Grades 6-8 continued

Get Your Game On II
(Video Game Design)
July 30 – August 3
Campers continue their Scratch programming journey begun in “Get Your Game On” as they learn and apply advanced animation techniques and tricks to create higher level computer games. They will boost their programming prowess as they create, share and play these more complex video games! (Previous Scratch programming experience is vital.) This camp uses Scratch Version 2.0.

Bio-Bots
(LEGO® NXT Robots)
July 30 – August 3 or August 6 – 10
Discover where and why NASA looks to nature for answers when designing robots to explore our solar system and beyond. Campers will use creativity and maybe just a little “animal instinct” to engineer and program robotic creatures that will be hopping, slithering and crawling throughout this wild robotic adventure.

Java Boot Camp
June 18 – 22 or June 25 – 29
Interested in coding but don’t know where to begin? Always wondered what programming is all about? This is the camp for you! Java Boot Camp is a beginning intensive, hands-on experience with Java. Campers will explore the various technologies and environments in which Java applications are developed as well as write, compile, test and troubleshoot Java programs. FTC robotics teams can gain valuable Java skills to help with robot programming.

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NEW! Co-Botics! (Collaborative Robotics)

LEGO® WeDo 2.0 Camp – Nature Bots
July 23-27 or July 30- August 6

Tinkering with Toys
July 23-27 or July 30- August 3

NEW! Explore the toy store! Young toy makers will be able to design, build, and test out several toys and at the same time learn how they work! Using concepts that include the engineering process, energy, shapes, color and sound, we will create our own toy using every day materials. Come tinker with toys this summer at iSPACE!

RoboBlitz (LEGO® EV3 Robots)
June 11 – 15

Calling all cadets! Enlist in this exciting adventure where campers will work in teams to build and program LEGO® MINDSTORM EV3 robots. Combining LEGO robots, daily robotic challenges, a rocket and new friends is sure to make this camp a blast!

Amusement Park Antics
June 18 – 22 or July 9 – 13

Campers will don their hard hats and work as engineers to design, build and test roller coasters. They will test drive customized mouse-trap cars and create the ultimate drop zone experience with an egg as the payload! Warning: constructing knowledge of Newton’s Laws of Motion and how forces work has never been more amusing!

Cool Chemistry
June 25 – 29

NEW! Join our group of mad scientists! Be prepared to brew, blend, and build while exploring bizarre and beguiling experiments. Cool chemistry concepts include: acid and bases, chromatography, polymers, boats that run on soap, density, and more! This camp is sure to charm and captivate the chemist in you!

NXT Challenge “Smart Cars” (LEGO® NXT Robots)
July 16 – 20 or July 23 – 27

Look Ma - no hands! Self-driving cars are no longer science fiction! Campers take on the roles of engineer and computer programmer to build and design autonomous cars that can navigate roads and park themselves. There will be no need for crash-test dummies in this NXT LEGO robot ultimate driving experience!

All Charged Up!
July 23 – 27

Get charged up and enLIGHTened about electricity and optics! Campers will go with the “flow” through electrical circuits and electromagnetism, as well as discover some incredible light tricks with optics. Did you know light can bend? How about making a target game using light and mirrors to “catch the monster?” Lights will shine, fans will spin, and alarms will buzz! This camp is sure to "shock" and amaze!

Forensic Fun
July 30 – August 3 or August 6 – 10

NEW! Farmer Bob is missing and we need your help to solve this mystery! Campers will serve as investigators to try and locate Bob and all forensic scientists analyzing evidence collected at the crime scenes. Latent print and footprint comparisons, toolmark and handwriting analysis, principles of chromatography, scientific method and DNA analysis will all be used to solve this mystery! (Based on curriculum developed by Bureau of Criminal Investigation.)

Grades 6-8 continued...
**Three Bears in Space**  
June 11 - 15 or June 18 - 22  
Join our three space bears, Gemini, Mercury and Apollo as they explore the wonders of our Universe and space exploration. They’ll help campers create their own constellation, probe into planetary science, train like an astronaut, test and design B.E.A.R. (Bear Egress And Recovery) parachutes and celebrate with campers as they launch their own rocket!

**Buggin' Out Robotics**  
June 25 - 29, July 16 - 20, or August 6 - 10  
Grab your antennas and wings as you embark on a different Bee-Bot adventure each day. Stories, science experiences plus programming a Bee-Bot robot all add up to a hive full of fun! Bee-Bots, designed for the younger robotic enthusiast, will send campers on an exciting journey each day to explore Dino-Bots, Farm-Bots, Bug-Bots and more! Get ready for a buzzing great time!

**Tinkering with Toys**  
July 23-27 or July 30 - August 3  
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**All sessions**  
run from 9am - 2pm  
Monday - Friday  
Cost: $275  
Campers should bring a small healthy snack, water bottle and lunch each day.

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**Dr. B. for Kids (Science Meets Art)**  
July 9 - 13 or July 16 - 20  
**NEW!** Scientist, scientist what do you see? I see bubbling solutions, buzzing insects, rainbows of color and so much more looking at me! Junior scientists will explore a different science topic each day based on the books of award winning children’s author, Eric Carle. Finding the science in beloved literature, such as The Very Hungry Caterpillar or The Mixed-Up Chameleon engages even the youngest scientist through experiments, activities, and science related crafts!

