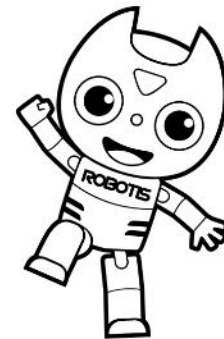
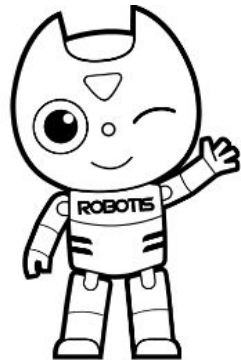
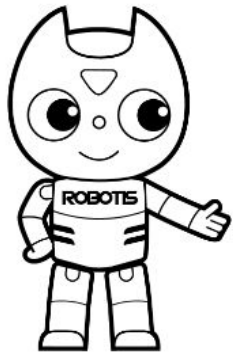




GLOBAL STEAM CUP CHALLENGE 2020

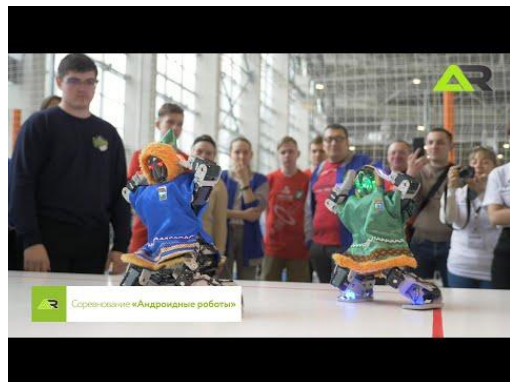


Introduction of STEAM CUP Challenge

- ❖ ROBOTIS and our partners from all over the world have tremendous job to organize STEAM CUP Challenge 2019 from their own region.
- ❖ 2020 ROBOTIS will commence a 1st global international STEAM CUP Challenge at Seoul, South Korea



World Wide Contests with ROBOTIS Partners



RUSSIA



KOREA



IRAN



MALAYSIA

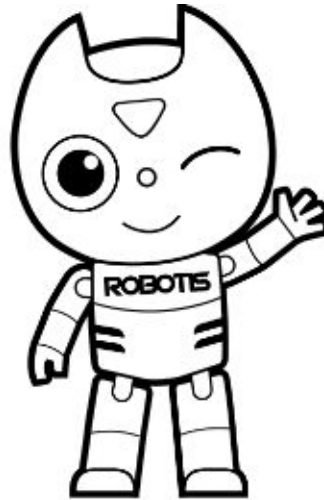
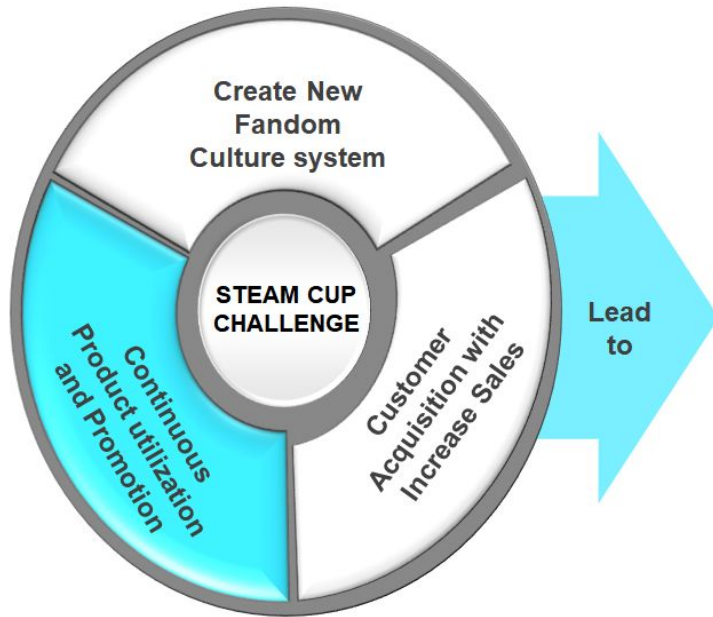


TURKEY

www.jingtianrobots.com

Concept of Contests

- ❖ **Purpose of STEAM CUP Challenge:**
One of major marketing strategy for All ROBOTIS partners.



