SUMMER CAMP 2018

Click here to register!

Ages 4-6 (PreK-KG)

STEAM Works Studio

	June 25-29	July 9-13	July 16-20	July 23-27	July 30-Aug 3	Aug 6-10	Aug 13-17	Aug 20-24	Aug 27-31
	Super Science	Little Doctors	Flying Machines	Super Science	Pirates Ahoy!	Animal Safari	Star Wars Epic!	Little Doctors	Flying Machines
9-12p Morning Session	A practical hands-on science and craft camp for kids to enjoy and explore the amazing world of science! Chemistry experiments with food colors, baking soda and other safe ingredients. Have you made your own Oobleck yet? Paper airplanes, building sturdy bridges, balloon powered cars & many fun STEM activities.	Little Doctors camp brings medicine, science & the importance of health and hygiene in an entertaining & fun way! Role play using tools that doctors use in real world, learn how the body works, bones in the body, how the heart works. This camp is surely going to inspire our little doctors of tomorrow!	Make paper planes and rocket craft, colorful straw rockets, balloon powered rockets, bottle airplanes, parachutes! Lots of educational activities for our Campful of aeronautical engineers! A little about history of flight and fun facts in the world of airplanes and rockets!	A practical hands-on science and craft camp for kids to enjoy and explore the amazing world of science! Chemistry experiments with food colors, baking soda and other safe ingredients. Have you made your own Oobleck yet? Paper airplanes, building sturdy bridges, balloon powered cars & many fun STEM activities.	Enhance students' curiosity and science and engineering skills with a wonderful mixed STEM introduction to ROBOTICS with LEGO Bricks like an escape boat fleeing a Pirate Ship! Develops logical problem solving skills and motor skills! Added spectacular chemistry and Science hands-on experiments and basic electronics!	Each of our Camp weeks incorporates activities with simple Electronics (Battery, wires, LED lights) fun play dough and paper circuits, creative art work, LEGO Robotics, Chemistry experiments and much more! Hours of educational fun using an exotic Animal Theme! A funtastic class for exploring a variety of basic STEAM activities!	Our Campers indulge themselves in the action filled world of Star Wars and make their own Star Wars characters & fun crafts. Children will learn about LED lights & how they can be used in their Light Saber project, make glow in the dark Star Wars themed slime! A movie & learning about space and solar system adds to the Camp fun.	Little Doctors camp brings medicine, science & the importance of health and hygiene in an entertaining & fun way! Role play using tools that doctors use in real world, learn how the body works, bones in the body, how the heart works. This camp is surely going to inspire our little doctors of tomorrow!	Make paper planes and rocket craft, colorful straw rockets, balloon powered rockets, bottle airplanes, parachutes! Lots of educational activities for our Campful of aeronautical engineers! A little about history of flight and fun facts in the world of airplanes and rockets!

LUNCH (12-1p) + Outdoor Blast (Soccer, Frisbee, Volley Ball, Stretches & Physical Activities!)

	Super Science	Little Doctors	Flying Machines	Super Science	Pirates Ahoy!	Animal Safari	Star Wars Epic!	Little Doctors	Flying Machines
1-4p Afternoon Session	A practical hands-on science and craft camp for kids to enjoy and explore the amazing world of science! Chemistry experiments with food colors, baking soda and other safe ingredients. Have you made your own Oobleck yet? Paper airplanes, building sturdy bridges, balloon powered cars & many fun STEM activities.	Transforming a piece of paper into something else is an experience children can truly appreciate. Full of craft work and science activities that are a mixture of Robotics, hands on electronics (play dough or paper circuits), this week all these activities revolve around Doctors, Cells, Animals & human body!	Each of our Camp weeks incorporates elements of Electronics (Battery, wires, LED lights) with fun play dough and paper circuits, enjoying creative art work, Robotics, Chemistry experiments and much more! Hours of educational fun! A funtastic class for exploring a variety of basic STEAM activities!	Learn about Electronics while doing fun crafts! Add LED lights, Motors, Sound to your paper circuits ex Greeting Cards, Paper crafts, Origami projects. Explore the fun world of electronics! Very easy to put together for little paws, learn about a battery, complete circuit & take home your project!	Whole week of fun art & crafts infused with science (build a real telescope, kaleidoscope!) A fun group treasure hunt, paper plate pirates, gold coin hunt, counting fun, build a Pirate hat that lights up when a button is pressed, a fun pirate ship that actually floats in "sea"! Pirate swords and other STEAM activities!	Learn elements of basic Electronics (Battery, wires, LED lights) with fun play dough and paper circuits while enjoying creative art work. Hours of educational fun! Colorful butterflies, giraffe's and other Safari animals. Build all you can imagine. A funtastic class for exploring a wide variety of basic STEAM activities!	Our Campers indulge themselves in the action filled world of Star Wars and make their own Star Wars characters & fun crafts. Children will learn about LED lights & how they can be used in their Light Saber project, make glow in the dark Star Wars themed slime! A movie & learning about space and solar system adds to the Camp fun.	Transforming a piece of paper into something else is an experience children can truly appreciate. Full of craft work and science activities that are a mixture of Robotics, hands on electronics (play dough or paper circuits), this week all these activities revolve around Doctors, Cells, Animals & human body!	Each of our Camp weeks incorporates elements of Electronics (Battery, wires, LED lights) with fun play dough and paper circuits, enjoying creative art work, Robotics, Chemistry experiments and much more! Hours of educational fun! A funtastic class for exploring a variety of basic STEAM activities!

