

What is STEAM?

STEAM is an integrated approach to learning that uses any combination of STEAM areas of study—Science, Technology, Engineering, and Math—as access points for inquiry, dialogue, and critical thinking. Additionally, it integrates STEM principles in and through Art and Design (the “A” in STEAM).

Who is STEAM for?

STEAM at the Library is for everyone in our community. A recent Cambridge Public Library survey revealed that patrons of all ages are interested in various STEAM learning opportunities. It is important for public libraries to support innovators of all ages as they explore and learn. In an innovation economy where the very nature of work is shifting, and a significant percentage of job sector growth is in STEAM related fields, guided experimentation with emerging technologies and facility with iterative problem solving have become essential to bridging opportunity chasms in our society.

What is currently offered at the Cambridge Public Library?

The Cambridge Public Library already offers STEAM learning activities and workshops and plans to expand our offerings to build a robust STEAM at the Library program. Past workshops for youth include building with robotic Legos, coding with Raspberri Pis, and in a collaboration with Akami, students took part enacting network components to viscerally understand how the internet works. The Library partners with Innovators for Purpose to facilitate 3D modeling technology and modeling concepts to middle schoolers. The Library also partners with Girls Who Code, a club offering computer science education and tech industry field trips to girls in grades 6-12. Additionally, Book Shop is an ongoing hybrid book group and makerspace workshop for youth. Our current offerings can be viewed [here](#).

Why is the Cambridge Public Library making STEAM equipment available and offering more STEAM learning opportunities?

Public libraries promote equality and opportunity by fostering literacy and skill acquisition through an individual’s entire lifespan. Libraries have traditionally provided free, confidential assistance as patrons develop reading, writing, language, information, and digital literacy. Libraries also foster the acquisition of skills necessary for a lifetime of satisfying employment.

The role of the Cambridge Public Library is to create learning opportunities for residents of all ages in a rapidly evolving creative, scientific, and technological landscape. This aligns naturally with the Cambridge Public School Department’s and the Cambridge [STEAM Initiative’s](#) strategic plans. To fulfill our mission of being a doorway to opportunity and learning, the Cambridge Public Library is committed to devoting resources in the form of space, expertise, networking and learning opportunities for patrons of all ages to acquire and expand their STEM literacy skills. We are

transforming space at the Main Library to augment existing public service areas, building staff capacity by hiring and training, and building upon current STEAM programs at all library branches to create new opportunities for Cambridge youth and adults.

When will the renovations take place for STEAM facilities?

Over the next year, the Library will open a number of spaces aligned to these efforts including a makerspace, a technology-enhanced classroom, a technology café, and multimedia recording studios. The Library is currently in the design and development stages of these new spaces. Renovations are expected to be completed in fall 2019 and we look forward to unveiling the new spaces in early 2020. For more information on the timeline, please click [here](#).

Will STEAM affect current library collections?

As part of maintaining a current and robust collection while also supporting the Library's new STEAM initiative, collections have been moved throughout the building. We continually seek to improve the quality of our collections and to promote easy access and discoverability for our patrons. No collections were reduced in order to effect this change. In fact, over the last 6 years, the adult collection has grown by 10,000 volumes.

Will there be STEAM offerings at the branches?

In addition to supporting STEAM at the Main Library, the six neighborhood branch libraries will play an important part of introduction of and exposure to STEAM learning opportunities. This will include collaborations and strategies developed in partnership with local assistance programs, schools, and services, including Cambridge Housing Authority, Department of Human Services Out of School Program, Agenda for Children, Center for Families, Baby University, and neighborhood schools and community spaces. Pop-up STEAM demos are envisioned, such as showcasing [cloud chambers](#) at the Central Square Branch and at the O'Neill Branch in North Cambridge. We now have circulating [STEAM kits](#) across all branches filled with materials to continue exploring at home.