ROBOTIS
Community

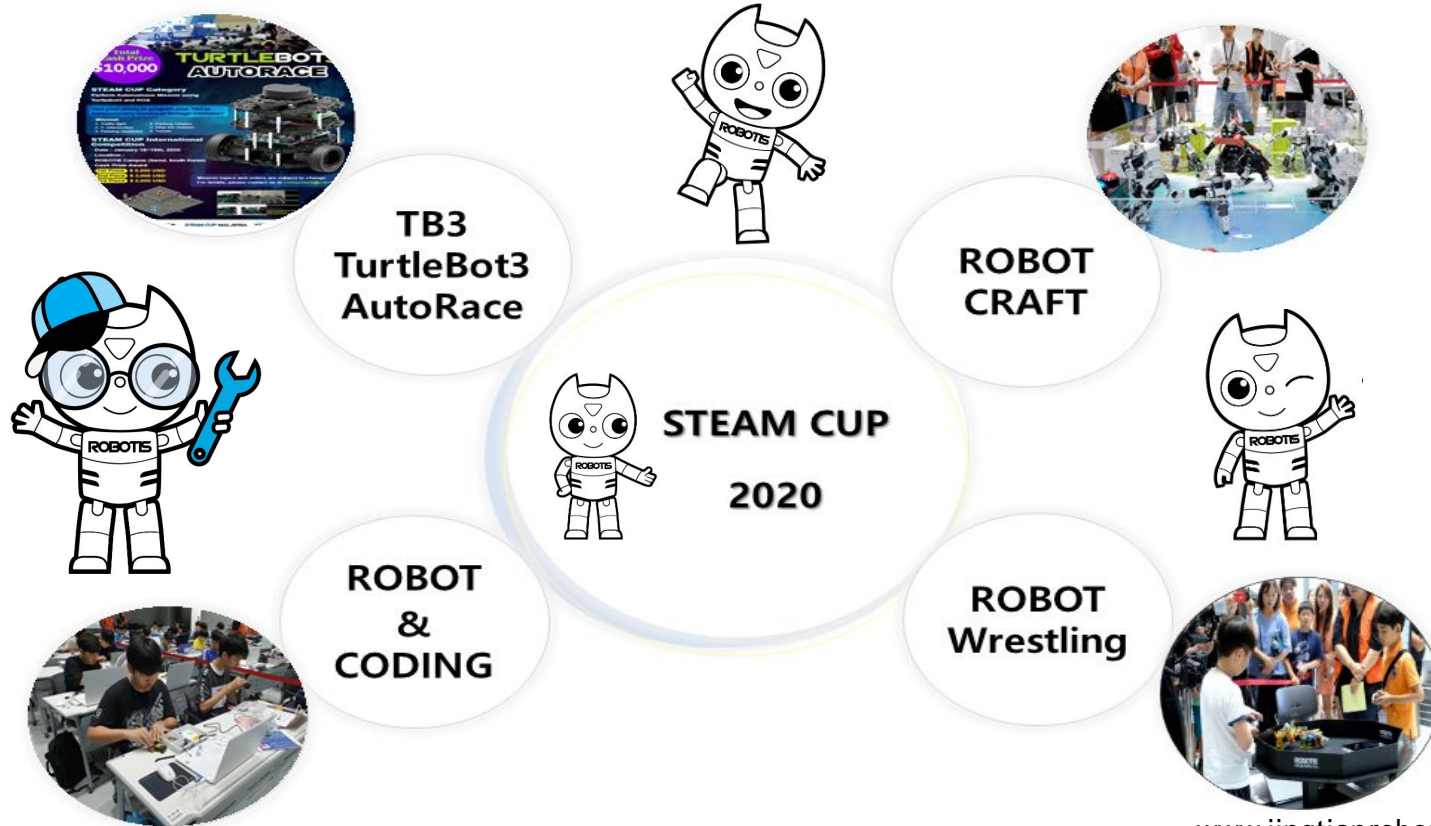


Competition Outline

1. **Title:** International STEAM CUP Challenge 2020
2. **Registration:** All regional qualified contestants may apply through ROBOTIS partners.
3. **Competition Date :** ~~2020 JAN. 18 (SAT) - JAN. 19 (SUN)~~ **May be subject to change to mid-Feb**
4. **Venue :** Seoul, South Korea (Details will be announced in Nov)
5. **Event :**
 - a) ROBOCRAFT
 - b) ROBOT & CODING
 - c) ROBOT Wrestling
 - d) TurtleBot 3 AutoRace

