Alexander Kampas (BCSA 2022) ventured to explore how music can be written algorithmically with the use of computers, independent of humans.

**Mapping Cultural Regeneration**

Urban renewal is a constant and controversial factor in the design of our cities. Evelyn DiSalvo's (BHA 2022) project visualized the impact of cultural regeneration in Barcelona and offered suggestions for a more equitable implementation of urban redevelopment, such as the construction of museums and arts programming.

**Sensors for New Interaction**

Perry Naseck (BESA 2022) utilized capacitive touch sensors embedded and hidden in objects to detect human presence, touch and proximity in localized areas around sculptures and installations.

**Spatial Audio Installation**

Miles Scharff (BSA 2022) constructed a wave field synthesis system, which allows for the fluid reconstruction and placement of spatial sound sources. This system was installed in Phipps Conservatory and Botanical Gardens Monet in Bloom flower show.

**Alumni Accomplishments**

Wick Editor, which began as Luca Damasco's (BCSA 2017, HCI 2018) BXA capstone project, has been used by millions. In 2018, the free open-source tool for creating games, animation and interactive media was winner of a $79,120 grant from the Mozilla Open Source Support program. The platform has recently been gifted to Carnegie Mellon's Entertainment Technology Center as a free educational tool for K-12+ students and educators.

Kaytie Nielsen (BHA 2016) built on her successes in filmmaking and social justice advocacy as a Marshall Scholar, studying screenwriting in the United Kingdom. She previously won a nationally competitive fellowship from the Henry Luce Foundation providing stipends, language training and individualized professional placement in Asia. She also received a Fulbright Award as a first-year creative writing and directing student.

__AVG STARTING SALARY__

$82,550

**GRADUATE SUCCESS**

Employed or in grad school within six months of graduation

89%

DATA AS OF JANUARY 2022

93% OF GRADUATES RESPONDING

**RECENT EMPLOYERS**

- Achieva
- Adobe
- Cartoon Network
- Deeplocal
- Google
- J.P. Morgan
- Morningstar
- National Institutes of Health
- Pixar
- National Institutes of Health
- Pixar

“The energy and excitement for learning in the BXA community is universal.”

- George, BSA, Class of 2024

Carnegie Mellon University

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