



# **FIRST<sup>®</sup> LEGO<sup>®</sup> League Malaysia 2020 NEWSLETTER**

## ***FIRST*<sup>®</sup>**



POWERED BY

**STAR  
WARS**<sup>™</sup>  
FORCE FOR CHANGE

© & <sup>™</sup> 2019 Lucasfilm Ltd.



## Introducing the *FIRST*® LEGO® League 2020 Challenge



&



### Inspiring a new generation of heroes

This year, Lucasfilm and parent company Disney are teaming up with *FIRST*® to inspire the next generation of heroes and innovators as part of the Star Wars: Force for Change philanthropic initiative.



Throughout history, great civilisations have risen and fallen. Now it's our turn to rise in building and bolstering our own planetary metropolis.

This 2019/2020 season, *FIRST*® RISE is setting out to inspire citizens of the galaxy to work together, strengthening and protecting the Force that binds us and creating a place where collaboration and collective wisdom can elevate new ideas and foster growth. Together, we RISE. Join us for the 2020 season.

### *FIRST*® LEGO® League Jr.\* Ages 6-10



#### BUILDING CURIOSITY

*FIRST*® LEGO® League Jr. challenges teams of children to explore a scientific concept, then build a model and code it to make it move using LEGO® Education WeDo 2.0

### *FIRST*® LEGO® League\* Ages 9-16



#### CREATING INNOVATORS

*FIRST*® LEGO® League gives students the chance to develop, design, build, and code LEGO® Education MINDSTORMS® EV3 robots to perform autonomous "missions" on a themed playing field and design innovative solutions to a real-world problem inspired by the theme.

\*More details about the Challenges can be found on inside pages of this newsletter



The world's leading youth-serving  
non-profit advancing **STEM Education**







## Where children and teens walk in and innovators walk out.

Project-based, hands-on *FIRST*® programs introduce students to coding, programming, and engineering in an inclusive, creative and robust environment where students work collaboratively to solve a yearly robotics challenge.

“

*We want to change the culture by celebrating the mind.*

”

**Dean Kamen**  
Founder, *FIRST*®

“

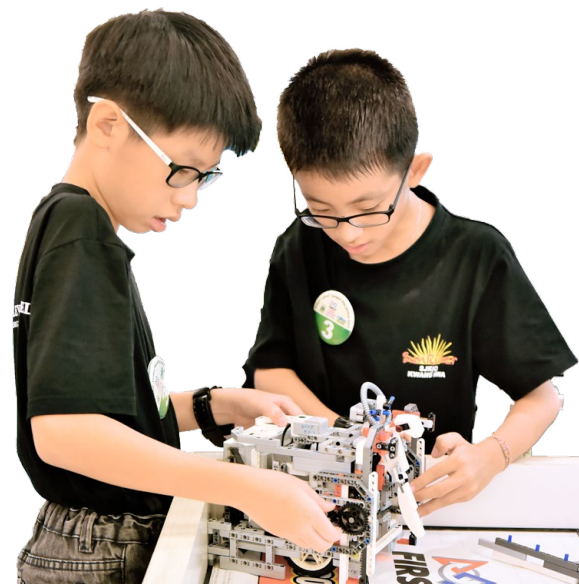
***FIRST**® **LEGO**® League encourages children to design, construct, and program their own intelligent inventions. This allows them not only to understand technology, but to become masters of it.*

”

**Kjeld Kirk Kristiansen**  
Owner & Deputy Chairman,  
the *LEGO*® Group

### What is *FIRST*®?

*FIRST*® is the world's leading youth-serving nonprofit advancing Science, Technology, Engineering, and Mathematics (STEM). For more than 30 years, *FIRST*® has evolved into a global movement by engaging millions of people with a proven game-changer for preparing kids to solve the world's greatest problems. *FIRST*® programs inspire innovation and leadership through engaging, hands-on robotics challenges developed to ignite curiosity and passion in students.



#### Vision

To transform our culture by creating a world where science and technology are celebrated and where young people dream of becoming science and technology leaders.

#### Mission

To inspire young people to be science and technology leaders by engaging them in exciting mentor-based programmes that build science, engineering, and technology skills, inspire innovation and foster well-rounded life skills, including self-confidence, communication and leadership.



## FIRST® LEGO® League

FIRST® LEGO® League is the most accessible, guided and global robotics competition that helps students and teachers to build a better future together. The program is built around theme-based Challenges to engage children and youth ages 9 to 16 in research, problem solving, coding, and engineering. Students emerge more confident, excited, and equipped with the skills they need in a changing workforce.

## FIRST® LEGO® League Jr.

It's never too early to discover STEM. FIRST® LEGO® League Jr. is designed to introduce STEM concepts to children ages 6 to 10 while exciting them through a brand they know and love – LEGO®.

## FIRST® Core Values

The FIRST® Core Values are the cornerstones of the program. They are among the fundamental elements that distinguish FIRST® LEGO® League from other programs of its kind. By embracing the Core Values, participants learn that friendly competition and mutual gain are not separate goals, and that helping one another is the foundation of teamwork. The **FIRST® philosophies of Gracious Professionalism® and Coopertition®** are expressed through these Core Values:

### DISCOVERY

We explore new skills and ideas

### INNOVATION

We use creativity and persistence to solve problems

### IMPACT

We apply what we learn to improve our world.

### INCLUSION

We respect each other and embrace our differences

### TEAMWORK

We are stronger when we work together

### FUN

We enjoy and celebrate what we did

## Three Essential Parts

Each yearly Challenge has three parts: Core Values, the Robot Game and the Project.

### ROBOT GAME

The Robot Performance Award recognises teams that score the most points in the Robot Game. Winners will be determined by the number of points the robot scores during scheduled matches.