* Demonstration Event : Mobile Robot Competition

EVENT LISTS



Competition Outline

	AutoRace	Robot Craft	Robot & Coding	Robot Wrestling
KIT	TurtleBot3	PR, GP, ENG, STEM	DreamII, STEM	DreamII
No. of Team or Contestants	20 TEAMS (60 contestant)	16 TEAMS (50 contestant)	Total 80 Contestants Dream II : K6/ 25 contestant K12/ 25 contestant STEM : 30 contestant	Total 50 Contestants
Competition Type	Time Record + Mission point	League, Tournament	Assembly and coding on site/ Time record	League, Tournament
TOTAL PRIZE	\$ 10,000	\$ 6,000	Engineering Kit	Engineering Kit
Age	Above High School	All age	Upto K12	Upto K6
Qualification	Regional Qualifying/ Recommendation	Regional Qualifying/ Recommendation	Regional Qualifying/ Recommendation	Regional Qualifying/ Recommendation
Others	Compulsory for participant to Open their Source code after the competition	-	-	-
	Fixed (No change)	Fixed (No change)	Changeable due to No. of participants	Changeable due to No. of participants

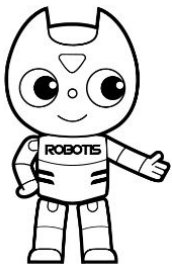
Competition Prize and award

RANK		1st	2nd	3rd
TB3 AutoRace		\$ 6,000	\$2,000	\$1,000
Robot Craft		\$ 3,000	\$2,000	\$1,000
Robot & Coding	K1- K6	ROBOTIS Engineer kit 1&2	ROBOTIS Engineer kit 1	ROBOTIS MINI
	K7- K12	ROBOTIS Engineer kit 1&2	ROBOTIS Engineer kit 1	ROBOTIS MINI
Robot Wrestling	K1- K6	ROBOTIS Engineer kit 1&2	ROBOTIS Engineer kit 1	ROBOTIS MINI
	K7- K12	ROBOTIS Engineer kit 1&2	ROBOTIS Engineer kit 1	ROBOTIS MINI

- **Prize winner will award Trophy, Medal and Certificate award**
- **Special Award** - Award for team that upload video clips with their preparation procedures such as assembly, practice, epilogue and competition video to their own SNS or media

Competition Events

Division	Description	Expectancy effects
Filming Event	<ul style="list-style-type: none">Contestant event. Award for team that upload video clips with their preparation procedures such as assembly, practice, epilogue, episode and competition video to their own SNS or media	<ul style="list-style-type: none">Expect SNS PR effect from the user and participant
SNS Event	<ul style="list-style-type: none">Contestant and attendee event When you upload event image or video into SNS, give an ROBOTIS eco bag as a gift	
Network Party	<ul style="list-style-type: none">Award event for Prize winner, Recreation event, Banquet event for contestants	<ul style="list-style-type: none">Provide fun toward the users to enjoy event. Enhance relationship between ROBOTIS and users.
Visiting ROBOTIS / Seoul Botanic Park	<ul style="list-style-type: none">Non-Compulsory event. Only available to partners who wish to participate event	<ul style="list-style-type: none">Enhance understanding of ROBOTIS from participant perspective



Event 1. TurtleBot3 AutoRace (Main)

TurtleBot3 AutoRace

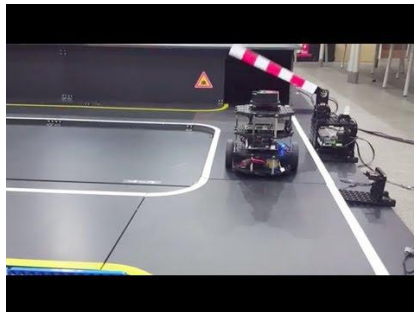
Concept: Test your ability to program your TB3 to complete missions!!

Applicable KIT : TurtleBot 3

AGE : Above High School (K10 to University Student)

RULES :

- Time Record ranking system
- 6 Task missions:
 1. Traffic light mission
 2. T-Intersection mission
 3. Obstacle mission
 4. Parking mission
 5. Stop-bar mission
 6. Tunnel mission





Total Cash Prize
\$10,000

TURTLEBOT3 AUTORACE

STEAM CUP Category
Perform Autonomous Mission using
TurtleBot3 and ROS

Test your ability to program your TB3 to
autonomously maneuver through missions!!

