



# SCIENCE, TECHNOLOGY, ENGINEERING AND MATH

## COMPUTER VIDEO GAME DESIGNER

Participants will use their imagination to create, design, test and play their own unique and interactive video games that will help participants better understand how programming works. Participants will primarily use Scratch, with the opportunity to also gain an introduction to other programming platforms.

**Age: 7 – 10**

**Class Length: 1.5 Hours**

### SPRING

#### Central Public School

Sat	9:00 am	Mar 30	8	\$68.40	934162
Sat	12:30 pm	Mar 30	8	\$68.40	934178
Sun	10:45 am	Mar 31	8	\$68.40	934167

### SUMMER

#### Central Public School

Wed	6:00 pm	Jul 3	8	\$68.40	939364
Mon	6:00 pm	Jul 8	7	\$52.99	939361

## COMPUTER VIDEO GAME DESIGNER

**Age: 10 – 13**

**Class Length: 1.5 Hours**

### SPRING

#### Central Public School

Sat	10:45 am	Mar 30	8	\$68.40	934196
Sun	9:00 am	Mar 31	8	\$68.40	934202
Sun	12:30 pm	Mar 31	8	\$68.40	934206

### SUMMER

#### Central Public School

Tue	6:00 pm	Jul 2	8	\$68.40	939367
Thu	6:00 pm	Jul 4	8	\$68.40	939371

## ENGINEERING LEGO® BUILDERS 1

Participants will develop their social skills and deepen their understanding of the world around them using Duplo LEGO® bricks. Each week a new theme will help them explore and learn about their communities through discussions, building activities, role-playing, and idea sharing. Participants will be provided with the opportunity to explore the world beyond their immediate surroundings while learning new vocabulary about people, places, and things in real life. Some of the themes may include: community helpers, shopping, food vendors, public transportation and healthcare.

**Age: 3 – 5**

**Class Length: 1 Hour**

### SPRING

#### Cassie Campbell Community Centre

Wed	5:30 pm	May 27	6	\$72	937059
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### SUMMER

#### South Fletcher's Sportsplex

Sun	9:30 am	Jul 14	6	\$72	937052
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## ENGINEERING LEGO® BUILDERS 2

Participants will continue to develop their social skills and deepen their understanding of the world around them using Duplo LEGO® bricks. Each week a new theme will help them explore and learn about their communities through discussions, building activities, role-playing and idea sharing. Participants will be provided with the opportunity to explore the world beyond their

immediate surroundings while learning new vocabulary about people, places, and things in real life. Some of the themes may include: public transportation, preschool, physical activities, touring town, extended families and helping each other.

**Prerequisite:** Engineering LEGO® Builders 1 (3-5 Years).

**Age: 3 – 5**

**Class Length: 1 Hour**

### SPRING

#### Cassie Campbell Community Centre

Wed	5:30 pm	Mar 15	6	\$72	937061
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## ENGINEERING LEGO® EARLY SIMPLE MACHINES 1

Participants will be able to work as young scientists, engineers and designers working with Duplo LEGO® simple machines bricks and guided activities that promote design technology, science and mathematics. Participants will work through real world investigations and problem solving to make assumptions and predictions as they make models. Themes to be explored may include: pinwheels, spinning tops, seesaws, rafts, car launchers and measuring cars.

**Age: 5 – 7**

**Class Length: 1 Hour**

### SPRING

#### Greenbriar Recreation Centre

Thu	5:30 pm	Mar 28	6	\$72	934155
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## ENGINEERING LEGO® EARLY SIMPLE MACHINES 2

Participants will continue to work as young scientists, engineers and designers working with LEGO® simple and powered machines bricks and problem-solving tasks that promote design technology, science and mathematics. Participants will use their knowledge of simple machines to work through real world investigations and use problem solving skills to make assumptions and predictions as they design and make models.