**Environauts to the Rescue**  
July 23 – 27  
**NEW!** Campers will develop programming prowess as well as a sense of pride when they get to share and play real video games that they design and program themselves!

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**RoboBlast (LEGO® EV3 Robots)**  
June 11 - 15  
Calling all cadets! Enlist in this exciting adventure where campers will work in teams to build and program LEGO® MINDSTORM EV3 robots. Combining LEGO® robots, daily robotic challenges, a rocket and new friends is sure to make this camp a blast!

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**Get Your Game On (Video Game Design)**  
June 18 – 22 or July 9 – 13  
Camper’s will be transformed into authentic video game designers as they learn and apply animation techniques and special tricks to create their own amazing versions of maze-based and platform computer games. They will develop programming prowess as well as a sense of pride when they get to share and play video games that they design and program themselves!

**Design Your Future 3D**  
June 11 – 15 or June 25 – 29  
**NEW!** iSPACE and Great Oaks have once again partnered to bring you a new 3D design camp. Campers will be designers as they work with multiple 3D print technologies, and advanced manufacturing tools. Campers will learn the basics of how to draw and manipulate designs using 3D design tools, and how to approach design problems efficiently. Each camper will bring home at least one camper designed 3D-printed object.

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**LED® WeDo 2.0 Camp – Nature Bots**  
June 11 – 15, June 25 – 29, or July 30 – August 3  
**NEW!** Explore the perilous side of nature from the comfort of your LEGO® building! Using LEGO®’s newest WeDo 2.0 robotics kits and programming platform, campers will be challenged to come up with solutions for some of the scientific world’s most pressing questions. How can we save the bees? How can we prevent coastal flooding? What can we do for earthquake prone areas? LEGO Engineers will put their brains together to become the scientist of tomorrow! Are you ready to tame nature’s fury?

**Co-Bots! (Collaborative Robotics)**  
June 18 – 22 or July 16 – 20 or August 6 – 10  
**NEW!** Ready for an adventure? Join us as we explore the benefits of humans and robots working together! Campers will build and program their way through dangerous situations while exploring different types of robots using LEGO®’s NEW WeDo 2.0 robotics kits and programming platforms. Get your camper ready to jump into the future of robots, wireless programming, and exciting challenges! Oh my!

**SMART (Science Meets Art)**  
July 9 – 13 or July 16 – 20  
**IMPROVED!** What happens when a camper’s inner Picasso meets their inner Einstein? The combination will cause reactions that will be filed with oohs and ahhs! Campers will not only discover that science is fun (and messy!), but also how science plays an important part in the process of creating art and toys as they design one-of-a-kind masterpieces! **IMPROVED!** Includes robotics and coding to create some masterpieces.

**Environauts to the Rescue**  
July 23 – 27  
**IMPROVED!** Beware! Campers may get dirty while learning how to clean and protect our environment. Environauts are racing to answer the spaceship Earth’s SOS message of “Save our Sphere!”. Campers come to the rescue by conducting a variety of hands-on investigations including “Sleuthing for Crystals” and “Treasures from Trash” as well as other experiments with light, water, soil and air. **IMPROVED!** Coding and robotics may also be needed to save our planet!

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Grades 6-8 continued

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(video game design)
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**SUMMER DAY CAMPS**

**IGNITING IMAGINATIONS**

2018

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**TETRIX® Robotics “Tackling the Basics”**
July 23 – 27

Campers will attack ROBOTC programming basics with the LEGO® MINDSTORMS® NXT robot controller. Experiences are expanded as they build a heavy-duty TETRIX® robot using aircraft grade aluminum parts and powerful drive motors. Campers who are serious about engineering or programming will enjoy tackling autonomous and remote control challenges.

**Get Your Game On II (Video Game Design)**
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**My Mini Space**
July 23 – 27

NEW! Campers will become “makers” as they conceive and create a miniaturized version of a favorite place, perhaps a home for your favorite minion. These small spaces will include at least one camper designed 3D-printed object to take home. Be ready to “think big” while learning to scale down to miniature.

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**Second Child Discount:**
If more than one child from the same family attends camp, receive a $50 discount for the second child. Children must be siblings.

**Refer a friend:**
Help us spread the word about iSPACE’s awesome camps. Refer a friend new to iSPACE and receive $50 as our thanks. Details online.

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**iSPACE After Camp:**
Available for students from K-8th grade.
2:00 pm – 5:00 pm daily.
Cost is $90 per child per week.

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For more information or to register, visit iSPACEstem.org or call 513-612-5786
Camp registration includes:
1 camp t-shirt
Additional shirts available for purchase for $15

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**REGISTER EARLY!**

Registration begins February 1.
Camps begin the week of June 11.

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**ENTERING GRADES 8-12**

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**ALL SESSIONS**
run from 9am - 2pm
Monday - Friday
Cost: $275

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