



ROBOTICS & CODING

HOLIDAY WORKSHOP

BUILD | CODE | CREATE

**DISCOVER THE
JOY OF LEARNING**

**IN A CARNIVAL
OF CREATIVITY**

WHY JOIN?

*Fun, hands-on learning
through robotics and coding*

No prior experience needed

*Perfect for kids aged 5–12
years old*

*Please refer to the
next page for the
schedule at each
location.*

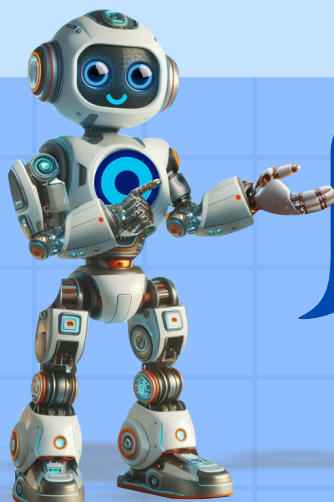
Limited Slots – Register Now!

 **+65 8822 1615**

Nov-Dec Holiday Workshop 2025



PLACE	DATE
Punggol Enrichment Centre	24-26 November 2025 8-10 December 2025
Jurong East Enrichment Centre	1-3 December 2025 8-10 December 2025
Novena Enrichment Centre	1-3 December 2025 15-17 December 2025
Bukit Timah Enrichment Centre	24-26 November 2025 8-10 December 2025
Katong Enrichment Centre	1-3 December 2025 15-17 December 2025
Thomson Enrichment Centre	24-26 November 2025



1-Day	2-Days	3-Days
\$168	\$328	\$439

*GST Included



CARNIVAL ENGINEERS

HOLIDAY EDITION

3

HOURS A DAY

DAYS STRAIGHT

JUNIOR ROBOTICS

FOR AGES 5-6

EXPLORATORY ROBOTICS

FOR AGES 7-9

MASTERY ROBOTICS

FOR AGES 10-12



EVENT

JUNIOR

EXPLORATORY

MASTERY

DAY 1

CAROUSELS & TARGET GAMES

- Build simple carnival rides and interactive game model using guided instructions and icon based coding.
- Focus on fine-motor skills, visual-spatial thinking, and hands-on exploration

- Build & modify carnival rides and interactive games with mechanical upgrades and basic logic.
- Emphasis on motion control, gear transmission and cause-effect relationships through hands-on exploration

- Build, test, and refine ride systems with timed loops, and sensor triggers.
- Emphasis planning, coding logic, purposeful design modifications and collaborations

DAY 2

BUMPER BOTS & FERRIS WHEEL

- Explore directional movement, balance, and rotation through robotics.
- Use icon-based programming to control vertical rotation and timed stops.
- Encourage creativity through upgrade & arena designs

- Build & test robots that move and bump using mechanical transmission and motors
- Use icon-based programming to control rotation, timed stops and signals
- Add creative upgrades with emphasis on ride safety and rider experience

- Explore energy transfer, impact absorption, and structural stability through robotics
- Use block-based coding to explore event-driven programming user interaction.
- Add creative Upgrades that improved rides.

DAY 3

SHOOTING GAMES & DROP RIDE

- Explore force and elastic energy with launchers.
- Use icon-based programming to control vertical ascent of a vertical drop ride
- Engage in collaborative and creative thinking through problem-solving challenges.

- Build interactive games and drop rides with participant-designed mechanical release
- Emphasis problem solving and design engineering

- Build interactive games and drop rides with advanced coding logic and student-designed mechanical release
- Emphasis safety, thrill, and performance tracking

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