**Prerequisite:** Engineering LEGO® Early Simple Machines 1 (5-7 Years).

**Age: 5 – 7**

**Class Length: 1 Hour**

### SPRING

#### Greenbriar Recreation Centre

Thu 5:30 pm May 16 6 \$72 943809

### SUMMER

#### Greenbriar Recreation Centre

Fri 5:30 pm Jul 12 6 \$72 943814

## ENGINEERING LEGO® SIMPLE AND POWERED MACHINES 1

Participants will be able to work as young scientists, engineers and designers working with LEGO® simple and powered machines bricks and guided activities that promote design technology, science and mathematics. Participants will learn about work through real world activities surrounding the topics of levers, wheels and axles, pulleys, inclined planes, wedges, screws, gears, cams, pawl and ratchets, and structures.

**Age: 9 – 13**

**Class Length: 1.5 Hours**

### SPRING

#### Greenbriar Recreation Centre

Thu 7:00 pm Mar 28 6 \$108 956754

### SUMMER

#### Greenbriar Recreation Centre

Thu 7:00 pm Jul 11 6 \$108 943817

## ENGINEERING LEGO® SIMPLE AND POWERED MACHINES 2

Participants will continue to work as young scientists, engineers and designers working with LEGO® simple and powered machines bricks and problem-solving tasks that promote design technology, science and mathematics. Participants will use their knowledge of simple machines to work through real world investigations and use problem solving skills to make assumptions and predictions as they design and make models.

**Prerequisite:** Engineering LEGO® Simple & Powered Machines 1 (9-13 Years).

**Age: 9 – 13**

**Class Length: 1.5 Hours**

### SPRING

#### Greenbriar Recreation Centre

Thu 7:00 pm May 16 6 \$108 934278

### SUMMER

#### Greenbriar Recreation Centre

Thu 7:00 pm Jul 11 6 \$108 943817

## ENGINEERING LEGO® SIMPLE MACHINES 1

Participants will be able to work as young scientists, engineers and designers working with LEGO® simple and powered machines bricks and guided activities that promote design technology, science and mathematics. Participants will learn about work through real world activities surrounding the topics of gears, wheels and axles, levers and pulleys.

**Age: 7 – 9**

**Class Length: 1 Hour**

### SPRING

#### Greenbriar Recreation Centre

Sat 11:00 am Mar 30 6 \$72 934220

Tue 7:00 pm May 14 6 \$72 934260

## ENGINEERING LEGO® SIMPLE MACHINES 2

Participants will be able to work as young scientists, engineers and designers working with LEGO® simple and powered machines bricks and guided activities that promote design technology, science and mathematics. Participants will continue to learn and work through real world problem-solving activities surrounding the topics of gears, wheels and axles, levers and pulleys.

**Prerequisite:** Engineering LEGO® Simple Machines 1 (7-9 Years).

**Age: 7 – 9**

**Class Length: 1 Hour**

### SPRING

#### Greenbriar Recreation Centre

Sat 11:00 am May 11 6 \$72 943811

### SUMMER

#### Greenbriar Recreation Centre

Tue 7:00 pm Jul 9 6 \$72 943820

## ENGINEERING LEGO® STEAM PARK 1

Participants explore the world around them as they use functional elements to build interactive models using Duplo LEGO® bricks. Each week develop science, technology, engineering, art, and math (STEAM) skills, including understanding cause and effect relationships, making predictions and observations, problem-solving and creating representations.

**Age: 3 – 5**

**Class Length: 1 Hour**

### SPRING

#### Greenbriar Recreation Centre

Sat 9:30 am Mar 30 6 \$72 934247

Tue 5:30 pm May 14 6 \$72 937033

### SUMMER

#### Greenbriar Recreation Centre

Tue 5:30 pm Jul 9 6 \$72 943815

## ENGINEERING LEGO® STEAM PARK 2

Participants will continue to explore the world around them as they use functional elements to build interactive models using Duplo LEGO® bricks. Each week they will continue to develop science, technology, engineering, art and math (STEAM) skills, including understanding cause and effect relationships, making predictions and observations, problem-solving and creating representations that were introduced previously.