### PROJECT

Participating teams are required to choose a problem, research it, and design their own innovative solution to the problem. Each team is given 5 minutes to summarise their project in a presentation to a panel of judges.

### CORE VALUES

This is the foundational working process that participants go through to develop important life skills such as problem solving, critical thinking, creativity and teamwork.



# THE IMPACT

**FIRST®** invests in evaluation to continuously measure the effectiveness in reaching its desired outcomes and making data-driven decisions to improve programs. Internal and external studies are conducted to assess impact on youth participants, which includes understanding changes in STEM

interest and intent, education achievement, post-secondary school plans, career intent and outcomes related to 21st century work skills, as a result of participating in **FIRST®**. The infographic below summarises the global program impact.

## SUBSTANTIAL INCREASE IN STEM INTEREST

**FIRST®** participants are **SIGNIFICANTLY MORE LIKELY TO** show gains in interest in:

- ✓ STEM
- ✓ STEM CAREERS
- ✓ UNDERSTANDING OF STEM

(than a matched comparison group of students)

THEY ARE OVER  
**2x**

as likely to show gains in their interest of STEM

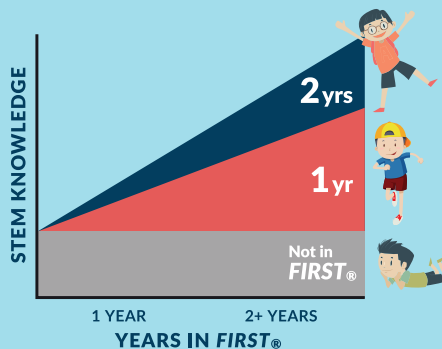
(than a matched comparison group of students)

**87%**

of participants plan to take a

**MORE CHALLENGING**  
MATH OR SCIENCE COURSE

## SUBSTANTIAL INCREASE IN STEM UNDERSTANDING



### STEM Knowledge Continues To Grow The Longer You Stay

Students who persist in **FIRST®** for more than one year show significantly greater gains than those who left after a single year.



### The Impact On Girls Is Significant

Females in **FIRST®** have a dramatically increased understanding of STEM compared to females in the comparison group.

“

*Through **FIRST®**, I was able to discover my passion for robotics and gain some amazing life opportunities that have led me to the path that I am on now.*

”

Jordan Burkland,  
**FIRST®** Alumnus

## READY FOR A CAREER IN STEM

**FIRST®** alumni are

**2.6x**

more likely to enroll for an  
**ENGINEERING**  
course in the first year of university  
(than a matched comparison group of students)

OVER

**75%**

of **FIRST®** alumni are in a  
**STEM FIELD AS A STUDENT  
OR PROFESSIONAL**



## GAINS IN WORKFORCE SKILLS



COMMUNICATION

**76%**

of students reported gains



CONFLICT RESOLUTION

**93%**

of students reported gains



TIME MANAGEMENT

**95%**

of students reported gains



PROBLEM-SOLVING

**98%**

of students reported gains

### LEARN MORE AT [firstinspires.org/impact](https://firstinspires.org/impact)

Based on decades of findings from external evaluations, external studies as well as internal surveys. Comparison claims based on data from **FIRST®** Longitudinal Study comparing average gains for **FIRST®** participants vs. comparison students taking into account differences between the groups at baseline.

**SOURCES:** Brandeis University (2016). **FIRST®** Longitudinal Study: Finding at Follow-Up. Waltham, MA. **FIRST®,** 2015 **FIRST®** Alumni Survey. Brandeis University, 2011 **FIRST®** Tech Challenge – **FIRST®** Robotics Competition Evaluation & 2013 **FIRST®** LEGO® League Evaluation. Based on decades of findings from external evaluations, external studies as well as internal surveys. Comparison claims based on data from **FIRST®** Longitudinal Study comparing average gains for participants vs. comparison students taking into account differences between the groups at baseline.



