## K-12 Out of School Time Opportunities in STEAM

## **Elementary School**

Grade(s)	Program	Focus	Cost	When
K-5	Science Club for Girls (currently programs are virtual; in-person will be available at some schools in 2022-2023)	Science, engineering, CS, applied math, STEM career pathways, mentorship (NOTE: This program is for girls and gender expansive youth.)	Free	School year
3-5	Cambridge Math Circle	Math, collaborative problem solving	Varies; scholarships available	School year and summer
4-5	Tutoring Plus: Math Plus	Applied math	Free	School year
Rising 2-5	Empow Studios	Coding, robotics, film, animation, Minecraft, engineering	\$839+/week	Summer
pK -12	Full STEAM Ahead	10 asynchronous packages for learners of all ages from MIT	Free	School year / Summer (virtual)
K-12	The Edgerton Center	Engineering and Imaging	Free	School year/ Summer

## **Upper School**

Grade(s)	Program	Focus	Cost	When
6-8	Cambridge Math Circle	Math, collaborative problem solving	Varies; scholarships available	School year and summer
6-8	BioCoding Club with Broad Institute (for more info contact: Ashley Johnson; ajohnson@broadinstitute.org)	Applied computer science and computational thinking, biology	Free	School year
6-8	Innovators for Purpose: iFp Labs	Sparking curiosity by connecting to science and math, design thinking and problem solving	Free	School year
6-8	Science Club for Girls Junior Mentoring Program	Leadership, science, engineering, STEM career mentorship (NOTE: Only for girls and gender expansive youth)	Free	School year

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6-8	Tutoring Plus: I Build	Engineering and applied math	Free	School year
6-8	Tutoring Plus: T++ Coders	Coding (Python) and problem solving	Free	School year
Rising 7-8	Summer Camp @ Novartis (1 week program)	Introduction to cell biology and biotech lab skills	Free	Summer 2022 (8/15-8-19)
Rising 6-8	Science Club for Girls: Summer Rocketry Program	Introduction to rocketry and aerospace career paths (NOTE: Only for girls and gender expansive youth)	Free	Summer (3 options for 2 week sessions)
Rising 6-8	Empow Studios	Coding, robotics, film, animation, Minecraft, engineering	\$839+/week	Summer
6-8	Cambridge Science Festival	Public celebration that offers a wide range of STEM related activities, performances, workshops, etc.  Over a period of several days in a variety of locations.	Free	School Year (October 3-9) at the Kendall/MIT Open Space!
7-8	SPARK through MIT Educational Studies Program (ESP)	Take classes taught by MIT students about anything and everything.	Program costs \$40 (financial aid is offered)	School year; One weekend in March
Rising 7-12	HSSP through MIT Educational Studies Program (ESP)	A multi-weekend program where hundreds of middle/highschoolers come to take classes, both academic and non-academic, at MIT.	Entire program cost \$40 paid online *Generous financial aid is available	Spring; Saturday afternoons from February - April Summer; Saturdays from July -August
7-10	SEED Program	Hands-on courses to new areas of STEM	Free	School year
7-12	DigiGirlz	Hands-on computer workshops with Microsoft employees!	Free	School-year
7-12	<u>Innovators for Purpose</u>	Integrating STEAM to create real-projects for real-clients	Free	School-year

## **High School**

Interested teens should reach out to Nina Nolan, STEAM Internship Coordinator in the Office of Workforce Development (nnolan@cambridgema.gov) for support with their applications.

Grade(s)	Program	Focus	Cost	Program Type	When
9-11	CASCADE through MIT Educational Studies Program (ESP)	STEAM topics and mentorship	Free	Classes	School Year, Fall (5 weeks every Saturday )
9-12	Innovators for Purpose: iFp Studios	STEAM and social justice, design thinking and problem solving	Free	Internship	School year, and summer through MSYEP
9-12	Science Club for Girls Junior Mentoring Program	Leadership, science, engineering, STEM career mentorship	Free	Enrichment	School year and some summer
9-12	Summer Exploratory Experience in Design (Sasaki Foundation's SEED Program)	Architecture, Interior Design, Planning and Urban Design, Landscape Architecture, Design Techniques and Processes	Free (and participants receive stipend)	Internship	Summer (6 weeks)
9-12	Sasaki Foundation SEED on-line courses	Architecture, Interior Design, Planning and Urban Design, Landscape Architecture, Design Techniques and Processes	Free	On-line course	All year (virtual)
9-12	SPLASH through MIT Educational Studies Program (ESP)	STEAM Topics	\$40 fee (Financial aid by request)	Classes	School Year, In-person on November 19-20
9-12	MIT BLOSSOMS	150+ STEM lessons and videos for High School students	Free	On-line lessons	All year (Virtual)
9-12	ACE Mentorship Program	Architecture, Engineering, and Construction Management	Free	Enrichment	School Year
9-12	MassRobotics Jumpstart Fellowship	Robotics	Free	Internship	Spring-Summer
9-12	BioStar: Bioengineering Science. Technology, and Research	Bioengineering, 3D Culturing, Cell Staining	Free	Enrichment	Summer

9-12	CyberStart America	CyberStart Games, Cyber Security.	Free	Enrichment	School Year (virtual)
Rising 10-12	Biogen-MIT Biotech in Action: Virtual Programs Summer 2022	Biotechnology, Parkinson's disease	Free	Enrichment	Summer (virtual program3 options for 2 week sessions)
Rising 10-11	Girls Get Math at Boston University	Math computation and experiments, mentorship	Free	Enrichment	Summer
10-12	Camp Zon (Boston Children's Hospital Stem Cell Program)	Cancer Biology and Blood Development Research	Free (and participants are paid)	Internship	Summer
10-12	Dana-Farber/Harvard Cancer Center	Hands on clinical and cancer research, and nursing	Free	Internship	Summer
10-12	Harvard-MIT Science Research Mentoring Program	Science, computer science, computational thinking, research	Free (and participants receive stipend)	Internship	School year
10-11	High School Health Careers Program (HSHCP) at the UMass Chan Medical School	Biomedical research, Biotechnology, Health	Free	Internship	Summer
10-12	Lincoln Laboratory Cipher Program	Introduction to cryptography, mathmentics, and cyber security	Free	Enrichment	Summer
10-12	Microsoft New England High School Summer Camp	Technology, Computer Science	Free	Enrichment	Summer
10-12	NASA Virtual Volunteer - Aviation System Division	NASA Aeronautics, Air Traffic Management (ATM)	Free	Internship	Summer

10-12	ZooTeen Program	Zoology, science education and outreach, animal care	Free (and participants are paid)	Internship	Summer
Rising 12	Broad Summer Scholars Program	Scientific research, STEM career mentorship, science presentation	Free (and participants receive stipend)	Internship	Summer (6 week session)
Rising 12	<u>Lincoln Laboratory</u> at MIT	Building radar systems with engineers and scientists	Free	Enrichment	Summer
Rising 12	Women's technology Program at MIT	Computer Science, Electrical and Mechanical Engineering	Free	Enrichment	Summer
Rising 12	Young Scholars Program at Northeastern University	Hands on research, Science, Engineering, Health Sciences	Free	Internship	Summer
Rising 12	Youth Neurology Education and research Program at Mass General	Neurology, medical research	Free (and participants are paid)	Internship	Summer

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This resource was created by:



For more information go to: https://www.cambridgema.gov/steam