**Prerequisite:** Engineering LEGO® STEAM Park 1.

**Age: 3 – 5**

**Class Length: 1 Hour**

### SPRING

#### Greenbriar Recreation Centre

Sat 9:30 am May 11 6 \$72 943810

### MATH

Through this program, participants will have fun exploring the world of math. Participants will gain confidence by participating in counting drills and number recognition games to help introduce and reinforce math skills for completing everyday tasks.

**Age: 3 – 6**

**Class Length: 2 Hours**

### SPRING

#### Brampton Soccer Centre

Sun 1:00 pm Mar 31 12 \$123.24 932505

#### Chinguacousy Wellness Centre

Mon 5:30 pm Mar 25 11 \$112.97 932025

#### Chris Gibson Recreation Centre

Sun 9:00 am Mar 31 12 \$123.24 932424

#### Gore Meadows Community Centre

Mon 5:30 pm Mar 25 11 \$112.97 937311

Fri 1:00 pm Mar 29 11 \$112.97 937313

#### Howden Recreation Centre

Tue 9:30 am Mar 26 13 \$133.51 936915

### SUMMER

#### Chinguacousy Wellness Centre

Mon 5:30 pm Jul 8 7 \$71.89 932335

#### Gore Meadows Community Centre

Mon 5:30 pm Jul 8 7 \$71.89 940068

#### Howden Recreation Centre

Tue 9:30 am Jul 2 9 \$92.43 938363



**MATH**

Participants will explore such areas as math literacy, fractions, percentages, quick calculations and the real life applications. They will learn new skills to help them become a more confident student. This program is not curriculum based but will relate to basic academic skills.

**Age: 6 – 8**

**Class Length: 2 Hours**

**SPRING**

**Greenbriar Recreation Centre**

Sun 1:15 pm Mar 31 12 \$123.24 937000

**ROBOTICS LEGO® MINDSTORMS CODING 1**

Using LEGO® Mindstorms robotics sets, participants will work to build and program robots through direct teaching, experimentation, and exploration. Participants will learn fundamental computer programming and engineering concepts using real world concepts that is integrated with science, mathematics, and design technology. Participants will solve computational problems by programming the robots to move in a variety of ways as well as integrating the ultrasonic, touch and colour sensors in their robots to complete challenges.

**Age: 10 – 14**

**Class Length: 1.5 Hours**

**SPRING**

**Gore Meadows Community Centre**

Sun 9:00 am Mar 24 6 \$135 937071

**South Fletcher's Sportsplex**

Sun 9:30 am May 12 6 \$135 937137

**SUMMER**

**South Fletcher's Sportsplex**

Sat 9:30 am Jul 13 6 \$135 937153

Sun 11:00 am Jul 14 6 \$135 937152

Mon 5:30 pm Jul 15 6 \$135 937145

**ROBOTICS LEGO® MINDSTORMS CODING 2**

Using LEGO® Mindstorms robotics sets, participants will work to build and program robots through direct teaching, experimentation, and exploration. Participants will learn fundamental computer programming and engineering concepts using real world concepts that is integrated with science, mathematics, and design technology. Participants will work off of concepts from Level 1 to solve challenges and to design and build a driverless automated wheeled robot.

**Prerequisite:** Robotics LEGO® Mindstorms 1 (10-14 Years).

**Age: 10 – 14**

**Class Length: 1.5 Hours**

**SUMMER**

**South Fletcher's Sportsplex**

Sat 11:15 am Jul 13 6 \$135 937173

**ROBOTICS LEGO® MINDSTORMS ENGINEER PROJECTS 1**

Using LEGO® Mindstorms robotics sets, participants have the opportunity to work as design engineers to build and program robots that can 'Make It Move'. Participants will work on learning to design, build and program robots that can think and move on their own. Some of the themes of the course include making it move with wheels, displaying speed, moving without wheels, moving up an incline, and moving in a pattern.

