

Hong Kong FLL ROBOTICS TOURNAMENT

香港FLL創意
機械人大賽

創意



■ Organizer 主辦機構：



香港青年協會
the hongkong federation of youth groups

■ Sponsors 贊助：



創新科技署
Innovation and
Technology Commission



■ Supporting Organizations 支持機構：



Members of VTC Group VTC 機構成員





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Hong Kong FLL Robotics Tournament 香港 FLL 創意機械人大賽

The Hong Kong Federation of Youth Groups introduced FIRST LEGO League International Programme to Hong Kong in 2005. The local competition known as Hong Kong FLL Robotics Tournament (FLL) has been warmly received by local schools since its launch, with over 6,500 participants from 190 schools and organizations.

Teams are required to

- ▶ Design, build and program a robot on their own in order to complete the missions on a table-top playing field
- ▶ Conduct a research on a real-world problem, such as energy crisis, food safety, trash recycling, etc., and create a solution with the knowledge of sciences and technologies.

Via FLL, students not only could learn various concepts of Science, Technology, Engineering and Mathematics (STEM), but also develop their creativity, teamwork and critical thinking, as well as cultivate their positive mind to face and solve different problems.

香港青年協會於 2005 年引入國際 FIRST LEGO League 活動，並在香港舉辦「香港 FLL 創意機械人大賽」(FLL)。自推出以來，參與學校及機構超過 190 間，參加人數亦超過 6,500 人。

參賽隊伍需要

- ▶ 自行設計、搭建及編寫程式，控制機械人完成桌面上的場地任務
- ▶ 透過科學與工程解決現時的世界性問題，例如：能源危機、食品安全及廢物處理等。

透過 FLL，學生除了可以輕鬆愉快地學習科學、科技、工程及數學 (STEM) 的概念外，亦可以透過解難的過程，發揮他們無限創意、建立團隊合作精神及鍛煉批判思維，以積極的態度面對及解決各項難題。

FORMAT of the FLL Tournament

大賽形式

This is a school-based inter-team competition that registration will be processed on a first-come-first-served basis. Each team comprises 5 to 10 students and 1 to 2 coaches.

這是一項以學校為基礎的隊制比賽（名額有限，先到先得）。每隊由 5-10 位學生及 1-2 位導師組成。

Teams will compete in two divisions:

Primary Division: for 9-12 years old

(< 13 years old before 1 August 2019)

Secondary Division: for 12-16 years old

(< 17 years old before 1 August 2019)

參賽隊伍會分為兩個比賽組別：

小學組：9 至 12 歲之學生

（在 2019 年 8 月 1 日前必須小於 13 歲）

中學組：12 至 16 歲之學生

（在 2019 年 8 月 1 日前必須小於 17 歲）

All teams will participate in **A. Robot Performance Challenges** and **B. Three Judgings** [Robot Design, Project Presentation (Research Poster) and Teamwork] in the Tournament Day. The winning teams may get the opportunity to represent Hong Kong to join the overseas tournaments competing and interflowing with teams around the world.

所有隊伍在大賽當天將會進行 **A. 機械人表現賽** 及 **B. 三大評審** [機械人設計、項目研究（研究海報）及團體合作]；最後勝出隊伍或有機會代表香港到海外參加其他國際比賽，與各地的隊伍切磋比試及作文化交流。

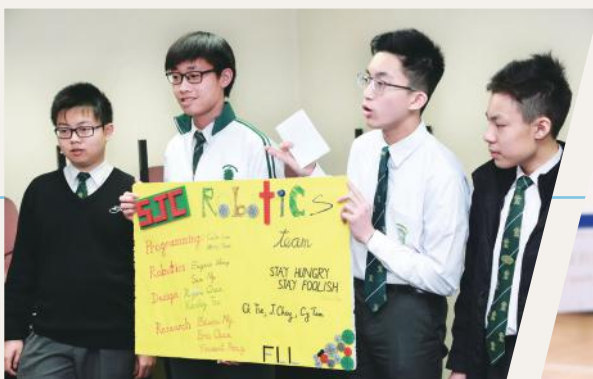
Each FLL Team must Prepare

每支 FLL 隊伍必須預備

- ▶ HK\$1000 Enrollment Fee (Successfully enrolled team can choose to join 2 Workshops)
- ▶ Robot with LEGO MINDSTORMS® Education NXT/EV3 Controller (must be labeled with Warranty and Official label)
- ▶ Field Set for Robot Performance Challenge
- ▶ The cost of materials for developing solutions
- ▶ 港幣一千元正報名費（成功報名的隊伍將可選擇參與兩節工作坊）
- ▶ 置有 LEGO MINDSTORMS® Education NXT/EV3 控制器（必須貼有保用及正貨認證標籤）
- ▶ 機械人表現賽的場地任務
- ▶ 用於解決難題所需物資的費用

Please see the detail at <http://ccst.hkfyg.org.hk>

以上詳情可登入 <http://ccst.hkfyg.org.hk>



MAJOR of FLL Tournament

CONTENTS FLL 大賽主要內容

A. Robot Performance Challenge

Teams are required to use LEGO MINDSTORMS® kit to construct and program their robots to complete as many missions as possible on a table-top playing field within 2.5 minutes.

B. Three Main Judgings

1. Robot Design

Teams are required to introduce their robot engineering, software programmes and strategies on the field, as well as answer the questions by the Judging Panel on their robot design.

