



2019

SUMMER CAMP GUIDE Ages 8-14 1-833-399-0154 info@edtechhive.com









### **GENERAL INFORMATION**

Camp Dates: June 29th - September 4th

Camp Hours: 9:00am - 4:00pm

Location: 75 Waterbridge Lane, Unionville, ON - L3R 4G3

Cost: \$375 +HST per week (Full Day)\* \$175 +HST per week (Half Day)\*

Extended care options also available. Participants are required to bring their own lunch, nut-free snack, and water bottle.

### **DAILY SCHEDULE**

9:00-9:30	Morning Stations
9:30-10:45	STEM Activity Part 1
10:45-11:00	Snack
10:45-12:00	W2L (Want to Learn)
12:00-12:30	Lunch
12:30-1:30	Outdoor Play (Weather dependant)
1:30-1:45	Mindful Moment
1:45-2:45	STEM Activity Part 2
2:45-3:00	Snack
3:00-3:45	STEM Mystery Activity
3:45-4:00	Wind down/Wrap-up

\* shorter weeks will be pro-rated accordingly.

## **CAMP DATES & THEMES**

#### WEEK 1: JUNE 29TH - JULY 3RD\* MEDIA MOGULS

Discover the world of media and design as you explore 3D printing, film, game design, and more!

#### WEEK 2: JULY 6TH - 10TH GAME DESIGN GURUS

Learn the ins and outs of the game development industry as you create your own game from initial plan to final launch!

#### WEEK 3: JULY 13TH - 17TH INDUSTRIOUS ENGINEERS

Gain hands-on experience with the amazing world of electrical and mechanical engineering through a variety of exciting projects!

#### WEEK 4: JULY 20TH - 24TH COMPUTER CAPTAINS

It's a fact; coding is all around us! Explore the wonderful world of computers and code as you learn different languages and explore concepts like cyber security!

#### WEEK 5: JULY 27TH - 31ST INNOVATORS & ENTREPRENEURS

This week, the learning is up to you! Work through a weekly design challenge as you design, create, and prototype solutions for your future!

#### WEEK 6: AUGUST 4TH - 7TH\* MEDIA MOGULS

Discover the world of media and design as you explore 3D printing, film, game design, and more!

#### WEEK 7: AUGUST 10TH - 14TH GAME DESIGN GURUS

Learn the ins and outs of the game development industry as you create your own game from initial plan to final launch!

#### WEEK 8: AUGUST 17TH - 21ST INDUSTRIOUS ENGINEERS

Gain hands-on experience with the amazing world of electrical and mechanical engineering through a variety of exciting projects!

#### WEEK 9: AUGUST 24TH - 28TH COMPUTER CAPTAINS

It's a fact; coding is all around us! Explore the wonderful world of computers and code as you learn different languages and explore concepts like cyber security!

#### WEEK 10: AUGUST 31ST - SEPT. 4TH INNOVATORS & ENTREPRENEURS

This week, the learning is up to you! Work through a weekly design challenge as you design, create, and prototype solutions for your future!



# NEW



## **FOR SUMMER CAMP 2020**

## **COMPREHENSIVE CAMP THEMES**

More than just getting hands-on with the latest technologies, we want our campers to understand how all the technology we use is related and help them to build skills to better prepare them for the ever-changing future. That's why we've created overarching themes and projects for all of our camp activities this year, so that your child can learn and have fun while building critical skills for success now and in the future.

## **PERSONALIZED, PROJECT-BASED LEARNING**

Our Want to Learn (W2L) time is an opportunity for campers to explore independent projectbased learning experiences. W2L has been built into our daily camp schedule, which means more time for your child to explore their passions and learn new skills under the guidance of our expert staff! For more information on W2L, please see our Camp FAQs.

## **NEW TECHNOLOGY**

We are constantly looking for ways to introduce campers to revolutionary technologies! This year we've added a whole new set of tools to our roster including the HP Sprout, ZSpace AR/VR All-in-one, mBot and 10-in-1 Makeblock robotics, and more!