SUMMER CAMP 2018

Click here to register!

STEAM Works Studio

Grade 1-2

	June 25-29	July 9-13		July 16-20		July 23-27		July 30-Aug 3	
	Milo the engineer	Space Bots	Arcade Games	Little Doctors	Super Science	Animal Zoo	Origami-tronics	Acrylic Painting	Art & Music

9-12p Morning Session

Milo the engineer: Nurture curiosity, science & engineering skills with a wonderful introduction to ROBOTICS with LEGO Bricks, Tilt and Motion Sensors, Motors and gears. MILO pretends to be a super engineer lifting tables, dragging and cleaning up spaces. Block coding is super easy and fun while developing creative & logical problem solving skills!

Space Bots: A Robotics program with a SPACE theme! Think STAR WARS ™ and Lunar Landers & Mars Rovers! Have a blast using motors, gears, pulleys & motion sensors to create fun space themed builds! Campers will learn about simple machines like gears to create motion! Problem solving & logical thinking with block coding!

Arcade Games: Create your own games & & animations with SCRATCH using "drag and drop programing". SCRATCH, by MIT, helps young kids to learn to think creatively, reason systematically, & work collaboratively. Color coded, drag & drop block programming, as well as sounds, backdrop images & drawings are used. Get them to code!

Little Doctors: Little Doctors camp brings medicine, science & the importance of health and hygiene in an entertaining & fun way! Role play using tools that doctors use in real world, learn how the body works, bones in the body, how the heart works. Use microscopes to see cells! This camp is surely going to inspire our little doctors of tomorrow!

Super Science: Make paper planes and rocket craft, colorful straw rockets, balloon powered rockets, bottle airplanes, parachutes! Lots of educational activities for our Campful of scientists! Daily Hands-on Chemisty experiments like glow in the dark slime. See composition of air by trying a hands on fun experiment!

Animal Zoo: Enhance students' curiosity, science and engineering skills with a wonderful introduction to ROBOTICS with LEGO Bricks, Tilt and Motion Sensors, Motors and gears, Block coding. Build these fun Animal Robots controlling them using block coding. Develop spatial thinking, motor skills, creative and logical problem solving!

Origami-tronics: Transforming a piece of paper into something else is an experience children can truly appreciate. Watching a child's eyes light up when he completes an origami for kids model is priceless! We add simple coin batteries, colorful LED lights and buzzers to make them come alive!

Acrylic Painting: Exploring acrylic painting techniques is a wonderful way to get used to the medium. Any time students play with an art material, they become more comfortable with it & they will approach future projects with confidence. We use small canvases so that artwork can be taken proudly home!

Art & Music: Kids learn to create their own games & fun stories & animations with SCRATCH using "drag and drop programing". Think creatively, reason systematically, & work collaboratively. Color coded, intuitive drag & drop block programming, as well as sounds, backdrop images and drawings are used. Get them to code!

LUNCH (12-1p) + Outdoor Blast (Soccer, Frisbee, Volley Ball, Stretches & Physical Activities!)

