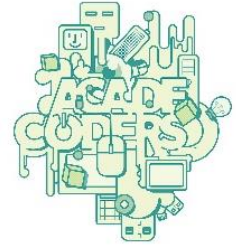




# ACADECODERS AND ACADEMAKERS 2018

Grade 3 and up



## AcadeCoders Game Development Streams

This summer, **AcadeCoders Game Development** sessions will have 5 different streams to choose from. The AcadeCoders Campers are encouraged to select one of the streams to develop a sense of what is achievable in a week, with the help of our starter kits. They are using Godot 3.0, a new open-source game engine. Using this engine, our campers program in a Pythonic scripting language known as GDScript, which enables them to take big steps into the programming world, while being captivated by their own ideas and game concepts.

## AcadeMakers Sessions

AcadeMakers is a series of week-long project-based camp sessions, each with a new physical project to take home. The Makers sessions are less code based than AcadeCoders but still build on STEM related concepts such as Electronic Hardware, 3D Printing, Woodworking and Digital Art.

### Weekly Sessions Enhanced by:

- 1 Instructor to 6 Campers Ratio for Personalized Learning
- Powerful Hardware
- Game Design Theory
- Drawing Lessons
- Minecraft Fun Breaks
- Special Guest Lectures
- K2 Martial Art Jiu-jitsu Class
- Daily 1 Hour Outdoor Activities
- Achievement Bracelets
- Weekly Take Home Project

The maximum session size is 15 due to the number of available desktops. If a session is full, you may still register; however, you must provide your own laptop. \*Each session is designed for different age groups. Kindly check the session descriptions as some sessions may accommodate younger children.

### 2018 SUMMER READING & WRITING PROGRAMME: Orton Gillingham Multisensory Teaching Sessions for Campers

For students with reading and writing difficulties, we offer Orton Gillingham-based multisensory teaching sessions, in addition to the activities provided during our AcadeCamp or AcadeCoders sessions. The OG multisensory teaching sessions will be offered for 1 hour, 5 times a week (4 times a week during holiday weeks), and the participant must register for at least 4 weeks, or preferably all summer, in order for the programme to be effective. If a student has not been evaluated previously, pre- and post-testing will be provided. With the Orton Gillingham approach, a student learns using the visual, auditory, kinesthetic, and tactile senses simultaneously. The OG multisensory teaching sessions will take place within the 9:00 am – 4:00 pm camp day.

### Additional Information

<b>Camp Hours:</b>	9:00 am – 4:00 pm
<b>Pre &amp; Post Camp Care:</b>	8:00 am – 9:00 am; 4:30 pm – 5:30 pm
<b>Lunch Program:</b>	Includes 2x pizza on Mondays (on 5-day weeks), hot lunch with dessert & fruit Tuesdays – Fridays
<b>Contact Information:</b>	Email us at <a href="mailto:info@acadecap.org">info@acadecap.org</a> or call 613-721-3872

## Planning your summer? Check out our weekly calendar for June, July and August 2018!

Week #	Week of	Program	Description
1	Jun 25-29	Maker Movement	Let's Make a Raspberry Pi Synthesizer!
2	Jul 3-6 (4 days)	Game Development	Let's design a game using the new Godot 3.0 engine!
3	Jul 9-13	Game Development	See below for stream descriptions
4	Jul 16-20	Maker Movement	Let's Make a Toy Set for a Playable Tabletop Game!
5	Jul 23-27	Game Development	See below for stream descriptions
6	Jul 30-Aug 3	Game Development	See below for stream descriptions
7	Aug 7-10 (4 days)	Maker Movement	Let's Make a Wizarding Wand ... or many!
8	Aug 13-17	Maker Movement	Let's Make a Comic Book ... or many!

### WEEK 1, 4, 7 AND 8: MAKER MOVEMENT SESSIONS

#### Week 1: June 25 – June 29

#### A RASPBERRY PI SYNTHESIZER (grade 5 and up)

During this week-long project, AcadeMakers campers focus on music and create an electronic instrument out of a raspberry pi computer. They accept electrical signals from a power source and then modulate them through mathematical functions and oscillators to produce a resulting sound wave. They also hook this up to a "Rhythm Machine", a small patterning piece of code that allows for drum machine type stepping, which help them keep a whole song in order, all in one little box! To keep the level of noise to a minimum, AcadeMakers Campers require their own headphones; earbuds being fine.