## **CAMP FAQS**

#### What time is drop-off and pick-up?

Camp runs from 9:00 am - 4:00 pm each day. Drop off for camp begins at 8:45am and pick up begins at 3:45pm. Extended care options are also available at an additional cost to better suit your schedule. If your child will be arriving late or picked up early please send us prior notification via email to info@edtechhive.com.

#### Will my child be going outside during camp?

Campers will be going outside after lunch, weather permitting. In the case of unfavourable weather conditions, alternative indoor activities will be provided. Please ensure that your child comes prepared for outdoor activity each day and with indoor shoes.

#### Do I need to provide lunch for my child?

Campers are required to bring their own nut-free lunch, snacks, and water bottle with them each day. At EdTech Hive we provide a NUT AWARE environment. Put simply, we do not provide any foods that contain nuts and nut products and do not permit participants to have food containing nuts and nut products at camp. For more information on our Nut Aware Policy, please visit www.edtechhive.com.

#### What do I do if my child is sick?

For safety of other campers, if your child is exhibiting symptoms of illness please keep them home for the day. In the case that your child will be absent from camp, please contact us via phone or email to notify the staff that they will not be attending. In the case that a camper becomes ill during camp hours, the parent will be notified by the staff.

## **CAMP FAQS**

## What if someone else will be picking my child up from camp?

When registering your child, please list any authorized pickups in the "Order Notes" section. If you need to add someone to the authorized pickup list after registering, please send us an email at info@edtechhive.com.

#### What is W2L (Want to Learn)?

Campers come with a wide range of interests and topics they want to learn more about. We believe that honouring this passion is the best way to engage kids in meaningful learning. At the beginning of the week, campers identify a topic they are interested in learning more about and each day have time to learn and explore with the expert guidance of our staff. According to our campers, W2L is their favourite time of day at camp!



For more information about our camp policies, please visit https://edtechhive.com/policies-and-procedures/

# **STEM ACTIVITIES**

\*\* activities and themes are subject to change without notice

#### Curious about what your child will get up to while they're at

**camp?** Each day, we'll be exploring cutting-edge new technology through project-based learning experiences to show children the connections between innovative STEM topics.

### **Digital Media & Design**

- Stop-Motion Animation & Film
- Digital Photography & Green Screens
- Virtual Reality
- 3D CAD Design & 3D Printing
- 2D CAD Design & Graphic Design
- Video Game Design with FlowLab and Unity
- Minecraft Education Edition

### **Computer Engineering**

- Block-based Coding (Scratch & MakeBlock)
- Line-based Coding (Python, Processing, Java, C++)
- Robotics (LEGO EV3, Dash n' Dot)
- Databases, Networking, Cybersecurity, Cryptography

## **Mechanical & Electrical Engineering**

- Microcontrollers & Circuitry (Arduino, microBit)
- Robotics (LEGO EV3)
- Mechatronics (mBot, MakeBlock 10-in-1 Kit)
- Escape Room Puzzles

## **Project-Based Learning/Entrepreneurship**

- Public Speaking/Pitching
- Design Thinking
- Prototyping & Beta-testing (using various technology)
- W2L (Want to Learn)







# MEDIA MOGULS

#### WEEKS1&6

**Overall theme for the week:** The connections between art and tech are ever growing. After all, media is all around us! This week campers will explore how some of the most cutting-edge technologies are used for art and design industries by creating their own short film, from pre-production and prototyping to final presentation!



## Day 1 - 3D Design

Begin your journey into the world of media with the exciting world of 3D printing as you design a prop for your animation or movie!



## Day 2 - Film & Photography

Continue your pre-production like the pros with storyboarding and begin to film your short stop-motion movie!



## Day 3 - Graphic Design

Finish off your media masterpiece and get ready for the post-production phase as you design and create a poster for your movie!



## Day 4 - VR & Green Screens

Now that your movie is finished, it's time to prepare it for launch! Explore some of the most cutting edge green screen and VR technology to create an ad for your movie masterpiece!