	Water Colors	World of Cells	Baking is Fun!	Silly Circuits	Amazing Structures	Crazy Chemistry	Animation	Space Bots	Silly Circuits

1-4p Afternoon Session

Water Colors: People are drawn to watercolors due to their vibrant, delicate, and luminous qualities. Experiment with different color combinations & patterns! Masking, flower printing, water color with coffee filters, stamping, salting, splattering, & stenciling, water color on canvas. So many creative ways to enjoy water painting!

World of Cells: A hands-on Biology class where kids will enjoy observing & learning via compound microscope screen projectors. Animal & plant cells, corn stem, lotus root, cabbage leaf, pumpkin ovary, ginger root, honey bee antenna, butterfly wings, sunflower pollen. Research is Yeast alive? Proteins, extracting DNA from your own cells.

Baking is Fun!: Baking is a wonderful way to spark a lifelong love of the kitchen. It teaches kids about the processes of cooking: following a recipe, measuring, combining ingredients & applying heat to create a transformation. It's messy (and fun!) & the results are hard to resist. Rainbow Cookies, Fruit Tarts, Moon Cycle Cakes!

Silly Circuits: Learn about Electronics while doing fun crafts. Add LED lights, Motors, Sound to your paper circuits ex Greeting Cards, Paper crafts, Origami projects. Explore the fun world of electronics! Our cool silly circuits with Lights, Sound and movement are bound to nurture the campers interest in Electronics!

Amazing Structures: This week is all about building sturdy Structures, Bridges & Construction Cranes. ROBOTICS with LEGO Bricks, Tilt and Motion Sensors, Motors and gears, Block coding. Drag & Drop block coding & engineering leads to developing spatial thinking, motor skills, creative and logical problem solving!

Crazy Chemistry: Practical Chemistry is lots of fun! Learn about the chemistry that you encounter every day in your house. Experiment hands-on with real chemical reactions & test different liquids, salt, vinegar. Create your own chromatography applied Tshirt to take home. What is Elctrolysis? Make and eat exothermic ice cream!

Animation: Kids learn to create their own games & fun stories & animations with SCRATCH using "drag and drop programing". Think creatively, reason systematically, & work collaboratively. Color coded, intuitive drag & drop block programming, as well as sounds, backdrop images and drawings are used. Get them to code!

Space Bots: A Robotics program with a SPACE theme! Think STAR WARS ™ and Lunar Landers & Mars Rovers! Have a blast using motors, gears, pulleys & motion sensors to create fun space themed builds! Campers will learn about simple machines like gears to create motion! Problem solving & logical thinking with block coding!

Silly Circuits: Learn about Electronics while doing fun crafts. Add LED lights, Motors, Sound to your paper circuits ex Greeting Cards, Paper crafts, Origami projects. Explore the fun world of electronics! Our cool silly circuits with Lights, Sound and movement are bound to nurture the campers interest in Electronics!

SUMMER CAMP 2018

Click here to register!

STEAM Works Studio

Grade 1-2

Aug 6-10		Aug 13-17		Aug 20-24		Aug 27-31	
SCRATCH O' BOTS	**Little Doctors**	**ART BOTS**	**Flying Machines**	**Animal Extravaganza**	**World of Cells**	**Silly Circuits**	**SCRATCH Games**

