

2024-2025 *FIRST*® LEGO® League Macao

FLL Challenge Registration Guidelines

The *FIRST*® LEGO® League (Macao) is at the Macao Science Center!

****The winning team (one spot) of the FLL Challenge will qualify for the official World Championship held in the USA in April 2025 !****

◆Purpose:

1. To cultivate students' creativity, critical thinking, and integration of knowledge to create innovative solutions.
2. To apply learned mathematics, science, and technology information to real-world problems.
3. To develop students' skills in technology, effective communication, teamwork, and increase personal confidence.

2024-25 Season Theme **SUBMERGED**, which will lead students away from land and into the depths of the ocean to explore different marine areas. Through hands-on design, exploration, and research, students will learn about underwater ecosystems and technological applications, emphasizing the importance of sustainable oceans. Students will collaborate to build and program robots using LEGO® Education kits, strategizing, designing, constructing, programming, and testing robots to complete a series of tasks related to the annual theme.



◆Organizer: Macao Science Center

◆Implementer: Macao Gifted Education Association, Macao Technology Innovation Education Society



◆Team: Students aged 9-16 (as of August 1, 2025); each team consists of 2-8 students and 1-2 adult mentors.

◆Required Equipment: 2025 FLL Competition Kit (#45826) and LEGO® Education kits.

◆Competition: Students will collaborate to build and program robots using LEGO® Education kits, strategizing, designing, constructing, programming, and testing robots to complete tasks related to the annual theme. The competition consists of two parts:

Part One: Robot Performance Competition

Design and build a robot solution, develop strategies, and complete tasks on the annual mission map autonomously within a time limit. Each team will participate in three robot field matches, each lasting 2.5 minutes, operating the robot to solve tasks and earn the highest possible score. Only the highest score will be taken as the final score for the field project.

Part Two: Judging Session

Teams will share their knowledge in a 30-minute judging session and receive valuable feedback from judges on their robot design, core values, and innovative projects. Judges will evaluate the team's achievements and provide some verbal feedback on the spot to encourage and inspire them. Teams must report and respond to judges' immediate questions in three categories:

1. Project Research: Share the research topic and analyze the design concept and its application.
2. Robot Design: Introduce the robot's structure, functions, originality, and programming demonstration.
3. Core Values: Judges will observe the team's on-the-spot performance and score their team spirit.

◆Dates:

Registration: Now until February 14, 2025 (23:59PM); complete registration form.

Workshop: February 8, 2025 (Saturday), organized by LEGO® Education at MSC (priority for successfully registered teams).

Competition Date: March 9, 2025 (Sunday).

Mentor Meeting: March 1, 2025 (Saturday).



◆Registration Fee: MOP 5,700.00 per team, which includes the "2025 FLL Competition Kit (#45826)." If three or more teams from the same unit register, a discount of MOP 1,000.00 will be applied. Successful registration is confirmed only after completing payment.

◆Registration Method: Refer to the Macao Science Center website at www.msc.org.mo

◆Competition Awards: Awards will be given based on scores, including first, second, and Merit Prize, as well as participation certificates. Additional awards will be given to winning teams, including project medals and trophies:

Overall Champion, First Runner-up, and Second Runner-up

Robot Performance Awards: First, Second, and Third Place

FIRST Robot Design Award: One

FIRST Innovation Project Award: One

FIRST Core Values Award: One

Judges' Award: One

Best Presentation Award: One

◆Other Information:

1. The competition rules are based on the English version.
2. This year's selected FIRST Macao representative team may choose to participate in the "World Festival" World Championship announced by FIRST headquarters.
3. The quota for the Macao representative team at the World Championship is subject to the announcement of the international official organization.
4. Teams going to the World Championship must pay the international registration fee to FIRST headquarters (based on international announcements). This fee does not include accommodation and transportation costs, which must be self-managed by the team.
5. Winning teams may also could participate in nearby regional or local events held in the same season, details depending on LEGO® Education official announcements.
6. The organizers reserve the final interpretation rights regarding the teams advancing to the finals.
7. Competition results and winning teams will be announced on the Macao Science Center website: www.msc.org.mo.
8. The organizers have the right to terminate the competition, modify the registration guidelines, or disqualify participants for misconduct.
9. In case of any disputes, the organizers reserve the final interpretation rights.



◆For more registration details, please contact:

(853) 6565 5209 Ms. Tan

(853) 6360 8012 Mr. Chan

(853) 6336 9298 Alex