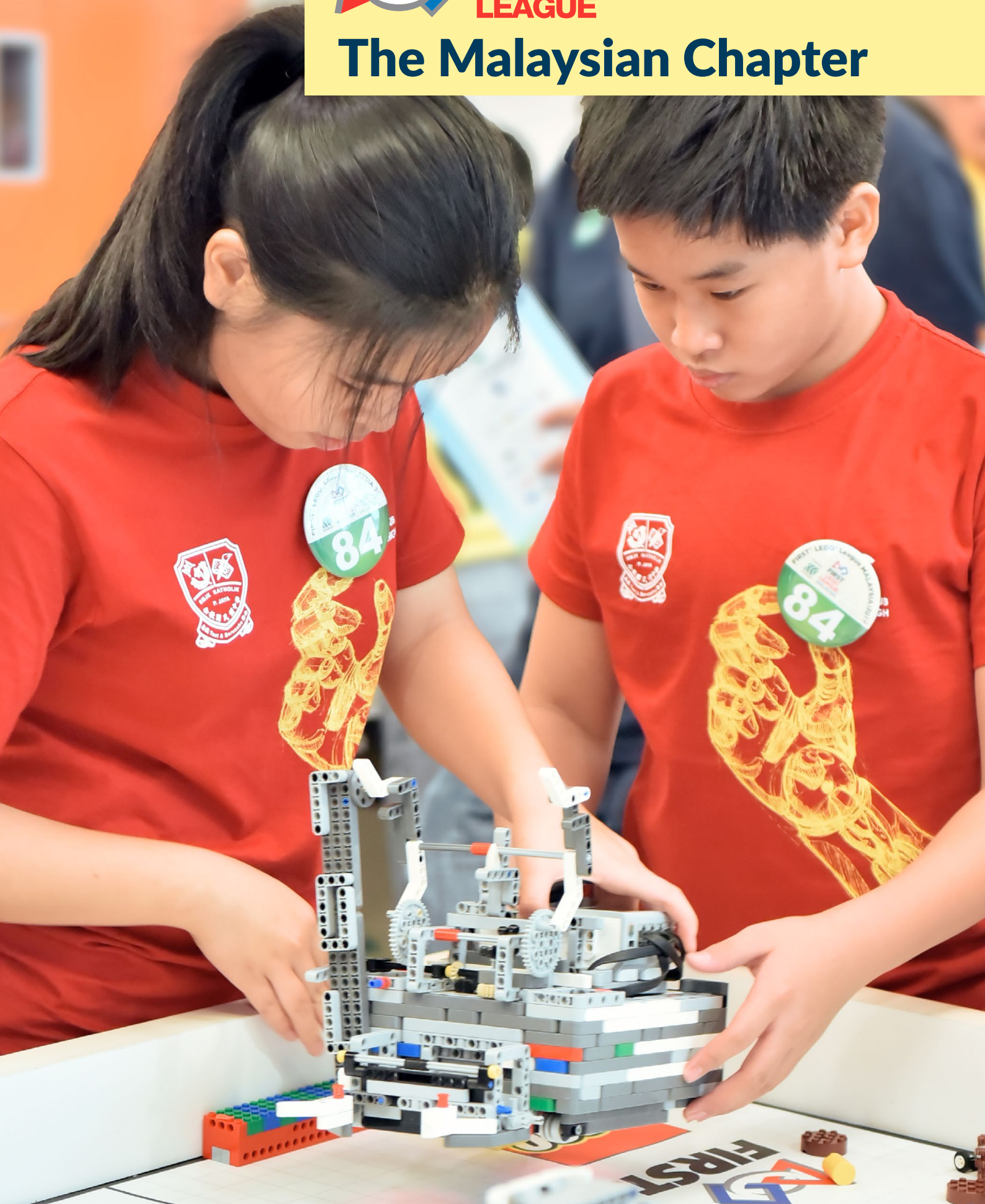
# AN OVERVIEW OF GLOBAL THEMES

## (1999–2019)



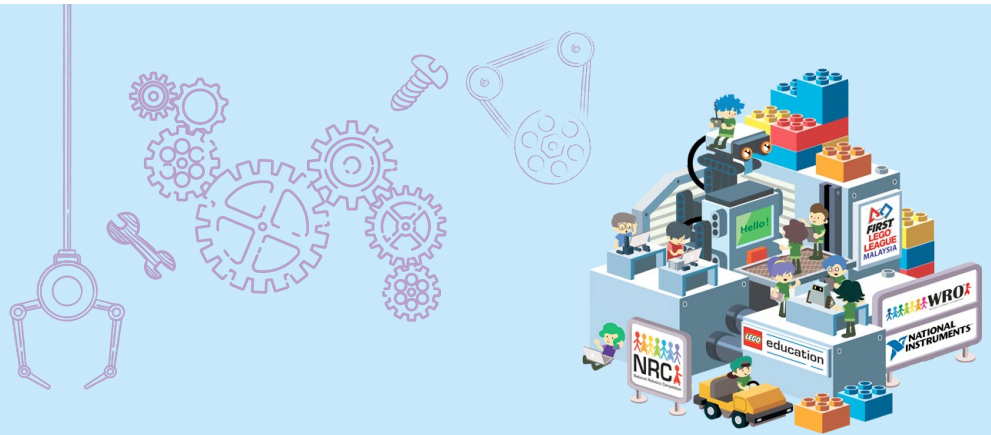


# The Malaysian Chapter





# NURTURING SKILLS



## About the organiser, Sasbadi.

As the organiser of **FIRST® LEGO® League** in Malaysia, Sasbadi believes that education is more than an academic performance but also a journey of nurturing skills. For a holistic learning experience, it is essential that the young generations of today develop 21st century skills to be prepared for a rapidly changing future. This includes life skills such as problem solving, critical thinking, creativity, good communication and working in teams.

With that, Sasbadi Learning Solutions was set-up as early as 2005 as a wholly-owned subsidiary of Sasbadi Group to promote hands-on learning through educational tools and learning platforms. As such, Sasbadi has been championing Science, Technology, Engineering and Mathematics (STEM) education and working closely with key partners such as the Ministry of Education (MOE) Malaysia and **LEGO® Education** through robotics. Sasbadi also organises the annual National Robotics Competition (NRC) and National Robotics Open Competition (NROC).

## About **FIRST® LEGO® League (FLL) Malaysia**

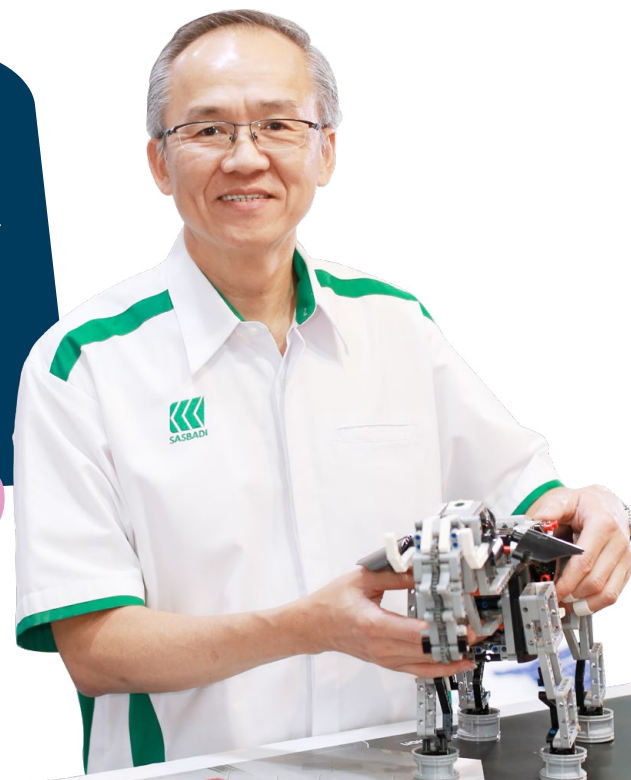
FLL was held for the first time in 2008 at National Science Centre with only 20 participating teams. Since then, this annual competition has grown from strength to strength with a participation of more than 100 teams and 900 students across primary and secondary school today. This competition platform is co-organised with the support of the Ministry of Education Malaysia.