#### Week 4: July 16 – July 20

#### A TABLETOP GAME (grade 3 and up)

During the year at AcadeCap, students have developed a school-wide game known as "AcadeBattles". This is a tabletop game similar to a game like Warhammer. The core concept is designing a "Squad" which is a 5-10 character team that can face off against other "Squads". In certain modes, it can even be played 2v2! During this summer session, Maker Movement Campers think up a fantasy/sci-fi game theme such as mummies, ninjas, dragons, aliens, or whatever the imagination rolls out. AcadeMakers Campers learn to assign fair statistics that do not overpower other existing or new players. The aim is to end up with a balanced team. This session explores concepts such as Game Design, Randomness, Spatial Sensing and Graphic Design.

#### Week 7: Aug 7 – Aug 10 (4 days)

#### WIZARDING WANDS (grade 3 and up)

This summer session is open to a wide range of AcadeMakers campers to design and fabricate a Wizarding Wand. The AcadeMakers campers end the week with a custom-made Wizarding Wand, which they find on a nature walk, pick and fashion themselves. Basic woodworking skills are taught. The week is themed like the most famous Wizard's School, to include games like Quidditch and Wizard's Duels, as well as week-long competitions such as the House Cup. Campers acquire board game strategies playing Harry Potter Monopoly, Clue, Hogwarts's Battle, and more. Harry Potter modded Minecraft is part of the downtime between themed events.

#### Week 8: Aug 13 – Aug 17

#### A COMIC BOOK (grade 4 and up)

Do you have story ideas? Do you like to draw? Using Krita, an open-source drawing program, AcadeMakers Campers have the opportunity to improve their art and to fit it into comic strips as they go! Over the course of the week, they have drawing sessions and creative exercises to ignite the imagination. The campers start with a blank page and begin to sketch. The sketch is digitized, traced and coloured, and is saved as a panel. After completing 4 to 6 panels, Campers have enough art to fill a page. At the end of the week, campers publish a printed staple bound comic book. This session takes a look at Studio Ghibli and the graphic novels and animation of Hayao Miyazaki et al.

## WEEK 2, 3, 5, 6: GAME DEVELOPMENT STREAMS

*NOTE: The 5-Game Development Streams are ongoing simultaneously for the 4 weeks. Upon registering for a week, AcadeCoders campers choose one of the five streams below. Please note that campers can benefit from remaining in the same stream for all 4 weeks. However, they may choose a different one at the beginning of each week.*

### A - THE ADVENTURER (grade 3 and up)

AcadeCoders campers attending this stream want to learn about most everything in the game development world; how objects move, how a player, enemies and worlds are created, all in one. This is an all-rounder learning stream; therefore, the mechanics are kept simple. For example, campers make a 2D TOP DOWN adventure game similar to “The Adventures of Zelda: A Link to the Past” for the Super Nintendo. In this stream, the AcadeCoders Campers gain well-balanced, all-around, knowledge to explore game development on their own.

### B - THE WARRIOR (grade 3 and up)

Warrior AcadeCoders campers charge into battle and defeat the enemy! In this stream, campers cover a more action-based game similar to the first “Castlevania” for the NES. The game is meant to be simple, the main character versus an evil lair. Campers joining this stream must have the ability to channel their maker minds to create a world worth defeating. This stream is similar to the Adventurer stream but factors in real-time 2D physics as well as custom written physics. AcadeCoders campers develop a solid understanding on spatial reasoning.

### C - THE STORYTELLER (grade 3 and up)

The Storyteller game development stream will have no combat elements. It will focus on telling a story and solving puzzles created by the AcadeCoders campers themselves. This stream also allows for a stronger focus on storytelling while other streams work on the enemies and the worlds. Campers may use either code base, the top down or the sidescroller, strictly focusing on puzzle solving through moving physics objects or using simple abilities.

### D - THE CLAN MEMBER (grade 5 and up)

Sign up with a friend or more as a team! The Clan Member stream will let some of the campers learn aspects of programming while others focus on other strengths such as art, music and design. A group of campers with varying interests and skills will make a great team to design and develop a more complex game than possible by one single camper. Campers may want to join as a group and figure out along the way what are their interests and skills! Campers will learn important team skills that will be an asset in the work force.

### E - TRUE SPATIAL MAGICIAN (grade 7 and up)

Become a True Spatial Magician by joining this stream where AcadeCoders will dive into Matrix math for game development. This stream enable campers to make a 3D game, under stringent circumstances: they must be willing to put in extra focus and time to achieve the end goal. This stream will be demanding and challenging and if the campers are up to it, they will have developed and acquired the skills to create their own 3D game on their own as well. AcadeCoders Campers will learn the coded physics and the basic 3D modelling because game development requires practice. Additional challenges will be provided each week. This stream is as close as can be to a university preparation stream for future game programmers as it incorporates Matrix math.

