Computer Science and Design Innovation Linked Learning Pathway @ East Bay Innovation Academy

EBIA Linked Learning Pathway Mission

EBIA upper school is centered around a "Computer Science and Design Innovation" Linked Learning pathway which supports the school's overall mission "To prepare a diverse group of students, who reflect the Oakland community, to be successful in college and to be thoughtful, engaged citizens who are leaders and innovators in a 21st century global world," EBIA integrates rigorous and relevant academic and technical learning to create an authentic project-based learning environment. EBIA fosters social and emotional skills students need to be leaders and changemakers as well as opportunities to extend learning through internships, field experiences and community-based practica. Students grow to be problem solvers and advocates who utilize computer science, technology, and the design process to create innovative solutions. When students leave EBIA, they are ready for college and career success and to be leaders in their communities.

What is a Linked Learning Pathway?

The Linked Learning approach integrates rigorous academics that meet college-ready standards with sequenced, high-quality career-technical education, work-based learning, and supports to help students stay on track. It provides students with the knowledge, skills, and experience necessary for success in college, career, and life.

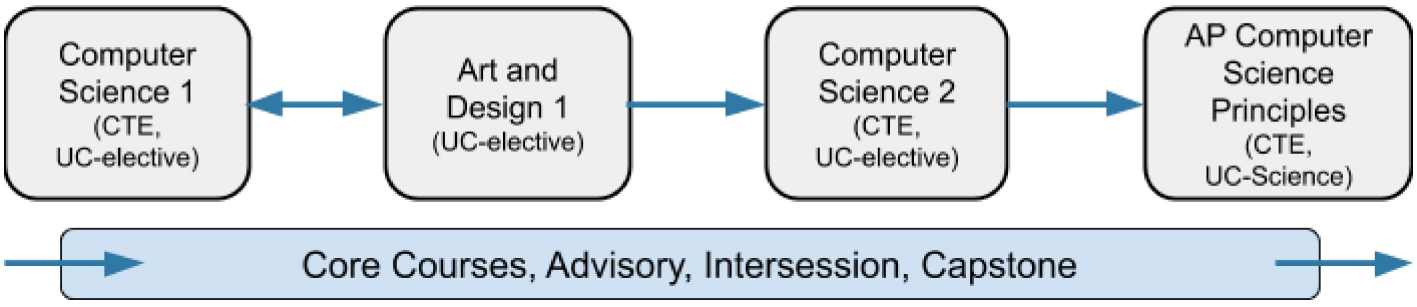
Why computer science?

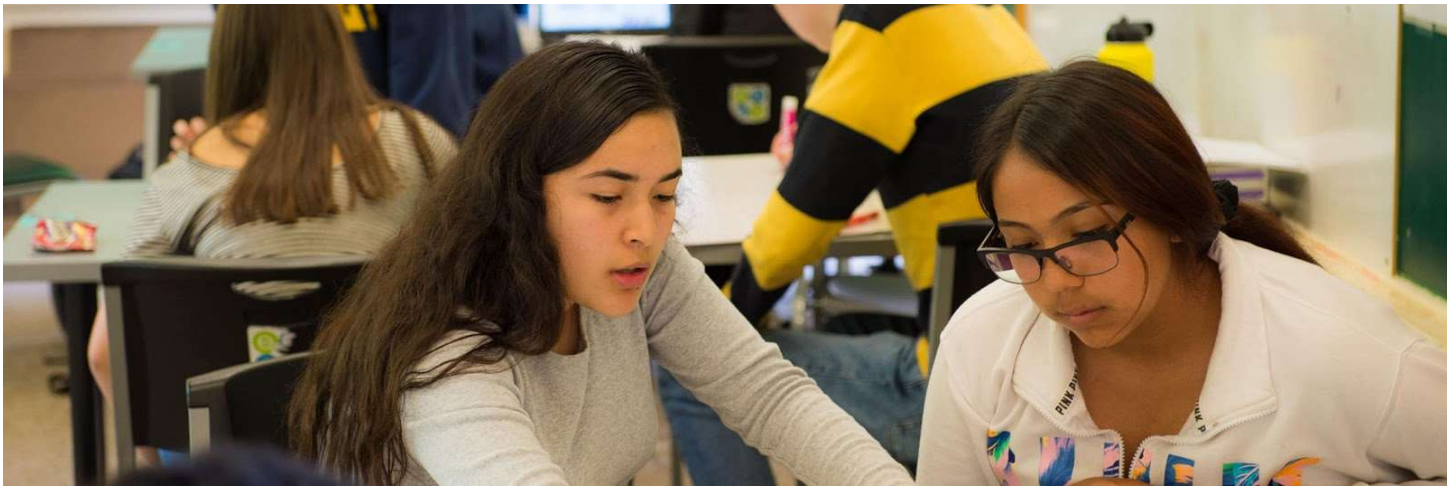
Computers have become the defining technology of the 21st century. At home and at work, Americans interact with technology in nearly every aspect of their daily lives. We believe that no single skill makes a job applicant more universally qualified than digital literacy. Having strong computer science skills is also an essential component of college success. Our pathway prepares students with the skills to succeed in computer science or any major or career that involves technology, innovation and design.

What is the EBIA Linked Learning Pathway?

EBIA has a pathway approach that focuses on computer science, design, and innovation. Students move from a general introduction to computer science and design in their freshman and sophomore years, through increasingly more challenging technical courses that result in mastery of specialized digital skills and complex design concepts.

Linked Learning Pathway Progression





Intersession

At EBIA, intersessions happen 3 times a year and are focused on in-depth elective courses and internships with community organizations and local businesses. Intersession enables students to explore an area of passion and gain real-world experience. Examples include: information technology internship, computer science internship (app design), digital beat-making, wearable technology, entrepreneurship, and design/build a maker-space.

Advisory and College/Career Counseling

At EBIA, students participate in 4 years of advisory. In 9th and 10th grade, there is a focus on both social/ emotional learning and college/career exploration and preparedness. All students track progress toward graduation, preparedness for college/career success, and develop goals through a personalized learning plan. All students receive 1:1 college and career counseling from both their advisor and a dedicated counselor.

Capstone Projects and Project-Based Learning

100% of students participate in a yearly school-wide cross-curricular Capstone project which lasts approximately 3 weeks. Projects include all academic core content areas and computer science/CTE components. All students present their work to community and industry partners. Students at EBIA is learn through projects that leverage technology and real-world connections. We strive to include opportunities to utilize computer science, design, and innovation in as many learning experiences as possible. Some examples include:

- **Capstone** - Videos/Innovation/Design for change - Students learn about a problem in their community, and utilize English, history, math, science, and computer science to design a digital product or device to address that issue. They present their solution/product to an authentic audience for assessment and feedback.
- Students design, create and present candidate websites to an authentic audience, with the goal of persuading their peers to register for their party and vote for their candidate.
- Students design a new roof, tiny house, garden structure, etc. for a customer, receive guidance and feedback from an industry partner, and present professional scale drawings to the customer.
- Students create websites, games, or simulations to model natural phenomena and have a chance to skype with scientists who create/use computer models.
- Students create podcasts, videos, and websites for digital storytelling and literary analysis.