The International Robot Olympiad (IRO) is one of the world’s largest annual international youth robot competitions with over 500 teenagers.
Robot, meets sport.

I have a mission to complete. But I don’t have much time to figure out.

Tictoc tictoc-

Other competitors are trying to find their own ingenious way. Well, I am going to try to do the other way.

“Great, I’ve got the chance turned the game around!”

A drama without a script. This is not the sport we’ve known already.

This is a Robot Sport!
IRO?

International Robot Olympiad (IRO) is an annual international youth robot competition. Over 500 teenagers who passed a preliminary round from 38 member countries annually participate in IRO.

Participants are trying to make their own robot in the competition site within a strict time limit. Also, they should cooperate with their teammates to solve the mission given by IROC. They are going to think logically so that they can make an algorithm.

In this process, they become a talent with 4C for the 21st century.

* 4C: Critical Thinking, Communication, Collaboration, Creativity
The goal of IRO

The discovery of a converged future robot technology required by the age of the times aim to provide the opportunity to maintain amicable social relationships and to build leadership.
When you participate in IRO,

01. Discovery of your own special talents
   - Competition with students from all around the world who has interest in robot.
   - Good experiences to find your own special talents.

02. Motivation
   - Absorption in your interest.
   - A Motive for learning and challenge.
   - A clear goal.

03. Self-directed learning
   - Self-esteem and fulfilling experience.
   - Development of self-directed learning.

04. Well rounded education
   - Teamwork through cooperation and sharing with teammates.
   - Improved ability to investigate, apply and have creativeness.
Features of the competition

01. Participants
   - After participants grow up, they are participating IRO as staffs for their juniors.

02. Accumulated Manuals
   - More than 13,000 participants every year.
   - Our accumulated data base and manuals from experiences in many competitions.

03. Computerized System
   - Use RFID card and leader machine.
   - Use our own program which managed participants’ information and results.

04. Consistent Rules
   - From regionals to world championships, all countries and regions consistently follow our rules in each game, regardless of when it holds.
Features of the competition

05. Unlimited types of robot
- A wide selection of Robot types.
  (Except some of categories)

06. Open Match
- All games open to all the visitors.

07. Challenge
- Participants: Devise their own development goals.
- National partners and participating nations: Seek business in conjunction with IROC.

08. Fairness
- Built on site Robots.
- Mission released on the day of match.
- The impossible to pre-work.
- Specialized knowledge needed.
Features of the competition

**09. A wide range of participants**

- Step by step categories.
- Motivation to go upper level.

**Simple mission:** Basic level
- Basic organizing ability + Control ability

**Complex mission:** Beginner level
- Organizing ability + Programming ability

**Overall Mission:** High level
- Organizing ability
- Programming ability
- Planning ability
- Expressiveness (STEAM)

* STEAM
STEAM(Science, Technology, Engineering, Art, Mathematics) convergence and integrated science education
1999. 08.
The first IRO hosting (Deajeon, Korea)

2001.11.
The first overseas hosting (Hongkong)

2003. 11
Over 10 National partners (Deajeon, Korea)

2009.12
Over 15 National partners (Gwangju, Korea)

2015. 12
The highest number of participants; 1,280 people (Bucheon, Korea)

2018. 12
1,000 participants from 10 nations (Manila, Philippines)

2019. 12
1,700 participants from 14 nations (Chiang Mai, Thailand)

Where’s Next?
The annual plan

Announcement of revised rules and title for robot in movie and creative category

National preliminary rounds league (Selecting participants for the national final)

National final league (Selecting participants for the IRO world league)

International Robot Olympiad World League

*It may be changed as needed.*
Introduction of categories: Record league

Robot gathering
- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Built on site robot

Robot Gathering aims to arrive at the point of destination to arrive quickly collects the entire object given in the game.

Town Watch
- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Built on site robot

Town watch is a game that robot finds targets while following the black lines using their sensor or camera. After this, put each target in the destination colored same as each target.

Emergency Extreme
- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Built on site robot

Suppose a serious disaster occurred, participants are trying to accomplish a mission using a certificated humanoid robot with camera.

Emergency Standard
- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Premade robot

Suppose a serious disaster occurred, participants are trying to accomplish a mission using certificated humanoid robots.

Mission Challenge
- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Premade robot

Mission Challenge is a game that participants fulfill a given mission using limited materials.

Energy Saving
- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Built on site robot

After charging the battery in the light for a few minutes, robot follows the black line using charged battery.

* Junior (under 13 years old) / Challenge (over 13 years old)
Tournament league

**Robot Farming Extreme**

Control their authorized **humanoid with camera** to complete the given mission that constructs a road as fast as they can.

- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Premade robot

**Robot Farming Standard**

Control their authorized humanoid to **complete the given mission that constructs a road** as fast as they can.

- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Premade robot

**Tag-Out**

Participants control their premade robot to **push out the opposite robot or the opposite block.**

- Junior
- 1 participant for 1 team and 1 robot
- Premade robot

* Junior (under 13 years old) / Challenge (over 13 years old)
Evaluation league

Robot in Movie

Participants are required to make a short movies with robots related to the theme presented by IROC.

- Junior/Challenge
- 1 participant for 1 team and 1 robot
- Premade robot

Creativity category

Participants are required to design, construct, and present their robots according to theme presented by IROC.

- Junior/Challenge
- 1~3 participants for 1 team and 1 robot
- Built on site robot

* Junior (under 13 years old) / Challenge (over 13 years old)
Malaya Business Insight  March 17, 2017

Philippine Robotics Team bags 192 medals in the 18th Int’l Robot Olympiad in China

March 17, 2017

Nine 10th graders from Tonk Poorvika Girls School in Dehradun, India, performed very well in the 18th International Robot Olympiad (IRO), bagging 192 medals, the highest ever for the country. The team won 170 medals in the high school category, along with 22 medals in the junior and middle school categories.

Bangladesh The Daily Star  December 19, 2018

Bangladesh wins multiple medals at International Robot Olympiad 2018

MAISHA ISLAM MONAMER

2018 ends with yet another proud achievement for the Bangladesh team, as they win three gold medals at the 18th International Robot Olympiad (IRO), held in Beijing, China. The young delegates comprised of 70 students from 18 schools made the country proud with 19 Gold, 19 Silver, 31 Bronze and 123 Technical Awards.

Malaysian RojakDaily  December 30, 2019

Four Malaysian Students Win Gold Medals At The 2019 International Robot Olympiad

Build robots, win gold medals.

What did we tell you about Malaysians going all out to win all the awards this year? Last week, six students made the country proud when they won several medals at the International Junior Science Olympiad 2019. And just before 2019 closes out, another group of Malaysian students managed to win a couple more gold medals at an international competition.
The Welcome Message

Robots which are the result of technological integration are getting out of laboratory; they are coming into our daily lives. Since the first international robot Olympiad was held in 1999, International Robot Olympiad became the linchpin of all this changing and we have constantly provide the discovery of new talent in the robot world and international exchange.

Our accumulated know-how and networks will provide you with more interesting and enthusiastic experiences.

Let’s have new experiences with us.
THANK YOU

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