“

*Experts estimate that STEM professions will represent 75% of the workforce by 2025. Therefore, there is an increasing demand for innovators, makers and problem-solvers, who will be the driving force of our economy. And **FIRST® LEGO® League** is a great platform to provide our young generation with the fundamentals needed in STEM and a competitive advantage in the 21st century workforce.*

”

**Mr. Law King Hui,**  
Group Managing Director,  
Sasbadi Holdings Berhad



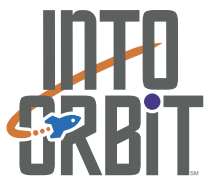


# A RECAP OF THE FIRST® LEGO® LEAGUE 2019 MALAYSIA

The eleventh instalment of this competition was successfully held at KDU University College, Utopolis Glenmarie Campus, Shah Alam, Selangor on 28th to 30th June 2019.

<b>123</b> TEAMS	<b>OVER 900</b> PARTICIPANTS	<b>AGES 6-16</b>	<b>16</b> STATES
<b>OVER 130</b> MENTORS	<b>OVER 50</b> JUDGES	<b>OVER 40</b> VOLUNTEERS	<b>OVER 10</b> SPONSORS AND PARTNERS

## FIRST® LEGO® League



A Galactic Adventure  
Awaits You

**Into Orbit** presented participants with the challenge of designing autonomous robots that can help in long-duration space exploration, create food, energy and equipment to help humans thrive in space.

## FIRST® LEGO® League Jr.



The Journey Begins

**Mission Moon** required participants to explore the challenges of living on the moon. The young participants build a motorised model of a moon base to show how they can generate basic necessities such as water, air, energy and solve other problems in living on the moon, and a *Show Me* poster.

Catch the competition highlights here:



Sasbadi Group



sasbadilearning

Scan this QR code or logon to the link below for the video.



[bit.ly/2TO0drO](https://bit.ly/2TO0drO)



# Hello, FIRST® LEGO® League Malaysia 2020!



## CITY SHAPER

CREATING INNOVATORS

Architects design and construct buildings. They combine science and art to make buildings and structures for their clients. Sometimes they make new buildings and sometimes they redesign old ones. Our cities and towns face major issues, like transportation, accessibility and even natural disasters. How can we shape a better future for everyone? It will take teamwork and imagination. Are you ready to build a better tomorrow together?

### In the Robot Game, your team will:

- **Identify** Missions to solve.
- **Design, build and program** a LEGO® Robot to complete the Missions.
- **Test and refine** your program and design.

Your Robot will have to navigate, capture, transport, activate, or deliver objects. You and your Robot will only have 2½ minutes to complete as many Missions as possible. So, be creative!

### In the Innovation Project, your team will:

- Identify a problem with a building or public space in your community.
- Design a solution.
- Share your solution with others and then refine it.

At official events, your team will present your Project, including the problem, your solution, and how you shared it, in a 5-minute presentation.

### FIRST® LEGO® League Missions:

Mission 1: Elevated Spaces

Mission 2: Crane

Mission 3: Inspection Drone

Mission 4: Design for Wildlife

Mission 5: Treehouse

Mission 6: Traffic Jam

Mission 7: Swing

Mission 8: Elevator

Mission 9: Safety Factor

Mission 10: Steel Construction

Mission 11: Innovative Architecture

Mission 12: Design & Build

Mission 13: Sustainability Upgrades

Mission 14: Precision

For details, you may download the game guide here:

<https://firstinspiresst01.blob.core.windows.net/fli/2020/city-shaper-game-guide-pdf.pdf>

## Official Competition Kits

45544  
LEGO® MINDSTORMS®  
Education EV3 Core Set



LEGO MINDSTORMS®  
education EV3

45560  
LEGO® MINDSTORMS®  
Education EV3 Expansion Set



# HOW IT WORKS

## CHILDREN AND YOUTH



**Learn  
Teamwork  
Skills**



**Research  
Challenges Facing  
Today's Scientists**



**Design, Build,  
and Program  
Autonomous  
Robots**

## GET STARTED. YOU WILL NEED:

Teams of up to  
**10** children  
and youth

Ages  
**9 to 16**

Facilitation by  
**Adult Coaches  
and Mentors**

**A Meeting Place**  
(school, after-school,  
homeschool, or  
community space)

**Support**  
from parents, teachers,  
and community volunteers

**LEGO® MINDSTORMS®**  
Robot Set and  
Annual Challenge Set

A minimum of  
**8** weeks

## WHAT IT OFFERS:

- Application of science and math concepts
- Hands-on problem solving
- Programming experience
- A new real-world themed challenge each year
- An exciting sports-like tournaments with judges and awards

## HOW TO PARTICIPATE IN FIRST® LEGO® LEAGUE 2020 MALAYSIA:

Complete the order form and send it back to us via email [lego@sasbadi.com](mailto:lego@sasbadi.com) or fax to 03-6145 1199 / 6156 9080. You may download the form on our website [fll.sasbadi.com](http://fll.sasbadi.com) or get a copy from our dealers/distributors.





