

2023 International STEM Challenges

Date: July/ Dec

Venue: United Kingdom/ virtually



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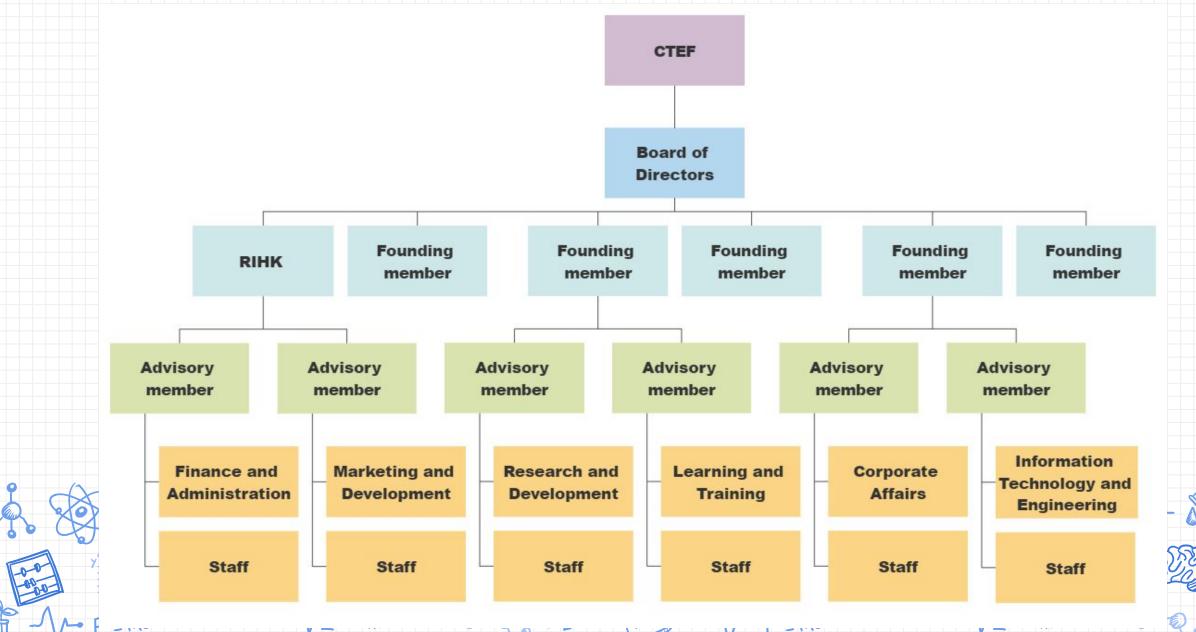


Children's Technology Education Foundation

The Children's Technology Education Foundation was founded in 2017 (according to the charitable institution or trust of a public character, which is exempt from tax under section 88 of the Inland Revenue Ordinance, Hong Kong). CTEF is committed to promote science and technology education by providing and designing innovative and diversity in science and technology, and also supporting students to participate in global science and technology competitions. It is to enhance the level of science and technology academically. CTEF supports families with financial difficulties by assisting their kids to participate in science technology-related courses, to cultivate students' curiosity about the world and enhance scientific thinking. Furthermore, CTEF promotes partnership between business and social welfare through scientific and technological activities to create a harmonious community together.



Organization Chart



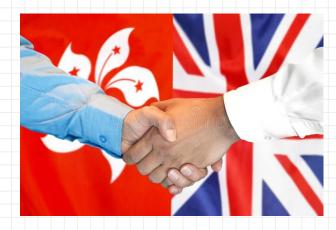
Introduction

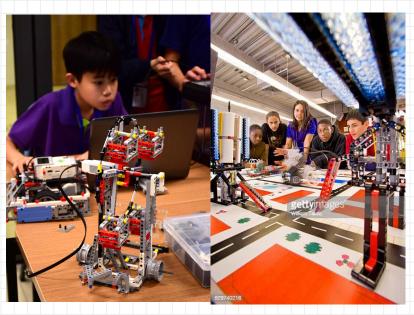
- Great opportunity for middle school, high school and post secondary students (Full cycle)
- STEM experience
- Hands on & realistic approach
 to learning
- Teamwork, leadership, problem-solving skills



Objectives

- Promoting world-class UK education
 to Primary and Secondary students
- Bridging Opportunities
- Bridging the STEM skills gap
- More Than Robotics
- Building the people who will change the world - today and tomorrow
- Nurturing tomorrow's engineers





About...

