

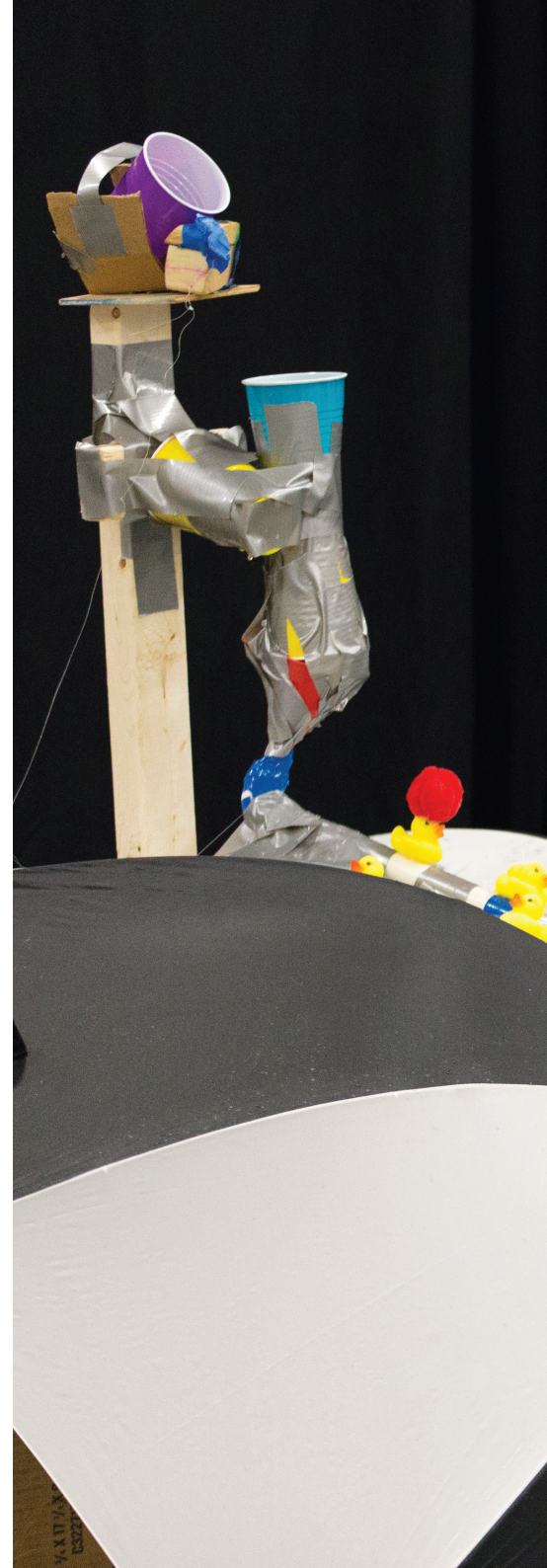
The  
MIT-Nord Anglia  
STEAM  
*Programme*