9-12p Morning Session

SCRATCH O' BOTS	Little Doctors	ART BOTS	Flying Machines	Animal Extravaganza	World of Cells	Silly Circuits	SCRATCH Games
You know how to code in SCRATCH. Can you control LEGO Robots from SCRATCH or better can you get your SCRATCH Games to take commands from your physical Robot's sensors? Build a flight simulator or a racing car game, a target practive simulator and many more fun projects! Think creatively, reason systematically, & work collaboratively.	Little Doctors camp brings medicine, science & the importance of health and hygiene in an entertaining & fun way! Role play using tools that doctors use in real world, learn how the body works, bones in the body, how the heart works. Use microscopes to see cells! This camp is surely going to inspire our little doctors of tomorrow!	A LEGO Robotics program with ART & MUSIC Themes! Spirograph Builder, MILO the Drawing Bot! Music Maker, Drum Master. Have a blast using motors, gears, pulleys & motion sensors to create fun space themed builds! Campers will learn about simple machines like gears to create motion! Problem solving & logical thinking with block coding!	Make paper planes and rocket craft, colorful straw rockets, fast moving balloon powered rockets, bottle airplanes, rubberband gliders & your own custom parachutes! Lots of educational activities for our Campful of aeronautical engineers! A little about history of flight and fun facts in the world of airplanes and rockets!	Enhance students' curiosity, science and engineering skills with a wonderful introduction to ROBOTICS with LEGO Bricks, Tilt and Motion Sensors, Motors and gears, Block coding. Build these fun Animal Robots controlling them using block coding. Develop spatial thinking, motor skills, creative and logical problem solving!	A hands-on Biology class where kids will enjoy observing & learning via compound microscope screen projectors. Animal & plant cells, corn stem, lotus root, cabbage leaf, pumpkin ovary, ginger root, honey bee antenna, butterfly wings, sunflower pollen. Research is Yeast alive? Proteins, extracting DNA from your own cells.	Learn about Electronics while doing fun crafts. Add LED lights, Motors, Sound to your paper circuits ex Greeting Cards, Paper crafts, Origami projects. Explore the fun world of electronics! Our cool silly circuits with Lights, Sound and movement are bound to nurture the campers interest in basic Electronics!	Kids learn to create their own games & fun stories & animations with SCRATCH using "drag and drop programming". SCRATCH, by MIT, helps young kids to learn to think creatively, reason systematically, & work collaboratively. Color coded, intuitive drag & drop block programming, as well as sounds, backdrop images and drawings are used. Get them to code!

LUNCH (12-1p) + Outdoor Blast (Soccer, Frisbee, Volley Ball, Stretches & Physical Activities!)

1-4p Afternoon Session

Crazy Chemistry	Baking is fun!	Silly Circuits	Little Doctors	Super Science	Digital Arts	Space Bots	Baking is Fun!
Practical Chemistry is lots of fun! Learn about the chemistry that you encounter every day in your house. Experiment hands-on with real chemical reactions & test different liquids, salt, vinegar. Create your own chromatography applied Tshirt to take home. What is Elctrolysis? Make and eat exothermic ice cream!	Baking is a wonderful way to spark a lifelong love of the kitchen. It teaches kids about the processes of cooking: following a recipe, measuring, combining ingredients & applying heat to create a transformation. It's messy (and fun!) & the results are hard to resist. Rainbow Cookies, Fruit Tarts, Moon Cycle Cakes!	Learn about Electronics while doing fun crafts. Add LED lights, Motors, Sound to your paper circuits ex Greeting Cards, Paper crafts, Origami projects. Explore the fun world of electronics! Our cool silly circuits with Lights, Sound and movement are bound to nurture the campers interest in Electronics!	Little Doctors camp brings medicine, science & the importance of health and hygiene in an entertaining & fun learning way! Role play using tools that doctors use in real world, learn how the body works, bones in the body, how the heart works. This camp is surely going to inspire our little doctors of tomorrow!	Make paper planes and rocket craft, colorful straw rockets, balloon powered rockets, bottle airplanes, parachutes! Lots of educational activities for our Campful of scientists! Daily Hands-on Chemisty experiments like glow in the dark slime. See composition of air by trying a hands on fun experiment!	An introduction to learning Graphic arts and many digital styles using Tablets. Learn to combine multiple brush types using a pressure sensitive digital tablet. Blend watercolour and textures from old textiles and photos to create a mixed media artwork. An experienced teacher trains the whole class step by step while helping each child techniques.	A Robotics program with a SPACE theme! Think STAR WARS ™ and Lunar Landers & Mars Rovers! Have a blast using motors, gears, pulleys & motion sensors to create fun space themed builds! Campers will learn about simple machines like gears to create motion! Problem solving & logical thinking with block coding!	Baking is a wonderful way to spark a lifelong love of the kitchen. It teaches kids about the processes of cooking: following a recipe, measuring, combining ingredients & applying heat to create a transformation. It's messy (and fun!) & the results are hard to resist. Rainbow Cookies, Fruit Tarts, Moon Cycle Cakes!

SUMMER CAMP 2018

Click here to register!