International STEM Challenges

Inspire

- Inspire students to actively work on meaningful projects that solve real world problems beyond the classroom
- Inspire passionate and driven students' scientific curiosity in the field of robotics and technology

Enduring Skills

Students need to learn fundamental skills that are essential now and for the foreseeable future:

- Learn
 - Risk taking
 - Collaborate
 - Experiential, self driven learning
 - Practical design, mechanical and programming skills

Bridge Opportunities

Connect students with opportunity by bridging:

- Companies/industry
- Likeminded students from different cultures
- Mentors and experts
 With
- Hong Kong Students

Collaboration with UK universities

- Promoting British values and education to students from young age
- Cultural exchange and life experiences in UK
- Cultivating computational thinking through student-robot interactions in robotics education
- Fostering relationship between UK and Hong Kong universities



Support from UK universities



- Appointing an engineering professor as founding member
- Competition judges
 - professor/ lecturer from engineering faculty (prefered robotics major)
- Student helpers
 - depends the local logistics flow arrangement
- Venue for competition
 - multipurpose hall/ gymnasium room (3 days usage inclusive of opening and closing ceremony and date to be discussed)
- School accommodation (optional)
- Awarding UK universities certificate
 - e.g., supported and endorsed by UK university

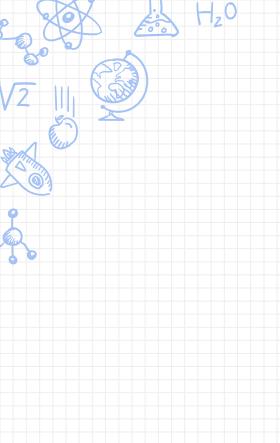
Marketing & Promotion

Digital marketing

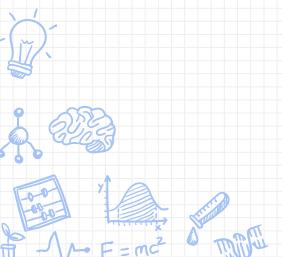
Promoting through established global network







Past event LAWRENCE TECHNOLOGICAL UNIVERSITY TIBLES TO THE TECHNOLOGICAL UNIVERSITY TO THE TECH

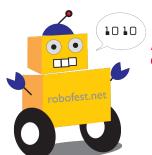




Hosted by Lawrence Technological University in the United States. Over 30,000 students from 20 different countries have participated since 1999.

Make young people interested in STEM fields. Improve their problem-solving skills. Prepare them to step in the technology and research industry.

Robot Institute of Hong Kong has started organising ROBOFEST and acting as a local volunteer sites to host events for teams in Hong Kong and Macau since 2016. With this opportunity to meet friends from all over the world and discuss our passion for robotics.













BOTTLESumo



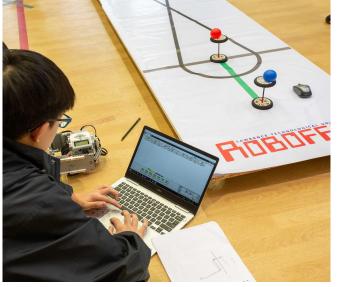










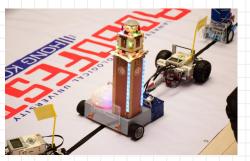


TIDELET Competition

- Category 1: Racing Battle (Primary and High School)
- Category 2: Robot Quidditch
- RobotSumo
- SMART Invention







Guidelines

For: Primary school, secondary school

Each team will consist of at most 4 students and 2 coaches

Competition method:

Participating teams will need to design their robot and program in accordance to the rules released by the organizing unit. On the day of the competition, teams should bring their robot, spare components and laptop to the competition venue

Competition Flow: Group stages -> Knockout stages

Outcomes

- To learn technical and non-technical skills in a competitive yet inspiring environment
- To meet and exchange ideas with other like-minded students from around the world
- To learn from and network with experienced industry experts
- Nurturing tomorrow's engineers



Supported by:

UK universities

HK universities

Global partners network

Congratulations!



Targeting:

- 10 UK schools
- 200 participants from HK,
 Macau, South Korea, UAE and others
- 100 teams final in UK university



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