# FIRST® LEGO® League Jr. Malaysia 2020

It's never too early to discover STEM



Welcome to Boomtown! Teams will explore the growing needs and challenges of the people in our community. Teams will help to imagine and create a building that solves a problem and makes life easier, happier, or more connected for the people that use it.



Use your imagination and LEGO® Education WeDo 2.0 to design and program your BOOMTOWN BUILD™.



Keep track of what you learn in your *Engineering Notebook*, and tell about it in a *Show Me* poster.

## Official Competition Kits



45300 WeDo 2.0 Core Set



45810 Inspire Set



# HOW IT WORKS

## CHILDREN

- Build and program a model that moves using LEGO® Education WeDo 2.0
- Document their work in individual Engineering Notebooks and present their team research journey in a collaborative *Show Me* poster
- Learn teamwork skills
- Build self-confidence, knowledge, and life skills

## GET STARTED. YOU WILL NEED:

Teams of up to

**3** children

Ages

**6 to 10**

Guidance by

**Adult Coaches  
and Mentors**

**A Meeting Place**

(school, after-school,  
homeschool, or  
community space)

**Support**

from parents, grandparents,  
teachers, and community  
volunteers

**12** sessions

**LEGO® Education WeDo 2.0  
and Annual Inspire Set**

## WHAT IT OFFERS:

- New Challenge each year, based on real-world topic
- Introduction to science and engineering concepts, the engineering design process, basic coding and research
- Culture of sharing, learning, and fun
- Engagement of children in meaningful, hands-on experimentation
- Presentation skills development

## HOW TO PARTICIPATE IN FIRST® LEGO® LEAGUE JR 2020 MALAYSIA:

Complete the order form and send it back to us via email [lego@sasbadi.com](mailto:lego@sasbadi.com) or fax to 03-6145 1199 / 6156 9080. You may download the form on our website [fl.sasbadi.com](http://fl.sasbadi.com) or get a copy from our dealers/distributors.





# OUR FLL MALAYSIAN TEAMS

## ON GLOBAL STAGE IN 2019

**FIRST® Championship 2019, Houston, Texas, USA**  
**Team Huntsman, Han Chiang High School, Penang**

**Robot Performance – Champion**  
**Best Strategy – Bronze**



"I see immense value in this competition because it brings people together, while having an enjoyable learning experience. The people I've encountered were friendly, helpful and simply amazing even if we are competing against each other. So I hope that competitions such as this will continue to expand for many years to come to continue building public interest in the field of robotics locally and internationally, especially for our younger generation."

- Mr Chin Kai Leek, Coach.

"We are honoured to represent Malaysia in the FIRST® Championship 2019. We started our preparations early since December 2018, the moment we received the Into Orbit challenge playing field. It was an intense 4 months where we went through countless trials and errors to build the perfect robot and brainstorm for the project presentation. However, with sheer determination and teamwork, we pulled through. And we are really proud of the results within such a short period of time.

This international championship had 38 countries competing and honestly, it was a bit overwhelming to compete against the best teams from across the world. But it was such a rewarding experience to learn about the different cultures and traditions and people were really friendly throughout the competition. It was such a pleasant thing for us to know that we share some cultural similarities with some of the people there and that has helped us to bond and made some really nice friends. For most of us, it was our first time being in the States, so it was an experience of a lifetime that we will never forget!

- Keh Jie Zhan (Team Leader) and Gan Jing E

**FIRST® LEGO® League Open International Turkey 2019, Izmir, Turkey**  
**Stealth-X Assassins, Assassins Robotics, Penang**

**Strategy and Innovation Award**  
**- Bronze**



"We had only 5 months to prepare for the FLL Open International Turkey 2019 and I must say that there were times of doubts if we could do a good job. But the team has worked tremendously hard to come up with brilliant ways to improve the team efficiency during the practice sessions. I am so proud of the team on what they've achieved in such a short period of time and performed really well in the competition. This competition is such a wonderful opportunity to compete and learn from the best teams from across the world. I am sure that my team have gained a valuable learning experience that they will cherish for a long time!"

- Jeff Chung, Coach

"Throughout the competition, everyone was so friendly, we exchanged ideas and were blown away by some impressive prototypes. We had our fair share of memorable times. One was when we encountered a glitch during our robot performance testing session. Fortunately, we managed to modify the robot design to enhance its performance in time. Another memorable time was when we had to perform a Chicken Dance for the judges during the Core Values challenge!

Participants sure know how to enjoy themselves even during the intensity of the competition. There were boom boxes blasting away, people taking photos and videos at every corner and some local participants even brought trays of lokum (Turkish candy) to share!

The competition was held at Fuarizmir, the largest fair centre in Turkey and we wanted to experience the country for its culture, so we participated in get-together events such as the Welcome Party at Fuarizmir, Colours of Science City parade, Colours of Culture Night at İnciraltı City Forest and Friendship Night at Kültürpark. Everyone enjoyed themselves with Turkish dances and songs as we celebrated in a truly global fashion. We took nice breezy strolls along the coast of Izmir and were awed by the unique architectures that blend historic and modern designs together so nicely.

At the end of the day, the joy and colourful personalities brought by hundreds of participants made this competition an incredible experience for all of us. This Turkish experience will remain as one of the best moments of our lives."