STEAM Works Studio

Grade 3-5

	June 25-29	July 9-13		July 16-20		July 23-27		July 30-Aug 3	
	EV3 Battle Bots	Stop Motion Anim	Baking is fun!	3D Printing & CAD	Electronics LAB	Car Physics	NASA™ Space Engineers	Python Art	Adv. 3D Printing

9-12p Morning Session

EV3 Battle Bots	Stop Motion Anim	Baking is fun!	3D Printing & CAD	Electronics LAB	Car Physics	NASA™ Space Engineers	Python Art	Adv. 3D Printing
Campers learn Robotics, utilizing sensors, gear trains, engineering design, logical thinking & coding, testing and performance, strategy building. This Robotics class is an excellent way to motivate children to get deeper into Robotics while also getting direct goals based outcomes that they can have fun and engagement with.	You see stop motion animation all the time on TV, movies — even if you don't realize it. This camp offers children ownership & autonomy in the film making process & encourages problem solving. Kids learn to plan out where a story is heading and fosters iteration & experimentation through trying and testing!	Baking is a wonderful way to spark a lifelong love of the kitchen. It teaches kids about the processes of cooking: following a recipe, measuring, combining ingredients & applying heat to create a transformation. It's messy (and fun!) & the results are hard to resist. Rainbow Cookies, Fruit Tarts, Moon Cycle Cakes!	CAD and 3D Printing introduces students to basic 3-D modeling. Primitive shapes, measurement, hollow objects & assemblies. Students learn the tools needed to design exciting projects. Students keep the 3-D printed printed models that they make! Save all your work and continue learning more!	Young makers explore learning basics of electronic circuits and how electronic components work, which they can then apply to an idea of their own. Students create their project using everyday materials. Students will use breadboards and will learn to build circuits that blink, squeak, tick and whirl.	Learn about motion, acceleration, friction. Design your own mousetrap car then race the furthest? How would you make it stop exactly at 10 meters? Design a working Solar car & try racing outside. Learn the art and he science behind air and CO2 powered dragsters. Fun hands on way of learning & getting interested in Physics!	Campers use the Engineering design process & team work to create a satellite in this mission. These satellites will have to survive a fall from 1 meter as well as a straw rocket launch without loosing any parts. Campers will be using science & math. Fun & challenging NASA designed activities that campers will love.	Python is a powerful, expressive programming language that`s easy to learn and fun to use. Python Art brings kids into the world of programming. Turtle graphics and tKinter allow students to enjoy making fun graphics, music, game & animation while learning Python language basics. A fun introduction to coding!	CAD and 3D Printing introduces students to basic 3-D modeling. Primitive shapes, measurement, hollow objects & assemblies. Students learn the tools needed to design exciting projects. Students keep the 3-D printed printed models that they make! Save all your work and continue learning more!

LUNCH (12-1p) + Outdoor Blast (Soccer, Frisbee, Volley Ball, Stretches & Physical Activities!)

