Carnegie Mellon University

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. Project funding is available through BXA as well as other grant opportunities.

The BXA programs experience promotes lifelong success, leadership and growth. All of which lead to creative excellence, intellectual excellence, innovation and independence. Graduates are prepared for careers in a variety of fields, including positions with arts and education nonprofits like museums and foundations, as well as technical positions with media and technology companies. Recent BXA graduates have also pursued medical, dental, law, professional, MFA and Ph.D. programs at top-ranking institutions.

INCOMING CLASS

— *FALL 2023* **24**

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.

Eighty-nine percent of the 2023 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.

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.

BXA INTERCOLLEGE DEGREE PROGRAMS

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.

"THE ENERGY AND EXCITEMENT FOR LEARNING IN THE BXA COMMUNITY IS UNIVERSAL."
—GEORGE, BSA, CLASS OF 2024+

Student Capstones and Research

Generative Drawing Assemblage
Himalini Gururaj's (BCSA 2023) online tool allows users to make small drawing tiles and then generatively assembles them into a larger drawing according to user annotations on the smaller tiles. This outputs an SVG which can be used with a pen plotter.

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.

The Slipping Nymph
Julie Scharf (BHA 2023) created an original illustrated fairy tale about a young nymph exploring their identity by shapeshifting into different river creatures. The story is based on a series of costumes accepted into the Prague Quadrennial of Performance Design and Space on view in the Emerging Designer exhibition.

Cooperative Skill Mechanistic Analysis: An ERP Approach
Cooperative skill is an important component in everyday life. Henry Liu's (BSA 2023) study investigates the neural correlates of cooperation and the mechanisms behind human interaction.

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.
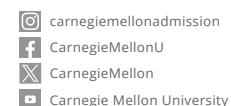
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