- Khoo Kai Yan and Wong Jo Em, Team Members



# A RECAP: 2014 - 2018

## FIRST® LEGO® League The Estonian International Open 2018 Tallinn, Estonia



Winner Of The Robot Game Category - SILVER  
Team name: Silent-X Assassins  
Assassins Robotics, Pulau Pinang

## FIRST® LEGO® League World Festival 2018 Houston, Texas



Winner Of The Robot Performance Category - BRONZE  
Team name: Nemesis-X Assassins  
Assassins Robotics, Pulau Pinang

## FIRST® LEGO® League Open European Championship 2017 Aarhus, Denmark



Winner Of The Champion's Award - GOLD  
Team name: Phantom-X Assassins  
Assassins Robotics, Pulau Pinang

## FIRST® LEGO® League World Festival 2016 St. Louis, United States of America



Winner Of The Mechanical Design Award - SILVER  
Team name: #REVELES  
SMJK Chung Ling, Ayer Itam, Pulau Pinang

## FIRST® LEGO® League Asia Open Championship 2016 Sydney, Australia



Winner Of The Best Presentation Award - GOLD  
Team name: Bintulu Hawks  
SMK Bintulu, Bintulu, Sarawak

## FIRST® LEGO® League World Festival 2014 St. Louis, United States of America



Winner Of The Mechanical Design Award - SILVER  
Team name: JS Flawless  
SMJK Jit Sin, Bukit Mertajam, Pulau Pinang





Strategic Partner & Venue Sponsor



Strategic Partners



**FIRST. LEGO® League**

**Awards Presentation a**

Officiate

**YBhg. Encik Za**

Director of Sport, Arts and





# FLL Malaysia 2019 Winning Teams

e MALAYSIA 2019

LEGO  
LEAGUE JR.  
MALAYSIA

and Closing Ceremony

ed by

inal bin Abas

d Co-curricular Division

c Malaysia

Organiser



Strategic Partner & Venue Sponsor



Strategic Partners



Scan this  
QR code for  
the photo album





# CHAMPION'S AWARD



## GOLD

**PheoniX**  
SMJK Heng Ee,  
Georgetown, Pulau Pinang



## SILVER

**TEMPLAR ASSASSINS**  
Assassins Robotics,  
Pulau Pinang



## BRONZE

**METEORITES**  
SMJK Katholik,  
Petaling Jaya, Selangor





# WINNING TEAMS

## BEST PROJECT

### #DELPHINUS

Chung Ling High School, Pulau Pinang

#### RESEARCH

**BESTERMINATOR**  
SAM Bestari, Selangor

#### INNOVATIVE SOLUTION

**#PLAHVATUS**  
Chung Ling High School, Pulau Pinang

#### PRESENTATION

**LUNARIS**  
KOLEJ PERMATAPintar, UKM, Selangor

## BEST ROBOT

### RIKI ASSASSINS

Assassins Robotics, Pulau Pinang

#### MECHANICAL DESIGN

**NYX ASSASSINS**  
Assassins Robotics, Pulau Pinang

#### PROGRAMMING

**APHELION**  
Future Tech Engineering [M] Sdn Bhd,  
Negeri Sembilan

#### STRATEGY & INNOVATION

**KILOBYTES**  
SJKC Kwang Hwa, Pulau Pinang

## BEST CORE VALUES

### ROBOT HACKERS

CR8 Robotics Sabah, Sabah

#### INSPIRATION

**XENON**  
SMK Tinggi Batu Pahat, Johor

#### TEAMWORK

**Victoria Institution AMal KL**  
Victoria Institution, W.P. Kuala Lumpur

#### GRACIOUS PROFESSIONALISM

**RETENTUS**  
SMK (P) Sultan Ibrahim, Johor

#### SPIRIT

**MIGHTY SPACE**  
Legobots Centre, Melaka

#### SHOWMANSHIP

**BABYGHOST**  
Creative Robotics Setia Alam, Selangor

## AGAINST ALL ODDS AND RISING STAR

#### AGAINST ALL ODDS

**D'KERIAN BOY**  
SMK Kubang Kerian, Kelantan

#### RISING STAR

**JAZARIN**  
SAM Bandar Baru Salak Tinggi, Selangor

## BEST ROBOT PERFORMANCE

#### CHAMPION

**RIKI ASSASSINS,**  
Assassins Robotics, Pulau Pinang

#### 1ST RUNNER-UP

**TEMPLAR ASSASSINS,**  
Assassins Robotics, Pulau Pinang

#### 2ND RUNNER-UP

**PheoniX,**  
SMJK Heng Ee, Pulau Pinang

# WINNING TEAMS

## Robot Performance Award

1. Riki Assassins, Assassins Robotics, Pulau Pinang
2. Templar Assassins, Assassins Robotics, Pulau Pinang
3. PheoniX, SMJK Heng Ee, Pulau Pinang
4. NYX Assassins, Assassins Robotics, Pulau Pinang
5. Nerubian Assassins, Assassins Robotics, Pulau Pinang
6. METEORITES, SMJK Katholik, Selangor
7. Nemesis Assassins, Assassins Robotics, Pulau Pinang
8. Kilobytes, SJKC Kwang Hwa, Pulau Pinang
9. Kinrara Fighters, Creative Robotics Kinrara, Selangor
10. #DELPHINUS, Chung Ling High School, Pulau Pinang
11. Team Ghost, Creative Robotics Setia Alam, Selangor
12. RS Ultimate, RS Robotic Center, Melaka
13. #PLAHVATUS, Chung Ling High School, Pulau Pinang
14. Mighty Space, Legobots Centre, Melaka
15. BabyGhost, Creative Robotics Setia Alam, Selangor
16. Robot Hackers, CR8 Robotics Sabah, Sabah
17. Bestterminator, SAM Bestari, Selangor
18. CYBOTZ, Next Gen Technology, Selangor
19. AL FATEH, Al Fateh Integration Primary School, Selangor
20. Space Frontiers, Robotech Education Center, Selangor
21. TS EMPIRE JUPPY, MRSM Muar, Johor
22. The Robonauts, SMK Infant Jesus Convent, Johor
23. JAAFARIAN GRAND ORDER, SMK Dato Jaafar, Johor