1-4p Afternoon Session

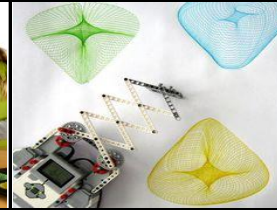| 3D Printing & CAD	EV3 Mars Mission	Optics & Lasers	World of Cells	Moving Creatures	Python Art	Acrylic Painting	Stop Motion Anim	Making Rockets
CAD and 3D Printing introduces students to basic 3-D modeling. Primitive shapes, measurement, hollow objects & assemblies. Students learn the tools needed to design exciting projects. Students keep the 3-D printed printed models that they make! Save all your work and continue learning more!	Campers work on a special Mars mat and Mars Rocket parts and Lego parts that simulate craters and uneven terrain and solve a set of Robotic challenges very similar to Lego competitions. Campers learn sensor control, programming, testing and engineering design while working on Mars inspired Robots in Space theme!	This practical Physics program demystifies concepts in Optics (Light as waves, mirrors, lenses, how do lasers work, communication with light etc. with a hands-on learn by making approach. We build projects like Periscopes, Galilean telescopes, Projectors, Virtual Reality Goggles, optical illusions and much more!	A hands-on Biology class where kids will enjoy observing & learning via compound microscope screen projectors. Animal & plant cells, corn stem, lotus root, cabbage leaf, pumpkin ovary, ginger root, honey bee antenna, butterfly wings, sunflower pollen. Research is Yeast alive? Proteins, extracting DNA from your own cells.	Campers use Mindstorms EV3 Robots to make moving Creatures like a vicious scorpion that senses your presence, an adorable puppy, 8 legged spider and a caterpillar that slithers. Children run Robotics and different ways of movement using mechanical parts. Teaches Problem solving, block coding, engineering design!	Python is a powerful, expressive programming language that`s easy to learn and fun to use. Python Art brings kids into the world of programming. Turtle graphics and tKinter allow students to enjoy making fun graphics, music, game & animation while learning Python language basics. A fun introduction to coding!	Exploring acrylic painting techniques is a wonderful way to get used to the medium. Any time students play with an art material, they become more comfortable with it & they will approach future projects with confidence. We use small canvases so that artwork can be taken proudly home!	You see stop motion animation all the time on TV, movies — even if you don't realize it. This camp offers children ownership & autonomy in the film making process & encourages problem solving. Kids learn to plan out where a story is heading and fosters iteration & experimentation through trying and testing!	Campers engage in building paper, straw rockets, air pressure powered rockets and participate in a rocket engine demo. The scientific, technological, engineering & mathematical foundations of rocketry provide exciting opportunities for authentic hands-on, experimentation!
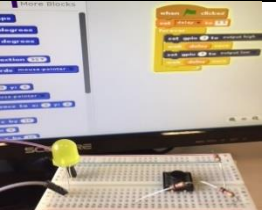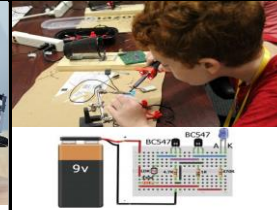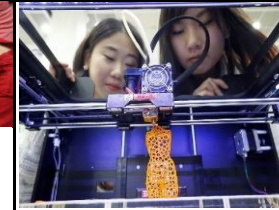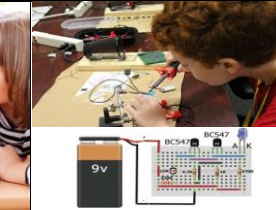
SUMMER CAMP 2018

Click here to register!

Grade 3-5

Aug 6-10		Aug 13-17		Aug 20-24		Aug 27-31	
Super Science	**Art of Healthy Cooking**	**EV3 ART BOTS**	**Flight Science**	**Animal Extravaganza**	**Acrylic Painting**	**EV3 Mars Mission**	**Baking is Fun!**

9-12p Morning Session

Super Science: Practical Chemistry is lots of fun! Learn about the chemistry encountered every day in your house & at school. Experiment hands-on with real chemical reactions, test different liquids, salt, vinegar & learn about chemistry. Chromatography on T-shirts, electrolysis, exothermic ice cream, volcanic eruptions, color changing magic chemistry and much more!

Art of Healthy Cooking: Young chefs practice essential kitchen skills & fundamentals of cooking. Kids enjoy working alongside campers learning techniques in measuring, baking, cleanliness & elements of healthy cooking. Pizza, Muffins Baking, Smoothies, Taco Cookies, Guacomole dips, Fruit Tart & fun activities!

EV3 ART BOTS: Learn about color spectrum, optical illusions & the human vision. Build spin art machines, drawing robots, kinetoscopes (moving pictures). Each day is a completely new fun Robot building and block coding challenge with art or music in mind. Learn about light, color, touch sensors and controlling your robots while building fun robots!

Flight Science: Design and build a variety of flying machines, then launch them! How high can you go? Think gliders, rubberband powered airplanes, kites, air pressure rockets, parachutes & you are on the way to embracing all the engineering fun to be had! Build a complete R/C airplane from scratch with step by step guidance from the teacher. Go launch & fly them outside!

Animal Extravaganza: Learn about robotic locomotion and balancing. Build mechanical versions of your favorite animals like a three legged spider robot or a slithering snake like motion. Understand the mechanics required to make efficient multi-pod movements while learning EV3 Mindstorms coding! Campers will heavily utilize different kinds of sensors as well as remote control!

Acrylic Painting: Exploring acrylic painting techniques is a wonderful way to get used to the medium. Any time students play with an art material, they become more comfortable with it & they will approach future projects with confidence. We use small canvases so that artwork can be taken proudly home!

EV3 Mars Mission: Campers use engineering design methods and work on a special Mars Competition mat and work with Mars Rocket parts LEGO parts that simulate craters and uneven terrain to solve a set of Robotic challenges very similar to Lego competitions. Campers learn sensor control, programming, testing and engineering design while working on Mars inspired Robots in Space theme!