**Age: 10 – 14**

**Class Length: 1.5 Hours**

**SPRING**

**Gore Meadows Community Centre**

Sun 9:00 am May 12 6 \$135 937188

**South Fletcher's Sportsplex**

Sun 9:00 am Mar 24 6 \$135 937181

**SUMMER**

**Gore Meadows Community Centre**

Sun 11:15 am Jul 14 6 \$135 937248

Wed 6:00 pm Jul 31 6 \$135 937214

**ROBOTICS LEGO® MINDSTORMS MAKER BUILDER 1**

Using LEGO® Mindstorms robotics sets, participants will grow their creative problem solving skills that will enable for them to become critical thinkers and makers for the future. Participants will work through the maker design process as they learn to design,



engineer, build and code using motorized models and simple programming as they work through building various models which may include gyro boy, a colour sorter, puppy robot, robotic arm, and a sound machine.

**Age: 10 – 14**

**Class Length: 1.5 Hours**

**SUMMER**

**Gore Meadows Community Centre**

Sun 9:30 am Jul 14 6 \$135 940613  
Thu 6:00 pm Jul 25 6 \$135 940610

**ROBOTICS LEGO® WEDO BUILDER ANIMALS**

Using LEGO® WeDo robotics sets, participants will learn how to build various animal robots and learn the programming involved in creating the mechanisms of: wobbling, cranking, walking, flexing, grabbing, reeling, tilting or pushing which each of the different models they build. Participants will have the chance to explore and use their creativity to expand their models and programming beyond those of the base models, as well as showcase their discoveries and methods with the rest of the class.

**Age: 7 – 10**

**Class Length: 1 Hour**

**SPRING**

**Gore Meadows Community Centre**

Mon 7:15 pm Mar 25 6 \$135 940618

**SUMMER**

**Gore Meadows Community Centre**

Mon 7:15 pm Jul 15 6 \$135 940619

**ROBOTICS LEGO® WEDO BUILDER CARS & VEHICLES**

Using LEGO® WeDo robotics sets, participants will learn how to build various robotic cars and vehicles and learn the programming involved in creating the mechanisms of: driving, spinning, reeling, lifting, steering, and turning which each of the different models they build. Participants will have the chance to explore and use their creativity to expand their models and programming beyond those of the base models, as well as showcase their discoveries and methods with the rest of the class.

**Age: 7 – 10**

**Class Length: 1 Hour**

**SPRING**

**Cassie Campbell Community Centre**

Fri 5:30 pm Mar 29 6 \$135 940620

**Gore Meadows Community Centre**

Mon 7:15 pm May 13 6 \$135 940622

**LISTINGS LEGEND**

Day	Time	Date	No.	Cost	Code
Tue	6:00pm	Dec 5	12	\$34	123456

**Day, Time,** and **Date** identify when the course begins  
**No.** indicates how many classes are part of the course  
**Cost** is the price  
**Code** is needed for registering

**ROBOTICS LEGO® WEDO BUILDER TOYS & TOOLS**

Using LEGO® WeDo robotics sets, participants will learn how to build various tools and toy-based robots and learn the programming involved in creating the mechanisms of turning, tilting, motion, sweeping, revolving, spinning, flexing, and wobbling which each of the different models they build. Participants will have the chance to explore and use their creativity to expand their models and programming beyond those of the base models, as well as showcase their discoveries and methods with the rest of the class.

**Age: 7 – 10**

**Class Length: 1 Hour**

**SPRING**

**Cassie Campbell Community Centre**

Fri 5:30 pm May 17 6 \$135 940623

**ROBOTICS LEGO® WEDO GEARS & GADGETS**

Using LEGO® WeDo robotics sets, participants will work to creatively solve real life science questions and engineering problems. Participants will connect and discuss possible solutions, and then apply their knowledge when they learn to build, program and modify their models. Each week participants will work through a new project which may include: science rovers, pulling, speed, robust structures, sorting and recycling, and mining materials. The class will then join together to share their solutions and findings through documentation and presenting their robots each week.