# Helping your child *invent* the future

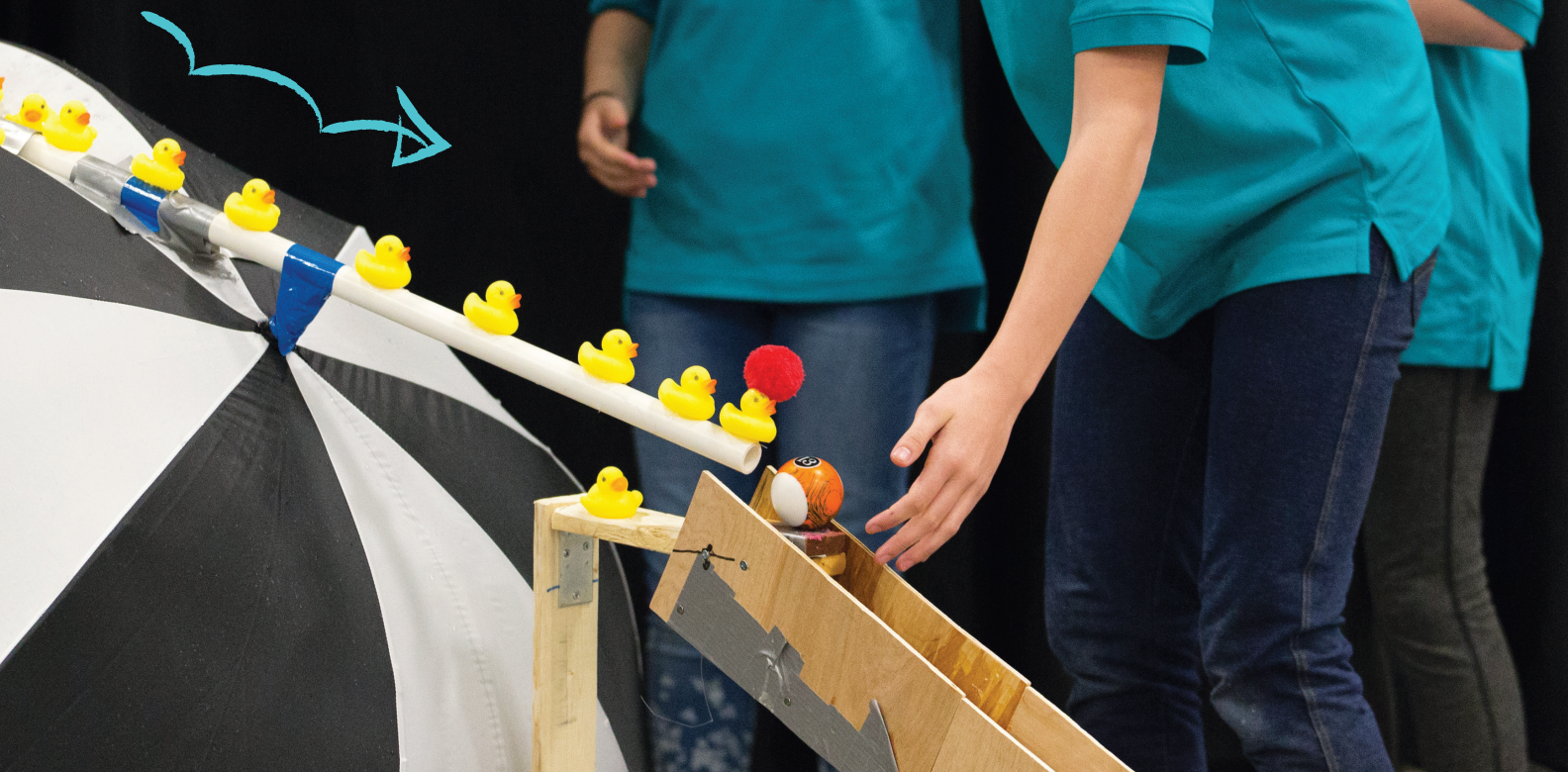
Succeeding in the 21<sup>st</sup> century means learning how to think, not what to think. Nord Anglia Education's collaboration with Massachusetts Institute of Technology (MIT) is designed to prepare students for our rapidly evolving world, equipping them with the skills and techniques to thrive. Through hands-on, interdisciplinary learning of STEAM subjects (science, technology, engineering, art and maths), your child will develop the transferrable skills needed to invent the future they will ultimately inherit.

**Science**  
**Technology**  
**Engineering**  
**Art**  
**Maths**



“Sharing this with students will embolden them to take risks, make mistakes and get messy. It will ensure that they become creative problem solvers as they head into an uncertain future.”

Tom Collins, Head of STEAM,  
British International School of Chicago,  
Lincoln Park





## Why STEAM?

STEAM brings together science, technology, engineering, art and maths based on the belief that innovation is often found where different subjects intersect. By learning these subjects at the same time, students consider a wider range of perspectives when solving a particular problem. Whereas traditional learning develops fact-based knowledge around individual subjects, our STEAM programme develops the skills needed to thrive in our dynamic world – flexibility, critical thinking, creativity and communication.

A strong body of evidence also suggests that STEAM has a beneficial impact on learning across the board precisely because it helps develop transferrable skills. STEAM learning fuels innovation and creativity, and improves collaboration.

“There was a good variety of activities and new experiences which helped our students to develop social skills, teamwork skills and skills within the STEAM curriculum.”

Melissa Neal, Science Specialist,  
British International School of Chicago,  
South Loop

## Inspiring interdisciplinary thinking through MIT

Our STEAM programme is guided by MIT's core philosophy of 'Mind and Hand,' a hands-on approach to learning across subjects aimed at developing vital transferrable skills through experimentation, trial and error, and creativity. As a world leader in innovation, MIT's current research and education includes digital learning, nanotechnology, sustainable energy, the environment, climate adaptation and global food and water security.