Baking is Fun!: Baking is a wonderful way to spark a lifelong love of the kitchen. It teaches kids about the processes of cooking: following a recipe, measuring, combining ingredients & applying heat to create a transformation. It's messy (and fun!) & the results are hard to resist. Rainbow Cookies, Fruit Tarts, Moon Cycle Cakes!

LUNCH (12-1p) + Outdoor Blast (Soccer, Frisbee, Volley Ball, Stretches & Physical Activities!)

SCRATCH O MATIC	NASA™ Space Engineers	Electronics LAB	3D Printing & CAD	Super Science	World of Cells	Electronics LAB	SCRATCH Games!

1-4p Afternoon Session

SCRATCH O MATIC: A creative coding exploration class with SCRATCH that allows students to explore how to control Motors, Electronics, react to Sensors from SCRATCH. Can a Tilt sensor allow you to make and play a Super Mario game? Can you make a magic wand that creates colorful magic circles in SCRATCH using the Motion Sensor and Tilt sensor? Control LED lights using SCRATCH and more.

NASA™ Space Engineers: Campers use the Engineering design process & team work to create a satellite in this mission. These satellites will have to survive a fall from 1 meter as well as a straw rocket launch without loosing any parts. Campers will be using science & math. Fun & challenging NASA designed activities that campers will love.

Electronics LAB: Explore basics of electronic circuits & how electronic components work, which they can then apply to an idea of their own. Create projects using simple electronics like LEDs, batteries, motors. Students use bread boards & will learn to build circuits that blink, squeak, tick & whirl.

3D Printing & CAD: CAD and 3D Printing introduces students to basic 3-D modeling. Primitive shapes, measurement, hollow objects & assemblies. Students learn the tools needed to design exciting projects. Students keep the 3-D printed printed models that they make! Save all your work and continue learning more!

Super Science: Practical Chemistry is lots of fun! Learn about the chemistry encountered every day in your house & at school. Experiment hands-on with real chemical reactions, test different liquids, salt, vinegar & learn about chemistry. Chromatography on T-shirts, electrolysis, exothermic ice cream, volcanic eruptions, color changing magic chemistry and much more!

World of Cells: A hands-on Biology class where kids will enjoy observing & learning via compound microscope screen projectors. Animal & plant cells, corn stem, lotus root, cabbage leaf, pumpkin ovary, ginger root, honey bee antenna, butterfly wings, sunflower pollen. Research is Yeast alive? Proteins, extracting DNA from your own cells.

Electronics LAB: Explore basics of electronic circuits & how electronic components work, which they can then apply to an idea of their own. Create projects using simple electronics like LEDs, batteries, motors. Students use bread boards & will learn to build circuits that blink, squeak, tick & whirl.

SCRATCH Games!: Kids learn to create their own games & fun stories & animations with SCRATCH using "drag and drop programming". SCRATCH, by MIT, helps young kids to learn to think creatively, reason systematically, & work collaboratively. Color coded, intuitive drag & drop block programming, as well as sounds, backdrop images and drawings are used. Get them to code!

SUMMER CAMP 2018

Click here to register!