**Age: 7 – 10**

**Class Length: 1.5 Hours**

**SPRING**

**Cassie Campbell Community Centre**

Wed 7:00 pm Mar 27 6 \$135 940631

**Gore Meadows Community Centre**

Sat 9:00 am Mar 30 6 \$135 940633

**SUMMER**

**Cassie Campbell Community Centre**

Tue 6:00 pm Jul 9 6 \$135 940635

**Gore Meadows Community Centre**

Mon 5:30 pm Jul 15 6 \$135 940637

**ROBOTICS LEGO® WEDO GEARS & GADGETS 2**

Using LEGO® WeDo robotics sets, participants will work continue to creatively solve real life science questions and engineering problems. Participants will connect and discuss possible solutions, and then apply their knowledge when they learn to build, program and modify their models. Each week participants will work through an extension of a previous topic from level 1 which may include topics such as: speed control, moon base, grabbing objects, city safety, and inspection. The class will join together to share their solutions

and findings through documentation and presenting their robots each week.

**Prerequisite:** Robotics LEGO® WeDo Gears and Gadgets 1 (7-10 Years).

**Age: 7 – 10**

**Class Length: 1.5 Hours**

**SPRING**

**Cassie Campbell Community Centre**

Wed 7:00 pm May 15 6 \$135 956795

**SUMMER**

**Gore Meadows Community Centre**

Sat 11:15 am Jul 13 6 \$135 940640

**ROBOTICS LEGO® WEDO PLANTS & ANIMALS**

Using LEGO® WeDo robotics sets, participants will work to creatively solve real life science questions and engineering problems. Participants will connect and discuss possible solutions, and then apply their knowledge when they learn to build, program and modify their models. Each week participants will work through a new project which may include: motion sensors, frog metamorphosis, plants and pollinators, predators and prey, animal expression, and wildlife crossings. The class will then join together to share their solutions and findings through documentation and presenting their robots each week.

**Age: 7 – 10**

**Class Length: 1.5 Hours**

**SPRING**

**Cassie Campbell Community Centre**

Fri 6:45 pm Mar 29 6 \$135 940658

**Gore Meadows Community Centre**

Mon 5:30 pm May 13 6 \$135 940659

**SUMMER**

**Cassie Campbell Community Centre**

Wed 6:00 pm Jul 10 6 \$135 940661

**Gore Meadows Community Centre**

Sat 9:30 am Jul 13 6 \$135 940685

**ROBOTICS LEGO® WEDO WEATHER & HABITATS**

Using LEGO® WeDo robotics sets, participants will work to creatively solve real life science questions and engineering problems. Participants will connect and discuss possible solutions, and then apply their knowledge when they learn to build, program and modify their models. Each week participants will work through a new project which may include: T.H. sensors, preventing flooding, dig and rescue, extreme habitats, hazard alarm, cleaning the ocean, space exploration. The class will then join together to share their solutions and findings through documentation and presenting their robots each week.

**Age: 7 – 10**

**Class Length: 1.5 Hours**



SCIENCE, TECHNOLOGY, ENGINEERING AND MATH

# SCIENCE TECHNOLOGY ENGINEERING MATH

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City of Brampton STEM (Science, Technology, Engineering and Math) programs give eager young minds early exposure to stimulating activities that will kick start their futures!

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- Gain critical thinking and inquiry skills
  - Develop problem solving abilities
  - Innovate and explore new ideas
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Go online to learn more about our course offerings or speak to a Customer Service representative.

**SPRING**

**Cassie Campbell Community Centre**  
 Wed 7:00 pm May 15 6 \$135 940688  
**Gore Meadows Community Centre**  
 Mon 5:30 pm Mar 25 6 \$135 940697

**SUMMER**

**Cassie Campbell Community Centre**  
 Fri 6:00 pm Jul 12 6 \$135 940701

**ROBOTICS LEGO® WEDO WEATHER & HABITATS 2**

Using LEGO® WeDo robotics sets, participants will work continue to creatively solve real life science questions and engineering problems. Participants will connect and discuss possible solutions, and then apply their knowledge when they learn to build, program and modify their models. Each week participants will work through an extension of a previous topic from level 1 which may include topics such as: debugging, rescue, reverse and recycle, and volcano abort. The class will join together to share their solutions and findings through documentation and presenting their robots each week.