## Judges' Choice Award

1. Team Ghost, Creative Robotics Setia Alam, Selangor
2. PUTRA ROBOTIC TEAM, SK Bukit Rahman Putra, Selangor
3. MITstem Robo Ninja, MITstem International School, Selangor
4. SEMERBAK VENTUROUS, SMK Seri Gombak, Selangor
5. Robot Warriorz, CR8 Robotics Sabah, Sabah
6. Nerubian Assassins, Assassins Robotics, Pulau Pinang
7. Kinrara Fighters, Creative Robotics Kinrara, Selangor
8. SPICA, Sekolah Seri Puteri, Cyberjaya, Selangor
9. SAS TEAM B, Sekolah Sultan Alam Shah, W.P. Putrajaya
10. SAS TEAM A, Sekolah Sultan Alam Shah, W.P. Putrajaya
11. PheoniX, SMJK Heng Ee, Pulau Pinang
12. CYBOTZ, Next Gen Technology, Selangor
13. S.M.A.R.T, Sekolah Rendah i-Musleh, Melaka
14. Trio Lion Roar-botics Gang, SMKHK/SMKSA/SKSL, Melaka
15. AMAl SABAH, Maktab Sabah, Sabah
16. SCHS Roboticist, Sabah Chinese High School, Sabah
17. The Robonauts, SMK Infant Jesus Convent, Johor
18. CS TROOPERS, SMK Convent (M), Muar, Johor
19. IDK 2.0, SMJK Yok Bin, Melaka

## FIRST® LEGO® League Jr. Malaysia

### Construction Innovation Award

1. LIL SPACE EXPERT, SK Seksyen 13, Shah Alam, Selangor
2. SUPER BOY, SJKC Ai Chun 2, Johor
3. C-H.E.L.P, Next Gen Technology, Selangor
4. WARRIOR, Kazlan Empire Robotic, Johor
5. KIDZONE ROBOTICS 01, SK Lesong Batu, Melaka

### Amazing Movement Award

1. WAZEMoon, SMK Chung Hwa Wei Sin, Terengganu
2. Galactic Star, SK Seksyen 13, Shah Alam, Selangor
3. Luna Explorer, SJKC Puay Chai 2, Selangor
4. Abimanyu, SJKT Ladang Semenyih, Selangor
5. SPACE AGENTS, kOkO Block Sdn Bhd, W.P., Kuala Lumpur

### Explosive Ideas Award

1. Crescent Crew SK (P) Methodist, Kuantan, Pahang
2. NEPTUNE, SK Seksyen 13, Shah Alam, Selangor
3. THE EXPLORERS, SK Seksyen 13, Shah Alam, Selangor
4. MASTERBUILDERS, SK Seksyen 13, Shah Alam, Selangor
5. NINJA 2, Ninja Academy, Selangor

### Artistic Eye Award

1. NINJA 4, Ninja Academy, Selangor
2. CHUNG HWA TEAM A, SJKC Chung Hwa Jerreh, Terengganu
3. Robonerd Jr 2, SK Sultan Sulaiman 1, Terengganu
4. SUPER GIRL, SJKC Ai Chun 2, Johor
5. B-LoVE, Next Gen Technology, Selangor

### Gracious Professionalism Award

1. Spacebot SK, Seksyen 13, Shah Alam, Selangor
2. LUCKY OWL, SJKC Yuk Cheng, Kelantan
3. Robonerd Jr 1, SK Sultan Sulaiman 1, Terengganu
4. SKA HERO, SK Ampangan, Negeri Sembilan
5. FORCE ONE, kOkO Block Sdn Bhd, W.P. Kuala Lumpur

### Effort and Learning Award

1. Space Explorer Jr., Sekolah Rendah Islam Hira, Selangor
2. CHUNG HWA TEAM B, SJKC Chung Hwa Jerreh, Terengganu
3. SUNFIELDS WARRIOR, Sunfields Montessori, Selangor
4. Future Explorer Jr., Sekolah Rendah Islam Hira, Selangor
5. Brickaway, Robocom, Melaka

### Complexity and Decoration Award

1. Titan Junior, SK Seksyen 13, Shah Alam, Selangor
2. Putra Robotic Team, SK Bukit Rahman Putra, Selangor
3. Captain Moon, SJKC Puay Chai 2, Selangor
4. N.I.T.R.O, Next Gen Technology, Selangor

### Robust Design Award

1. Xplo"R"eus, SK Convent Infant Jesus (2), Melaka
2. Ninja 3, Ninja Academy, Selangor
3. spaceXplorer Junior, Robotech Education Center, Selangor
4. Pathfinder, SK Sg Kelambu, Selangor
5. Star Cluster Mission, Sekolah Rendah Al- Amin Putra Mahkota, Selangor

### Rising Star Award

1. NINJA 1, Ninja Academy Selangor
2. MOON RIDERS, Sekolah Sri Tenby Selangor
3. Akademi DS Jr. 2, Akademi Teknologi DS, Selangor
4. Bluebot, SK Seksyen 13, Shah Alam Selangor
5. Akademi DS Jr. 3, Akademi Teknologi DS Selangor

### Inquiring Minds Award

1. ASTEROID ADVENTURES, SK Tengku Mahmud, Terengganu
2. AERO GEAR, SK Dato Onn Jaafar, Selangor
3. KIDZONE ROBOTICS 02, SK Datuk Tambichik Karim, Melaka
4. YOUNG HERO, SK Dato Onn Jaafar, Selangor
5. Sri Ayesha, Akademi Teknologi DS, Selangor

