

STEM & ROBOTICS

FALL 2026 PROGRAM GUIDE

REGISTRATION OPEN

Hands-on opportunities from
Kindergarten through Grade 12.

FALL TERM AT A GLANCE

10 WEEKS

Most programs: 10 sessions.
FTC: 24 meetings.

SEPTEMBER

Most: September 21, 2026.
FTC: September 14, 2026.

REGISTRATION

Opened August 24, 2026.
Avocado Parent Portal.

BGC STEM & ROBOTICS CENTRE

1300 Bath Road, Kingston
stem@bgcsoutheast.ca

PROGRAM TYPE COLOUR GUIDE

APPLIED ARTS	APPLIED STEM
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
RERUN	Previously delivered or directly adapted	



REGISTER THROUGH
AVOCADO

Scan to view Fall 2026
programs and register.

REGISTRATION & QUESTIONS

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

RERUN = previously offered theme • 'or' times are separate offerings • Prices cover the full program.

Applied Arts | Shapes in Motion

U6

\$170

Tues. 4:30-5:15 PM

Explore shapes, balance and movement through playful art, building and design challenges.

Applied Robotics | Smart Cities

U6

\$170

Wed. 4:45-5:30 PM or Sat. 9:30-10:15 AM

Build simple communities and guide beginner-friendly robots through routes, helpers and city challenges.

Applied STEM | Ecosystems

U6

\$170

Thurs. 5:45-6:30 PM

Explore plants, animals, habitats and relationships through hands-on science and simple design activities.

Applied STEM | Oceans

U8

\$180

Thurs. 4:30-5:30 PM

Investigate ocean life, buoyancy, water movement and environmental challenges through hands-on STEM activities.

Applied Robotics | Astronomy

U8

\$180

Mon. 5:45-6:45 PM or Sat. 9:30-10:30 AM

Code and guide robots through space-themed navigation, exploration and teamwork missions.

Applied Arts | Light, Sound & Motion

U8

\$180

Tues. 5:30-6:30 PM

Combine colour, shadows, sound, vibration and movement in creative art and science projects.

Coding: Minecraft Education | Eco Village Builders

U8

\$180

Mon. 5:15-6:15 PM or Thurs. 5:45-6:45 PM

Use Minecraft Education coding and collaborative building to design a thoughtful, sustainable community.

Coding: Video Games | Scratch Fundamentals

U8

\$180 • Maximum 8

Tues. 4:30-5:30 PM

Use Scratch to create animations and beginner video games while learning events, loops and debugging.

U10

Grades 3-4

Applied Robotics | Search & Rescue Robotics

U10

\$180

Mon. 7:00-8:00 PM

Design, build and code robots for rescue, navigation and problem-solving missions.

3D Printing Club | Design Your World

U10

\$180

Tues. 6:45-7:45 PM or Wed. 4:30-5:30 PM

Use TinkerCAD to create useful and imaginative objects, then prepare designs for 3D printing.

Applied Arts | Kinetic Art Lab

U10

\$180

Wed. 5:45-6:45 PM

Combine art, movement, balance and simple mechanisms to create interactive or moving artwork.

Coding: Minecraft Education | Island Engineering

U10

\$180

Wed. 5:45-6:45 PM

Use Minecraft Education coding and teamwork to develop island infrastructure, resources and transportation.

Coding: Video Games | Platformer Game

U10

\$180

Thurs. 4:30-5:30 PM

Use Flowlab to build a platform game with movement, collisions, scoring, levels and playtesting.

Applied STEM | Clean Water Challenge

U10

\$180

Sat. 10:45-11:45 AM

Investigate water systems and use testing, data and redesign to develop simple filtration solutions.

U12

Grades 5-6

3D Printing Club | Gadgets & Gizmos

U12

\$190

Mon. 4:30-5:45 PM or Wed. 6:45-8:00 PM

Use TinkerCAD to design useful gadgets, moving parts and fitted components for 3D printing.

Applied STEM | Disaster Response Lab

U12

\$190

Mon. 6:00-7:15 PM

Develop practical solutions for shelter, water, communication and transportation during simulated emergencies.

Coding: Video Games | Space Game

U12

\$190

Tues. 5:45-7:00 PM

Use Flowlab to create a space game with controls, obstacles, enemies, scoring and visual feedback.

Coding: Minecraft Education | Ancient Engineering

U12

\$190

Wed. 7:00-8:15 PM

Use Minecraft Education to recreate historic structures and systems, then automate selected tasks with code.

Applied Robotics | Robotic Field Missions

U12

\$190

Thurs. 6:45-8:00 PM

Build and program robots for connected missions using navigation, sensors, mechanisms and systematic testing.

U14, U16/U18 & COMPETE

Grades 7-12, plus select Grades 5-8

Coding: Minecraft Education | Automation & Logic

U14

\$190

Mon. 6:30-7:45 PM

Use Minecraft Education agents, loops, functions and logic to create and explain advanced automated systems.

3D Printing Club | Mechanical Models

U14

\$190

Tues. 4:45-6:00 PM

Use TinkerCAD to design working models with joints, gears, fit testing and moving assemblies.

Applied Robotics | Mars Mission

U14

\$190

Wed. 5:15-6:30 PM

Engineer and program rover solutions for navigation, obstacle response, sample collection and planetary challenges.

Coding: Video Games | Stealth Mission Game

U14

\$190

Thurs. 7:00-8:15 PM

Use Flowlab to build a stealth game with detection, enemy behaviour, strategic levels and playtesting.

Applied Robotics & Manufacturing | Kit Bot Build

U16/U18

\$170

Tues. 6:30-8:30 PM

Work through the mechanical build, wiring, programming and testing of a complete kit-based robot, separate from FIRST.

Greener World for Youth

U16/U18

Youth Green Advisory Council

Thurs. 4:00-5:30 PM

Explore local green spaces, learn from mentors and help design a youth outdoor program for Spring 2027.

LEGO Robotics Challenge | Mission Challenge

U12

U14

\$180

Thurs. 6:30-8:00 PM

Design, build and program a team robot for original Centre-created missions and collaborative challenges.

FIRST Tech Challenge | Official Season Team

U16/U18

24 meetings • \$300

Mon. and Wed. 6:00-8:00 PM

Maximum 10 participants. Design, build and program an official competition robot through a team-based season pathway.

FIRST Robotics Competition | Season Preparation

U16/U18

No fee through Avocado

Fri. 6:00-9:00 PM

A separate school board fee applies. Develop fabrication, programming, testing, outreach and teamwork skills.

Girls-Only | Inventors Lab

U12

U14

\$170

Sat. 10:30-11:45 AM

Explore robotics, circuits, structures and creative prototyping in a welcoming, collaborative environment.