## Registration Form

### Selection of Weeks, Sessions and Streams

- 1: Jun 25 – 29 A Raspberry-Pi Synthesizer
- 2: Jul 3 – 6 (4 days) Game Development Streams  A  B  C  D  E
- 3: Jul 9 – 13 Game Development Streams  A  B  C  D  E
- 4: Jul 16 – 20 A Table Top Game
- 5: Jul 23 – 27 Game Development Streams  A  B  C  D  E
- 6: Jul 30 – Aug 3 Game Development Streams  A  B  C  D  E
- 7: Aug 6 – 10 (4 days) Wizarding Wands
- 8: Aug 13 – 17 A Comic Book
- Summer SMT (4 weeks)** Please indicate week numbers: ex. 1,2,3,4

**Fees:** **\$350** per 5 day week  
**\$290** per 4 day week (holiday week)

**Discounted rate for all 8 weeks** **\$ 2412.00**

**Discounted additional week rate: (5 days)** **\$ 333.00**

**(4 days)** **\$ 276.00**

**Summer OG Multisensory Teaching Option:** **\$ 950.00**

**4 weeks, 1 hour sessions daily**

**First week: 5-day week or 4-day week** **1X** **\$350 or 290**

**Additional 4-day week:** **#X** **\$ \_\_\_\_\_**

**Additional 5-day weeks:** **#X** **\$ \_\_\_\_\_**

**OG Multisensory Teaching Option (4 weeks)** **#X** **\$ \_\_\_\_\_**

**Subtotal Session Fees:** **\$ \_\_\_\_\_**

**Pre-and Post Camp Care: \$25/ 5-day week** **#X** **\$ \_\_\_\_\_**

**\$20/ 4-day week** **#X** **\$ \_\_\_\_\_**

**Subtotal Supervision Fees:** **\$ \_\_\_\_\_**

**Lunch Program: \$55/ 5-day week (incl. 2x Pizza)** **#X** **\$ \_\_\_\_\_**

**\$45/ 4-day week** **#X** **\$ \_\_\_\_\_**

**Pizza (Mondays Only): \$5/slice** **#X** **\$ \_\_\_\_\_**

**Subtotal Meal Fees:** **\$ \_\_\_\_\_**

**TOTAL FEES:** **\$ \_\_\_\_\_**

Child's Name: \_\_\_\_\_ Sex:  M /  F

DOB: YYYY/MM/DD Current Grade: \_\_ Age: \_\_ Health Card#: Optional

Parent's/Guardian's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_ Email: \_\_\_\_\_

Tel-Home: (XXX) XXX-XXXX Work: (XXX) XXX-XXXX Cell: (XXX) XXX-XXXX

Emergency Name: \_\_\_\_\_ Tel: (XXX) XXX-XXXX

Contacts: Name: \_\_\_\_\_ Tel: (XXX) XXX-XXXX

Special concerns, needs, health, allergies, behavioural etc.

\_\_\_\_\_

## Media Consent



There are times we photograph or videotape the children participating in camp activities. We will publish some of these pictures (i.e.: newsletters, websites, Facebook, twitter, brochures, newspaper ads, etc.), without naming individual campers. Académie de la Capitale/École internationale Acadecap International School is requesting permission to use photos/videos of your child for the above mentioned purposes. Please note that remuneration will not be given for the use of photos/videos.

I give Académie de la Capitale/École internationale Acadecap International School permission to publish pictures of my child

Signature of Parent/Guardian

Initial or Sign

Date YYYY/MM/DD

## Waiver

I hereby release and forever discharge Académie de la Capitale/École internationale Acadecap International School, its directors, its employees, agents and all persons authorized by it from any claim, damages, action or cause of action or otherwise that may result from either personal injury or property damage suffered by the said child engaging in school activities including field trips provided, however, that the school and its employees and agents exercise reasonable care.

I hereby authorize the administrators, staff and/or excursion supervisor(s) to act on my behalf as my agent(s) to engage medical attention or hospitalization if required on an emergency basis.

Signature of Parent/Guardian

Initial or Sign

Date YYYY/MM/DD

## Finances

Please make cheques to **AcadeCap International School** ASAP to ensure a spot as our camps fill up quickly.

**Payment by Interac e-Transfer:**  
[finance@acadecap.org](mailto:finance@acadecap.org) (Please indicate child's name in description and provide password in separate email.)

Please note there are **no** refunds.