STEAM Works Studio

Grade 6-8

	June 25-29	July 9-13	July 16-20	July 23-27	July 30-Aug 3	Aug 6-10	Aug 13-17	Aug 20-Aug 24	Aug 27-Aug 31
	Java Fundamentals	**VEX Robotics**	**3D Print your DIY PC**	**Underwater Robotics**	**DIY Smart Robotic Car**	**Python Coding**	**Wood Working**	**Blender Animation**	**Sculpting**
9-12p Morning Session	A Jumpstart to Coding! Begin with a quick programming orientation using the Eclipse environment. Campers will learn to program using best practices and understand what makes JAVA unique and so powerful. JVM, Objects & Classes, Data Types, Arrays, Decision Structures, File I/O & Graphics are introduced!	Build a fully autonomous robot using the included programmable VEX ARM® Cortex® based Microcontroller & various sensor types. Students learn programming skills such as Robot-C, Robot Design and engineering process. Students can get ready and join teams to participate in VEX competitions organized widely across the nation	A mixed DIY STEAM camp which teaches students elements of computer organization, operating systems such as Linux, 3D Printing and CAD design for packaging, Python coding, Camera integration and how to control Electronics with a Input/Output board. Students build their own mobile computers and take it home!	Campers build a DIY Underwater Robot/ROV that can move vertically and horizontally using thrusters and can be controlled using a microcontroller to take live stabilized videos & pictures for under water exploration. The ROV allows for streaming HD video to a surface laptop to enjoy the experience from dry ground.	Students learn about the ARDUINO UNO microcontroller and its sensor, motor eco-system. Understand and learn to write code for line tracking, obstacle avoidance, IR-remote control and Bluetooth control over their phone with apps on iOS and android. Take your final Robotic Car you built home!	Python is a powerful, expressive programming language that's easy to learn and fun to use. We build cool Graphics & Games during the course. We use IDLE as a development tool as well as common Libraries that help with Graphics and Game building like tkinter and pygame to explore the power of Python language!	This totally safe working woodshop is a great way for kids to craft, create, build, and otherwise discover skills that can provide a lifelong source of enjoyment. Turn out real wood works in this Cool Workshop that's a combination of jigsaw, lathe, drill press, & sander. Make your own wooden bench, coat & hat rack, storage box!	Blender is a free and open source 3D creation suite. It supports the entirety of the 3D pipeline —modeling, rigging, animation, simulation, rendering, compositing & motion tracking. Thanks to high quality rigging and animation tools, Blender is used for numerous short films, ads, TV series and feature films now.	Clay is a great medium for students to get introduced to form & express themselves in a fun way. Understand the differences between form and shape. Learn techniques like scoring and slipping clay. Put the FUN in functional with a playful project that teaches the basics of ceramic hand building!

LUNCH (12-1p) + Outdoor Blast (Soccer, Frisbee, Volley Ball, Stretches & Physical Activities!)

	Electronics w Soldering	DIY Smart Robotic Car	Advanced 3D Printing	Virtual Reality	Building DIY Drones	Wearable Electronics	Laser Cutting, 3D print	Underwater Robotics	3D Print your DIY PC
1-4p Afternoon Session	Learning how to solder is quite easy and, with a little practice, you will be soldering your own electronics circuits. You can create something new that never existed before. Campers in this class learn about electronics circuits to build LED flashers, a radio transmitter, a touch sensing lamp, a 555 IC based tone generator.	Students learn about the ARDUINO UNO microcontroller and its sensor, motor eco-system. Understand and learn to write code for line tracking, obstacle avoidance, IR-remote control and Bluetooth control over their phone with apps on iOS and android. Take your final Robotic Car you built home!	Campers will explore Coding/Program based methods of generating 3D Printed projects. They will also explore two different advanced 3D printed projects that use electronic components. Ex. A water cooled mini pump that can shoot high speed water and a Hand Crank electricity generator with a LED torch light.	Oculus Rift is a hardware platform consisting of a headset & earphones that allows people to experience virtual reality. Learn the how to use the Unity® game engine and tackle the unique design challenges that arise when building for Virtual Reality. Game engine controls that use moving platforms & artificial intelligence.	Learn principles of flight, what makes things go up against the air & why, basics of 3D Printing & CAD, soldering & electronics. Build a load bearing fully functional Quad Copter which can fly using remote control & as an add-on you can make your copter take aerial photos. Take your drone home!	What if your clothing could change color based on mood or respond to your racing heartbeat? Welcome to the world of shoes that can dynamically shift your height, jackets that display when the next bus is coming, and neckties that can nudge your project partner across the room. Build your own Wearable!	A hands-on STEAM Camp for older kids to explore Laser cutting and build a variety of Art & Science projects: Ex. Eco Smart Houses, Jigsaw puzzle map, wooden ornaments or jewelry, roll-a-marble box and many more interesting engraving and laser cutting projects. Strict teacher control and safety considerations will be observed at all times!	Campers build a DIY Underwater Robot/ROV that can move vertically and horizontally using thrusters and can be controlled using a microcontroller to take live stabilized videos & pictures for under water exploration. The ROV allows for streaming HD video to a surface laptop to enjoy the experience from dry ground.	A mixed DIY STEAM camp which teaches students elements of computer organization, operating systems such as Linux, 3D Printing and CAD design for packaging, Python coding, Camera integration and how to control Electronics with a Input/Output board. Students build their own mobile computers and take it home!