### Outstanding Teamwork Award

1. STELLA NOVA, SK Sg Kelambu, Selangor
2. MOON EXPLORERS, Sekolah Sri Tenby, Selangor
3. Akademi DS Jr. 1, Akademi Teknologi DS, Selangor
4. I.B.C.E, Next Gen Technology, Selangor

### Against All Odds Award

1. SUPERMOON, SK Seksyen 13, Shah Alam, Selangor
2. NINJA 5, Ninja Academy, Selangor
3. LMNTRIX NEO, SK Bintang, Terengganu
4. LMNTRIX, SK Bintang, Terengganu

# CONGRATULATIONS

## to all FLL and FLL Jr. Malaysia Graduates

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- JAAFARIAN GRAND ORDER

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- The Robonauts

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- RETENTUS

**MRSM MUAR, JOHOR**  
- TS EMPIRE JUPPY  
- TS EMPIRE THE EARTH  
- TS EMPIRE V-NUS

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- Blitz Tsubasa

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- D'Kerian Boy

**ROBOCOM, MELAKA**  
- ROBOCOM UNITED

**LEGOBOTS CENTRE, MELAKA**  
- Mighty Space

**RS ROBOTIC CENTER MELAKA**  
- RS Ultimate

**SMKHK/SMKSA/SKSL, MELAKA**  
- Trio Lion Roar-botics Gang

**SK TANJUNG MINYAK 2, MELAKA**  
- SDOBY DO 2048

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- IDK 2.1

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- Tesseract

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- Team Ghost

**CREATIVE ROBOTICS KINRARA, SELANGOR**  
- Kinrara Fighters

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- BabyGhost

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- Space Frontiers

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- ROBOHIS

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**SEKOLAH SULTAN ALAM SHAH, W.P. PUTRAJAYA**  
- SAS TEAM A  
- SAS TEAM B

### FIRST® LEGO® League Jr. Malaysia | 60 Teams

**SK DATO ONN JAAFAR, JOHOR**  
- AERO GEAR

**KAZLAN EMPIRE ROBOTIC, JOHOR**  
- WARRIOR

**SJKC AI CHUN 2, JOHOR**  
- SUPER GIRL  
- SUPER BOY

**SJKC YUK CHENG, KELANTAN**  
- LUCKY OWL

**ROBOCOM, MELAKA**  
- Brickaway

**SK CONVENT INFANT JESUS (2), MELAKA**  
- Xplo"R"eus

**SK LESONG BATU, MELAKA**  
- KIDSZONE ROBOTICS 01

**SK DATUK TAMBICHIK KARIM, MELAKA**  
- KIDSZONE ROBOTICS 02

**SK AMPANGAN, NEGERI SEMBILAN**  
- SKA HERO

**SK (P) METHODIST, KUANTAN, PAHANG**  
- Crescent Crew

**ROBOTECH EDUCATION CENTER, SELANGOR**  
- spaceXplorer Junior

**AKADEMI TEKNOLOGI DS, SELANGOR**  
- Akademi DS Jr. 1  
- Akademi DS Jr. 2  
- Akademi DS Jr. 3  
- Sri Ayesha

**SEKOLAH RENDAH ISLAM HIRA, SELANGOR**  
- Space Explorer Jr.  
- Future Explorer Jr.

**SJKT LADANG SEMENYIH, SELANGOR**  
- Abimanyu

**SEKOLAH SRI TENBY, SELANGOR**  
- MOON RIDERS  
- MOON EXPLORERS

**SEKOLAH RENDAH AL- AMIN PUTRA MAHKOTA, SELANGOR**  
- STAR CLUSTER MISSION

**SK DATO ONN JAAFAR, SELANGOR**  
- YOUNG HERO

**SK BUKIT RAHMAN PUTRA, SELANGOR**  
- PUTRA ROBOTIC TEAM

**NEXT GEN TECHNOLOGY, SELANGOR**  
- Cyber Human Evolution and Lunar Prospector (C-H.E.L.P)  
- Interstellar Boundary Cyber Explorer (I.B.C.E)  
- Brainy Leaders of Visionary Explorers (BLoVE)  
- New Interstellar Transportation and Rehabilitation Order (N.I.T.R.O)

**SK SG KELAMBU, SELANGOR**  
- PATHFINDER  
- STELLA NOVA

**SUNFIELDS MONTESSORI, SELANGOR**  
- SUNFIELDS WARRIOR

**SJKC PUAY CHAI 2, SELANGOR**  
- Luna Explorer  
- Captain Moon

**NINJA ACADEMY, SELANGOR**  
- NINJA 1  
- NINJA 2  
- NINJA 3  
- NINJA 4  
- NINJA 5

**SK SEKSYEN 13, SHAH ALAM, SELANGOR**  
- Bluebot  
- Spacebot

**LIL SPACE EXPERT**  
- SUPERMOON  
- MASTERBUILDERS  
- Titan Junior  
- Galactic Star  
- NEPTUNE  
- THE EXPLORERS

**SK BINTANG, TERENGGANU**  
- LMNTRIX NEO  
- LMNTRIX

**SK SULTAN SULAIMAN 1, TERENGGANU**  
- Robonerd Jr 1  
- Robonerd Jr 2

**SMK CHUNG HWA WEI SIN, TERENGGANU**  
- WAZEMoon

**SJKC CHUNG HWA JERTEH, TERENGGANU**  
- CHUNG HWA TEAM A  
- CHUNG HWA TEAM B

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- RoboHavil2  
- RoboHavil3

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