This cross-functional approach to STEAM exemplifies how we can prepare students to thrive in the real world. It works on the premise that the world is complex and messy, and problems cannot be solved through knowledge of a single subject alone. Challenges are multifaceted and the thinking needed to find a solution must be equally dynamic.



## Programme Overview

The MIT-Nord Anglia STEAM Programme enables students to experience a university-inspired approach to learning STEAM subjects. Students will learn from MIT researchers, scientists and experts at the forefront of these fields, as well as taking a hands-on approach to problem solving.

1. In-School STEAM Challenges
2. NAE STEAM week @ MIT
3. Specialised Teaching



### 1. In-School STEAM Challenges

Each year, MIT faculty will set three real-world, open-ended tasks for students. These challenges require your child to work in teams to solve issues using ideas which cross disciplines. Designed to test students' problem solving capabilities, refine transferrable skills, develop interdisciplinary approaches, and encourage thinking outside of the box, these series of challenges will be interconnected and span the academic year. The challenges will vary from year-to-year, focusing on themes such as space, nanotechnology, building future cities and genetic engineering. Students will need to find solutions for these challenges with a sense of global mindedness and community awareness in the spirit of MIT's mission.

“Every part of STEAM was experienced and it was both educational and fun.”

Sophia, Year 6,  
British International School of Chicago,  
South Loop







“The trip was fun and exciting and the opportunities to spend time on the campus of MIT and Harvard were exceptional.”

Luke, Year 6,  
British International School of Chicago,  
Lincoln Park





## 2. NAE STEAM week @ MIT

Every spring, selected students will have the opportunity to explore MIT and immerse themselves in its culture of hands-on problem solving. Your child will interact with leading MIT professors and researchers in activities that expose them to the leading edge of scientific exploration. A series of engaging workshops such as coding, robotics, bioengineering and nanotechnology will guide your child's imagination and help them solidify complex ideas. Campus tours of Harvard University and MIT will also inspire students with a taste of college life in the United States. The weeklong event will be sure to motivate young learners in the world of scientific inquiry.

## 3. Specialised Teaching

Our STEAM teachers are passionate about the subjects they teach. They will guide your child's learning experience through science, technology, engineering, art and maths, encouraging students to holistically combine concepts and techniques from each. In addition to spearheading STEAM learning in schools, these teachers receive ongoing professional development from leading MIT experts to ensure that your child

benefits from the most current knowledge of the latest developments in these fields. This unique training opportunity includes a range of workshops, from learning about nuclear energy with plasma physics researchers, to an examination of aeronautics and astronautics. Throughout the year, MIT researchers will advise STEAM teachers to keep them up to date with latest developments and help them to evaluate the STEAM challenges.



## Developing skills today, so that your child can *succeed* tomorrow

65% of students starting school today will work in a job that doesn't yet exist. We are dedicated to equipping our students with the skills required for them to flourish in the classroom today and the workplace of the future.

Working closely with MIT, we have developed the STEAM curriculum to focus and nurture the key skills that they will require for success. We call these our learner ambitions.

“At MIT, we focus on inventing the future. We push past the edges of human understanding. We make new ways of seeing, and we see new ways of making.”

L. Rafael Reif,  
MIT President





## *Ignite curiosity*

We urge our students to question how and why things work the way they do. By searching for connections and relationships in the world, your child can start to face the unknown with confidence. Applying knowledge, skills and imagination helps them look beyond the ordinary to develop creative ways of thinking, expressing and solving problems.

## *Encourage ingenuity and innovation*

Students are encouraged to approach problems from a range of perspectives, identities and roles, incorporating skills and theories from different subjects. This helps them think of traditional subject boundaries not as barriers to solving a problem, but as opportunities to find new solutions.

## *Solve complex challenges*

A key focus is developing practical, hands-on and exploratory approaches. Our students learn and work together to tackle real world problems, creating solutions that make a meaningful impact.



## About MIT

The mission of the Massachusetts Institute of Technology (MIT) is to advance knowledge and educate students in science, technology and other areas of scholarships that will best serve the world in the 21st century. Founded in 1861, MIT is a community of hands-on problem solvers with a passion for fundamental science and eager to make the world a better place. That spirit continues to guide how the university educates students on campus and around the world. MIT's interdisciplinary exploration has fuelled many scientific breakthroughs and technological advances including major contributions to the Human Genome Project, the creation of GPS, and the pioneer of 3D printing among other things.

