bgc South East

STEM & ROBOTICS
WINTER 2027 PROGRAM GUIDE

REGISTRATION OPEN

Hands-on opportunities from Kindergarten through Grade 12.

WINTER AT A GLANCE

10 WEEKS — Most programs: 10 sessions. FRC: 36 meetings.

JANUARY — Most programs start the week of January 11, 2027.

REGISTRATION — Opened November 10, 2026. Avocado Parent Portal.

BGC STEM & ROBOTICS CENTRE

1300 Bath Road, Kingston
stem@bgcsoutheast.ca

Prices cover the full program. Spaces are limited.

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PROGRAM TYPE COLOUR GUIDE

- APPLIED ARTS
- APPLIED ROBOTICS
- VIDEO GAMES
- MINECRAFT EDUCATION
- 3D PRINTING
- COMPETE
- SPECIALTY

AGE BAND COLOUR GUIDE

- U6 — K
- U8 — Gr. 1-2
- U10 — Gr. 3-4
- U12 — Gr. 5-6
- U14 — Gr. 7-8
- U16/U18 — Gr. 9-12

REGISTER THROUGH AVOCADO

Scan to view Winter 2027 programs and register.

REGISTRATION & QUESTIONS

https://boysandgirlsclubofkingstonareaincl.my.site.com/#/app/program/list/DIV-001/
Questions: stem@bgcsoutheast.ca

Most programs run 10 sessions • Holiday and March Break exceptions apply • See Avocado descriptions for dates.

WINTER 2027 PROGRAMS

U6 & U8

Kindergarten and Grades 1-2

Applied Arts | Winter Wonders — U6
$170
Tues. 5:00-5:45 PM
Explore winter-inspired patterns, colour, texture and movement through imaginative art and design projects.

Applied Robotics | Robot Animal Adventures — U6
$170
Sat. 9:30-10:15 AM
Explore animal-inspired robot movements through playful coding, sequencing and hands-on engineering challenges.

3D Printing Club | Make Your Own Toys — U8
$180
Mon. 5:15-6:00 PM
Design playful toys with beginner-friendly 3D modelling tools, exploring shapes, symmetry and creative details.

Applied Robotics | Dinosaur Discovery — U8
$180
Wed. 5:15-6:15 PM
Code and guide robots through dinosaur-inspired missions, using movement, sensors and problem-solving.

Applied Arts | Creature Creations — U8
$180
Tues. 6:00-7:00 PM
Design real and imaginary creatures while exploring patterns, textures, movement and habitats through art.

Coding: Minecraft Education | Animal Rescue Builders — U8
$180
Thurs. 5:00-6:00 PM
Build animal habitats and rescue systems in Minecraft Education using collaborative design and beginner coding.

WINTER 2027 PROGRAMS

U10

Grades 3-4

Applied Robotics | Carnival Games

U10

$180

Mon. 5:15-6:15 PM

Build and code carnival-inspired robotics games with targets, timing, scoring and hands-on design challenges.

Coding: Video Games | Arcade Game Creators

U10

$180

Tues. 4:45-5:45 PM

Use Flowlab to create arcade games with controls, scoring, collisions, debugging and playtesting.

Applied Arts | Optical Illusions Lab

U10

$180

Thurs. 6:15-7:15 PM

Create optical illusions using colour, contrast, pattern, symmetry and perspective in hands-on art projects.

Coding: Minecraft Education | Theme Park Engineers

U10

$180

Sat. 9:30-10:30 AM

Build a collaborative theme park in Minecraft Education using coding, automation and creative engineering.

3D Printing Club | Everyday Inventions

U10

$180

Sat. 10:45-11:45 AM

Design everyday inventions with 3D modelling tools, then refine useful and playful objects for printing.

WINTER 2027 PROGRAMS

U12 & SPECIALITY

Grades 5-8

Applied Robotics | Animatronics

U12

$190

Mon. 6:30-7:45 PM

Create moving characters and interactive displays using robotics, coding, mechanisms and creative design.

Coding: Video Games | Skybound Jumper

U12

$190

Wed. 5:00-6:00 PM

Build an upward-jumping arcade game in Flowlab with platforms, hazards, scoring and progressive challenges.

Coding: Minecraft Education | City of Tomorrow

U12

$190

Wed. 6:30-7:45 PM

Use Minecraft Education and coding to design a future city with connected services, transportation, and resources.

3D Printing Club | Tabletop Game Studio

U12

$190

Thurs. 5:00-6:00 PM

Design and 3D print pieces, tokens and accessories for classic tabletop games, improving fit and function.

Girls-Only | Creative Tech Studio

U12 U14

$170

Sat. 10:30-11:45 AM

Explore STEM, digital design, art and maker projects in a welcoming girls-only studio focused on creativity.

WINTER 2027 • Prices cover the full program.

WINTER 2027 PROGRAMS

U14, U14/U16, U16/U18 & COMPETE

Grades 7-12

Coding: Minecraft Education | Lost Caverns: Mining

U14

$190

Mon. 6:15-7:30 PM

Explore Minecraft caverns using code, mapping, resource planning and engineering to design safe underground routes.

3D Printing Club | Fidget Factory

U14

$190

Thurs. 6:15-7:30 PM

Design and 3D print moving fidget objects that spin, slide or hinge, testing fit, comfort and durability.

Applied Robotics | Robotics Challenge Arena

U14

$190

Wed. 6:15-7:30 PM

Build and code robots for changing arena challenges, using sensors, strategy, testing and teamwork.

Coding: Video Games | Rhythm Side-Scroller

U14

$190

Tues. 6:00-7:15 PM

Use Flowlab to build a rhythm-inspired side-scroller with timed movement, obstacles, visual cues and sound.

Applied Robotics | Racecar Engineering

U14-U16

$170

Tues. 5:00-6:15 PM

Use Onshape, 3D printing, microcontroller wiring and testing to engineer small racecar systems.

Applied Robotics | Python Robotics

U16/U18

$190

Thurs. 5:15-6:30 PM

Use Python to program physical robotic systems, exploring sensors, motors, control logic and debugging.

FIRST Robotics Competition | Season Preparation

U16/U18

36 meetings • No fee through Avocado

Tues., Thurs. & Fri. 6:00-9:00 PM

Join the official FRC team for robot fabrication, programming, testing, strategy and collaborative competition work.

WINTER 2027 • Prices cover the full program.