2. Project Presentation

Teams are required to complete a research project according to the theme of the year and give a presentation on the research in various formats in front of the Judging Panel. It includes the reasons for choosing the research topic, the solutions of the real-world problem, and how the idea could be shared with others. Teams could also design and show a research poster to other teams for academic exchange.

3. Teamwork

Teams are required to complete a spontaneous task, and share their experience on their teamwork with the Judging Panel, in order to show the Core Value of FLL, including the sense of involvement, Gracious Professionalism® and Cooperation®.

A. 機械人表現賽

隊伍必須以 LEGO MINDSTORMS® 套件搭建機械人及設計電腦程式以驅動機械人於兩分半鐘內盡量完成桌面上各項的場地任務。

B. 三大評審範疇

1. 機械人設計

隊伍需要介紹他們所搭建的機械人、編寫機械人的程式及完成場地任務的策略，並解答評審團有關以上設計的提問。

2. 項目研究

隊伍需就每年大會的主題進行研究，並於大賽當日演述有關的內容，包括：選擇研究題目的原因、解決現今世界難題的方案及如何分享研究的成果等，形式不限。隊伍同時可就其研究項目設計海報，展示予其他隊伍作學術交流。

3. 團體合作

隊伍需要挑戰一個即興的任務，並與評判分享隊員間的合作及經歷，從而表現出 FLL 的核心價值，包括：隊員的投入度、團隊精神、樂於分享及尊重其他隊伍等。



FLL Video Competition

FLL 短片比賽

* FLL Core Value
FLL 核心價值：



In order to let more people to learn the Core Value of FLL* and its positive impact on teenagers, HKFYG will launch an additional programme - FLL Video Competition. All youths in Hong Kong are welcomed to join!

為了讓更多人可以了解 FLL 的核心價值 * 及其對青少年的積極意義，香港青年協會舉辦 FLL 短片比賽，歡迎全港青少年參加！

Video Detail 短片要求

- ▶ Make a video to promote the Core Value of FLL and its positive impact on teenagers
- ▶ The video must include a programmed EV3 and complete at least 3 missions from the Robot Performance Challenge
- ▶ The length of the video must be less than 2 minutes
- ▶ The resolution of the video should not be less than 720p (1280×720px)
- ▶ Cantonese, English or Mandarin could be used as the language in the video
- ▶ 製作一條短片宣揚 FLL 的核心價值及對青少年的積極意義
- ▶ 短片必須包括使用已編程的 EV3 去完成最少 3 個機械人表現賽中的任務
- ▶ 短片長度必須少於 2 分鐘
- ▶ 影片解像度要求不低於 720p (1280×720px)
- ▶ 廣東話、英語或普通話皆適用於短片中

Adjudication Criteria 評審準則

- ▶ Content of the video (50%)
- ▶ Creativity of completing the 3 missions (30%)
- ▶ Shooting and editing skills (20%)
- ▶ 短片的內容及訊息 (50%)
- ▶ 完成 3 個任務的創意度 (30%)
- ▶ 聲畫設計及剪接技巧 (20%)

Division and Team 組別及隊伍

- ▶ Primary Division
(<13 years old before 1 August 2019)
- ▶ Secondary and Open Division
(<36 years old before 1 August 2019)
- ▶ 1-3 persons per Team
 - ▷ each person can only join one Team
 - ▷ each Team can only submit one video
- ▶ 小學組
(於 2019 年 8 月 1 日前小於 13 歲)
- ▶ 中學及公開組
(於 2019 年 8 月 1 日前小於 36 歲)
- ▶ 每隊 1 至 3 人
 - ▷ 每一個人只可以屬於一隊
 - ▷ 每一隊只可以遞交一條短片

Fee 費用

- ▶ Free of charge
- ▶ 全免

Awards 獎項

- ▶ The Best FLL Video Award
- ▶ The Most Creative Missions Award
- ▶ The Best Shooting and Editing Award
- ▶ The Most Popular Video Award
- ▶ 最佳 FLL 短片大獎
- ▶ 最佳拍攝及剪接獎
- ▶ 最具創意任務獎
- ▶ 最受歡迎影片獎

Remarks 備註

- ▶ All contents in the video, including pictures and music, must be original or royalty-free. The participant(s) or school(s) should bear the legal responsibilities of the copyright of the video. Organizer is not required to bear the responsibilities mentioned above.
- ▶ Copyright of all award-winning videos are owned by the Organizer and will be used as promotional purposes.
- ▶ 短片中所有內容 (包括圖片及音樂) 必須是原創或已授權；任何有關版權的責任須由參加者或學校負責，主辦機構無需承擔以上的責任
- ▶ 主辦機構將擁有得獎作品之版權，並會用作宣傳用途

FLL Programme **Schedule**

FLL 活動日程



FLL **NEW**
短片比賽

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Briefing Session cum FLL Experience Day

Enrollment Deadline of Video Competition

Nov - Jan
11 月至 1 月

Robot Performance Workshop
機械人表現工作坊

Video Submission Deadline

遞交影片截止日期

16th-17th Feb
2月16-17日 **Result Announcement & Award Ceremony**
公佈結果及頒獎典禮

Apr - Jul
4 月至 7 月



APPLICATION and Enquiries 報名及查詢

The Hong Kong Federation of Youth Groups
Creative Education Unit

香港青年協會
創意教育組

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Fax 傳真 : (852) 2565 8345
Email 電郵 : hkrt@hkfyg.org.hk
Website 網頁 : <http://ccst.hkfyg.org.hk/>



香港 FLL 創意機械人大賽及 FLL 短片比賽之詳情以網站最新資訊為準

主辦機構將保留最終決定權

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