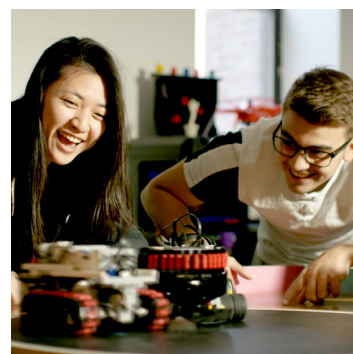
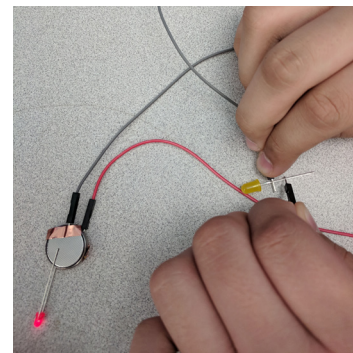




STEM



“Explore ideas, create electronic circuits and learn how to design and fabricate 2-D and 3-D laser cut objects in the CATS Innovation Lab on campus. Create 3-D artwork, light fixtures, puzzles, architectural models, 3-D sculptures and more. This program will inspire you to apply your knowledge of Science, Technology, Engineering and Math.”



BOSTON, USA

WHAT'S INCLUDED:



TUITION

Workshop based study will be facilitated by light, quick content tuition. The course will incorporate Science, Technology, Engineering and Maths projects as well as group work to apply theory and students will work towards a final presentation.



INNOVATION LAB

Practical workshops in our innovation lab are a key element of our STEM course and will allow theory learnt to be put into practice



ACTIVITIES

We offer a variety of onsite activities including sports, arts and crafts and team games. Our activities provide opportunities for students to use the English they have learnt and make international friends.



EDUCATIONAL VISITS

Our educational visits provide the perfect complement to lectures and workshops and provide a real world perspective to our courses. Visits may include Harvard University, Boston Aquarium and the MIT Museum.



EXCURSIONS

Excursions allow students to really get to know the USA. We use destinations such as Downtown Boston as a classroom, where students will find historic and cultural information through guided walking tours and visits to museums and other places of interest.



CERTIFICATE

Awarded for the successful completion of the course.

STEM

DEVELOP YOUR CREATIVITY

COURSE OVERVIEW

Participants will take part in lectures, workshops and lab-based lessons as well as visits to local places of relevant interest. The course focuses on the application of Science, Technology, Engineering and Maths to a series of real-world problems. The CATS Boston Innovation Lab allows our students to explore ideas, experiment with materials and build their own devices. The city of Boston and its environs will serve as an extension of the classroom through visits to Harvard, Boston Aquarium and MIT Museum.

PROGRAM OUTCOMES

You will:

- Learn how science, technology, engineering and math work in the real world.
- Build teamwork and project management skills.
- Learn how to build and program electronics and apply your knowledge by completing a Robot-building project.
- Learn how to use open-source technology to develop and practise coding skills.
- Visit local STEM institutions.

ACTIVITIES & EXCURSIONS

One full-day and four half-day excursions per week are included. Destinations may include Rhode Island, Canobie Lake Park and New York City. Evening activities are varied and fun and may include discos, talent shows and international evenings.

COURSE INFORMATION

CLASS SIZE:	Maximum 16	AGE RANGE:	14 - 17	COURSE LENGTH:	1 - 4 weeks
ACADEMIC REQUIREMENTS/ LANGUAGE LEVEL:	Upper Intermediate B2 level recommended	START DATES:	27 June to 1 August 2027	SPECIALIST HOURS:	18 hours per week
ACCOMMODATION: Single en-suite room. Meals are included (breakfast, lunch and dinner)					

SAMPLE PROGRAM

WEEK 1		MORNING		AFTERNOON		EVENING	
		09.00 - 12.00		13.00 - 16.30		19.30 - 22.00	
SUN	BREAKFAST	Arrival and Local Orientation				DINNER	Orientation Activities
MON		Introduction to Bridge Mechanics	LUNCH	Included Half Day Excursion: Boston Freedom Trail & Quincy Market	Ice Breakers		
TUES		Lesson: Bridge Testing		Included Half Day Excursion: Boston Harbor Cruise & Tour	Game Show		
WEDS		Introduction to Image Processing: cosmology, our solar system, and the endurance of astronauts in space		Included Half Day Excursion: Harvard University Tour & Cambridge area	Sports or Board Games		
THUR		Estimating the length of a molecule		Introduction to Robotics	Karaoke & Talent Night		
FRI		Seminar on building a practical robot		Included Half Day Excursion: Newbury Street Shopping & Copley Square Tour	Fourth of July Celebration		
SAT		Included Full Day Excursion: New York City					

WEEK 2	MORNING		AFTERNOON		EVENING		
		09.00 - 12.00		13.00 - 16.30		19.30 - 22.00	
SUN	BREAKFAST	Onsite Activities e.g. Arts & Crafts and Sports, Shuttles to the Mall, or Optional Full Day Excursion (at extra cost -please book before arrival)					
MON		Students operate a guided robot	LUNCH	"Included Half Day Excursion: Boston Aquarium"	DINNER	Welcome Party	
TUES		Introduction to 2-D and 3-D designing		Included Half Day Excursion: Premium Outlets Shopping at Wrentham		Halloween Party	
WEDS		3-D Design		Included Half Day Excursion: MIT Tour		Sports or Board Games	
THUR		Introduction to 9-Volt Car Design		Build 9 volt Car		International Night	
FRI		Car testing		Included Half Day Excursion: Historical Tour of Plymouth		Movie Night	
SAT		Included Full Day Excursion: Canobie Lake Amusement Park					
SUN		Departure					

This is a sample program and all elements may be subject to change.