**Prerequisite:** Robotics LEGO® WeDo Weather and Habitats 1 (7-10 Years).

**Age: 7 – 10**  
**Class Length: 1.5 Hours**

**SPRING**

**Gore Meadows Community Centre**  
 Sat 9:00 am May 11 6 \$135 940716

**SCIENCE AND TECHNOLOGY**

Participants will enjoy this hands-on curriculum-based program that includes math, science and technology. Participants will learn scientific basics through hands-on activities and scientific experiments that focus on observation, discovery and analysis.

**Age: 3 – 6**  
**Class Length: 1 Hour**

**SPRING**

**Cassie Campbell Community Centre**  
 Sun 9:00 am Mar 31 12 \$87.60 943093  
**Chinguacousy Wellness Centre**  
 Wed 5:30 pm Mar 27 13 \$94.90 932066  
**Greenbriar Recreation Centre**  
 Sun 10:45 am Mar 31 12 \$87.60 936974  
**South Fletcher's Sportsplex**  
 Thu 5:00 pm Mar 28 13 \$94.90 930909  
 Sat 12:00 pm Mar 30 13 \$94.90 930949

**SUMMER**

**Chinguacousy Wellness Centre**  
 Tue 5:30 pm Jul 2 9 \$65.70 932359  
**Gore Meadows Community Centre**  
 Fri 1:00 pm Jul 5 9 \$76.95 940046  
**Howden Recreation Centre**  
 Mon 12:00 pm Jul 8 7 \$51.10 938378  
**South Fletcher's Sportsplex**  
 Thu 5:00 pm Jul 4 9 \$65.70 931350

**SCIENCE AND TECHNOLOGY**

**Age: 6 – 8**  
**Class Length: 1 Hour**

**SPRING**

**Cassie Campbell Community Centre**  
 Sun 10:30 am Mar 31 12 \$87.60 943149  
**Century Gardens Recreation Centre**  
 Fri 5:00 pm Mar 29 11 \$80.30 932768  
**Greenbriar Recreation Centre**  
 Sun 12:00 pm Mar 31 12 \$87.60 936979  
**South Fletcher's Sportsplex**  
 Thu 6:00 pm Mar 28 13 \$94.90 930910  
 Sat 1:00 pm Mar 30 13 \$94.90 930950

**SUMMER**

**Century Gardens Recreation Centre**  
 Fri 5:00 pm Jul 5 9 \$65.70 932770  
**Howden Recreation Centre**  
 Tue 12:00 pm Jul 2 9 \$65.70 938374  
**South Fletcher's Sportsplex**  
 Thu 6:00 pm Jul 4 9 \$65.70 931353

**SCIENCE AND TECHNOLOGY**

**Age: 8 – 10**  
**Class Length: 1 Hour**

**SPRING**

**Century Gardens Recreation Centre**  
 Fri 6:00 pm Mar 29 11 \$80.30 932769  
**South Fletcher's Sportsplex**  
 Thu 7:00 pm Mar 28 13 \$94.90 930911  
 Sat 2:00 pm Mar 30 13 \$94.90 930951

**SUMMER**

**Century Gardens Recreation Centre**  
 Fri 6:00 pm Jul 5 9 \$65.70 932771  
**South Fletcher's Sportsplex**  
 Thu 7:00 pm Jul 4 9 \$65.70 931354

# GET READY TO SWIM!



**Make sure your swimmer is equipped to enjoy their lessons.**

Be sure to pack the following in a suitably sized bag.



Don't forget to shower and use the washroom before lessons begin.

Swim trunks or suit

A hair band or swim cap

Label belongings with a name and phone number.

Bring a lock to secure belongings

Avoid heavy meals before lessons

Towel  
 Flip-flops



[brampton.ca/recreation](http://brampton.ca/recreation)