Mission

1. Traffic light	4. Parking mission
2. T-Intersection	5. Stop bar mission
3. Passing obstacles	6. Tunnel

STEAM CUP International Competition

Date : January 18-19th, 2020

Location :
ROBOTIS Campus (Seoul, South Korea)

Cash Prize Award

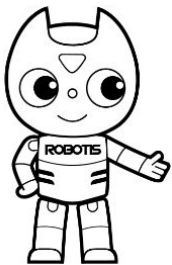
1st Place	\$ 5,000 USD
2nd Place	\$ 3,000 USD
3rd Place	\$ 2,000 USD

Mission topics and orders are subject to change.
For details, please contact us at contactus2@robotis.com



Now available
New mission close to home

STEAM EDUCATION RESOURCES **STEAM CUP USA** **STEAM CUP MALAYSIA** **STEAM CUP TURKEY** **ROBOTIS**



Event 2. ROBOT CRAFT (Main)

ROBOT CRAFT

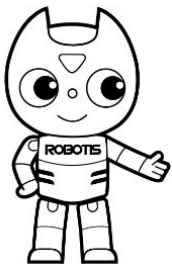
Applicable KIT : ROBOTIS Premium, Engineer Kit , GP, STEM

AGE : ALL

RULES :

- 3 Robots are allowed to play for each TEAM, (Must include 1 humanoid)
(Total weight of each team's ROBOTS must be less than 6kg)
- All ROBOT types are freely allowed (Humanoid / Multi Joint (Legs types))
- 3 Minutes of play time for each game
- Total 11 LED switch locations (Each location have Blue & Red switch buttons)
- There will be 2 obstacles in each area.
- The team that pushes more of their LED lights win the match.
- We plan to have TOTAL 32 teams to be qualified in the STEAM CUP Challenge 2020.





Event 3. ROBOT & CODING

ROBOT & Coding

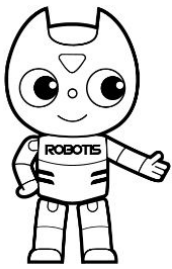
Applicable KIT : Dream II, STEM

AGE : 2 Divisions (Primary), (Middle & High School)

RULES :

- 1st mission + assembly time is 90 minutes then 2nd and 3rd mission provide 20 minutes to programming the each mission
- Mission will be provide just before the competition start.
- Must use 1 CM, 2 IR Sensor, 1 LED module and 1 Touch sensor
- Each mission allows 2 chance (if the ROBOT goes off the track 2 times, it will automatically disqua
- Coding can be programming with any program. eg.TASK or Scratch
- Person who earns highest point win the match. If duplicate score between players, rank judging by time records





Event 4. ROBOT WRESTLING

ROBOT Wrestling

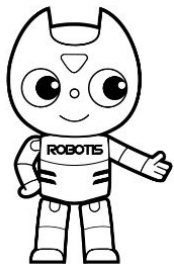
Applicable KIT : ROBOTIS DREAM II

AGE : up to K6

RULES :

- 1vs1 game match
- League (Qualification match) + Tournament (final event)
- Players will have positioning fight for 2 minutes then traps (hole) will open for 2 minutes on each side.
- Whoever put opponent's robot into the trap (hole) wins the game.
- If the match does not end within 2 minutes, we assume the game as draw.
- 5 players in each tournament group from A to J and top 2 player from the group goes to final tournament match



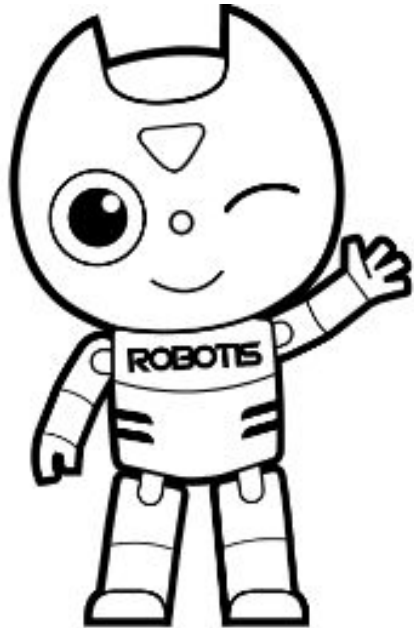


Event Preparation

Due Date	October 19'				November 19'				December 19'				January 20'	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Registration from each region														
Finalize Contestant														
Pre- Event (Korea)														
Pre- Event (Overseas)														
Press & Media														
Design and PO (T-shirt, Medal, others)														
Venue confirmation														
Competition Rehearsal														

Competition Schedules (Changeable)

Division	JAN.17(FRI)	JAN.18(SAT)	JAN.19(SUN)	JAN.20(MON)
TB3 AutoRace	SET UP	Practice TIME	Time Trial Start event	VISIT ROBOTIS & SEOUL BOTANIC GARDEN Tour
ROBOT CRAFT		League Pre-qualification	Tournament	
ROBOT & CODING		1st~2nd trial	3rd~4th trial	
ROBOT WRESTLING		League Pre-qualification	Tournament	
EVENT			Award / Network Party	



SEE YOU

2020 INTERNATIONAL

STEAM CUP CHALLENGE!!