 $^{\ast}$  activities & themes subject to change





# **GAME DESIGN GURUS**

#### WEEKS 2 & 7

**Overall theme for the week:** We constantly hear about kids who want to make video games their career, but what they don't always realize is that there is so much more to the industry than just game creation itself! This week campers will learn all about the end to end process of making their own video game as they explore elements of the game design industry like coding, art, music, and marketing!



### Day 1 - Intro. to Game Design

Begin your journey into the exciting game design industry as you begin to plan your game and design your first level!



## Day 2 - Sprites & Animations

Continue to build out your video game as you create your characters and enemies with sprites and animations!



## Day 3 - Behaviours & Collisions

Get ready for more advanced video game design as you create behaviours and collisions for your enemies and characters to allow them to function independently.



## Day 4 - Additional Assets

Time to polish up our games and get them ready for launch! Explore the creative side of game design as your learn to create your own music and box art!



## Day 5 - Playtesting & Showcase

Get your game ready for launch as your peers beta-test your game. Then, make your changes and prepare for your final showcase and pitch!

 $^{\ast}$  activities & themes subject to change





## **INDUSTRIOUS ENGINEERS**

#### WEEKS 3 & 8

**Overall theme for the week:** The world of electrical and mechanical engineering is one of the most popular STEM careers in today's time. This week, campers will gain hands-on experience with skills critical to engineering success by exploring circuits, microcontrollers, and robotics through a variety of project-based learning experiences!



## Day 1 - microBit

Explore the world of electronics and engineering with hands-on coding and circuitry projects using the microBit microcontroller!



## Day 2 - Coding with Arduino

Continue your learning in electrical engineering with Arduino as you create more advanced projects using lights, motors and more!



## Day 3 - Mechatronics with mBot

Learn to apply you newly discovered engineering skills to the exciting industry of mechatronics with our new mBot and 10-in-1 robots!



## Day 4 - LEGO Robotics

Continue to explore mechanical engineering and robotics as you apply your skills with the LEGO EV3 robots!



## Day 5 - Project-based Learning

Now it's time to put it all together for a choose your own engineering adventure!



#### Register at www.edtechhive.com!

@edtechhive

\* activities & themes subject to change



# **COMPUTER CAPTAINS**

#### WEEKS 4 & 9

**Overall theme for the week:** It's nearly impossible to escape computers these days. This week campers will explore the ins and outs of how computers function as they explore how engineering, coding, networks, and cybersecurity come together to create the digital world!



## Day 1 - Coding with Scratch

Learn the fundamentals of the language of computers as you create your own mini-animations using the popular Scratch platform!



## Day 2 - Video Game Design

Continue to explore how the creative side of coding as you make your turn your Scratch animation into an interactive video game!



## Day 3 - Coding with Processing

Level-up your coding skills by moving into line-based programming with the Processing language by exploring cryptography and cyber security challenges!



## Day 4 - App Development

Explore one of the most current applications of coding as your design and program your very own app using industry standard tools like lonic Creator!



## Day 5 - Robotics

Explore how the world of engineering and code come together as you use concepts you have learned throughout the week to complete a variety of hands-on robotics challenges!

 $^{\ast}$  activities & themes subject to change







## **INNOVATORS & ENTREPRENEURS**

#### WEEKS 5 & 10

**Overall theme for the week:** Learn to think and problem-solve like some of the biggest tech giants and entrepreneurs with our innovation week! At the beginning of the week, campers will be posed with a design challenge and will work throughout their time at camp to design, prototype, and pitch a solution!



## Day 1 - Ideation Day

Every great idea starts somewhere! Begin your journey into the world of entrepreneurship as you form a team and formulate an idea!



## Day 2 - Build Day 1

It's time to bring your idea to life! Begin to build your idea with popular prototyping tools like 3D printing, app development, and more!



### Day 3 - Build Day 2

Continue to bring your vision to life as you work through improving and adapting your prototype as a team!



## Day 4 - Posters/Marketing

Learn the fundamentals of marketing as your create posters and other creative materials to prepare for your final showcase and pitch!



## Day 5 - Pitching & Showcase

It's time to share your ideas! Practice pitching to an audience with exciting green screen and VR technology. Then, get ready to showcase your idea!

 $^{\ast}$  activities & themes subject to change





