

SUMMER STEM

CAMPS 2019





W eek of:	Time	Camp Name	Grade Levels (last grade completed)	Cost Per Camper
June 10th - 14th	9am -12pm	Junk Drawer Engineering, Level One	2nd - 8th	\$175.00
	9:30am - 11:30am	Mess Makers	Pre-K (Ages 4-6)	\$150.00
	1pm - 3pm	Science of the Seasons	Pre-K (Ages 4-6)	\$150.00
June 17th - 21st	9am - 12pm	Mathemagician Academy I	3rd - 8th	\$150.00
	9am - 12pm	Junk Drawer Engineering, Level Two	2nd - 8th	\$175.00
	1pm -4pm	Science Magic	2nd - 6th	\$150.00
June 24th - 28th	9am - 12pm	Put Some heART on those Walls	2nd - 6th	\$150.00
	9am - 12pm	Beginner Woodworking	4th - 8th	\$175.00
	1pm - 4pm	Factually Fun Fairytales	K - 3rd	\$150.00
July 1st - 5th	9am - 12pm	4th of July Science	4th - 8th	\$120.00 (no camp 7/4)
	1pm - 4pm	Spells, Magic, and Potions	K - 5th	\$120.00 (no camp 7/4)
July 8th - 12th	9am - 12pm	STEM Woodshop	5th - 8th	\$150.00
	9am - 12pm	Coding and Robotics, Level One	K - 4th	\$175.00
	1pm - 4pm	Getting a Charge Out of Electrical Engineering	3rd - 8th	\$150.00
uly 15th - 19th	9am - 12pm	Emerging Engineers	3rd - 6th	\$150.00
	9am - 12pm	Coding and Robotics, Level Two	4th - 8th	\$175.00
	1pm - 4pm	Bubble Bonanza	K - 3rd	\$150.00
யிy 22nd - 26th	9am - 12pm	High Steel Presents, Bridge Mania	4th - 8th	\$150.00
	9am - 12pm	Sewing and Circuits	K- 8th	\$175.00
	1pm - 4pm	Encountering Wild Science	K - 5th	\$150.00
July 29th - August 5th	9am - 12pm	Art and Nature	3rd - 8th	\$150.00
	1pm - 4pm	Mathemagician Academy II	4th - 8th	\$150.00
August 5th - 9th	9am - 12pm	Whatever the Weather	K - 4th	\$150.00
	9am - 12pm	Air and Space	K - 8th	\$175.00
	1pm -4pm	Mad Matter Scientists	K - 4th	\$150.00
		The Circus School of Lancaster Presents:		
August 12th - 16th	9am - 12pm		K - 8th	\$150.00
	9am - 12pm	Environmental Engineering	2nd - 8th	\$175.00
	1pm - 4pm	Return of FrankenSLIME	K - 8th	\$150.00

The Lancaster Science Factory has been offering Summer Camps for more than a decade. In 2019 we're celebrating by offering 28 unique, weeklong camps for kids of all ages and interests. Choose from sessions in the morning and afternoon, or pack a lunch and stay all day!

To learn more about these exciting camps and to register, please visit www.LancasterScienceFactory.org today!

CAMP DETAILS!

JUNE $10^{TH} - 16th$

Junk Drawer Engineering, Level One Maker Space Camp – 9am – 12pm – Grade Levels 2 - 8

The Junk Drawer Engineering series asks campers to solve design problems using everyday "junk" materials. In round one we'll use the Engineering Design process to build mechanical structures such as bridges, catapults, and hydraulic arms.

Mess Makers

Pre-K Camp – 9:30am – 11:30am – Ages 4 - 6 What happens when sugar, spice, and everything nice meet snips, snails, and puppy-dog tails? A whole lot of clean and messy fun all in one! Campers will use their senses to test different tea samples. They'll get their hands dirty while discovering soil and bugs! No messy camp would be complete with a little ploymer-play with slime!

Science of the Seasons Pre-K Camp – 1pm – 3pm – Ages 4 - 6

Can you name the Four Seasons? After this camp you can! Explore Spring and all its flowers, plants, and animals. Cook something up with the hot Summer sun! Examine the pretty leaves of Autumn and find out why they fall. When Winter comes, explore ever greens and the science of snow. STEM meets the Seasons in this seasonally spectacular camp!

JUNE 17TH - 21ST

Mathemagician Academy I

ST EM Camp – 9am – 12pm – Grade Levels 3 - 8
Have you ever wanted to be amazing? Would you like Math
to be fun? Become a Mathemagician in just five days! Learn
about famous mathematicians and magicians while mastering
mystifying magic with your own mathematical superpowers.
You will leave with a brain (and a magic box) stuff full of math
and magic sure to impress your family and friends!

Junk Drawer Engineering, Level Two Maker Space Camp – 9am – 12pm – Grade Levels 2 – 8

In round two of Junk Drawer Engineering, campers will focus on building their "junk" devices with the power of electricity! We'll build things like cardboard cars, robots that make art and clean up after you, gear trains, and more!

Science Magic

STEM Camp – 1pm – 4pm – Grade Levels 2 – 6 Magic and Science collide in this camp! Uncover the magic hiding in physics and chemistry and then show off what you've learned for your family at the end of the week!

JUNE 24TH - 28TH

Put Some heART on Those Walls
STEM Camp – 9am -12pm – Grade Levels 2 – 6
Award-Winning Murual Artist Katie Trainer returns to the
Science Factory to host a STEAM themed mural camp!
Campers will literally leave their mark on on the walls as they
complete a mural from design to paint. Join us in this creative
and educational collaboration and help us inspire students for
years to come!

Beginner W oodworking Maker Space Camp – 9am – 12pm – Grade Levels 4 – 8

Interested in making something out of wood but don't know where to start? In this maker camp, campers will learn the basics of woodworking and the tools of the trade while making cool projects like wizard wands and secret compartment boxes.

Factually Fun Fairy Tales

STEM Camp – 1pm – 4pm – Grade Levels K – 3 In this camp, campers will use their problem solving skills to engineer their way out of some fairy tale problems. Experiment with the scientific plausibility of some of the world's most famous stories. Make a boat to get the Gingerbread Man across the river, build a house strong enough to stand up to the big bad wolf, and more!

JULY $1^{ST} - 5^{TH}$ (NO CAMP JULY 4^{TH})

4th of July Science

STEM Camp – 9am – 12pm – Grade Levels 2 – 8 Celebrate the 4th of July with the incredible power of water and air in this fun, hands-on camp! Fly a water rocket high into the sky, cool down with some homemade ice cream, and more. No camp on Thursday July 4th!

Spells, Magic, and Potions

STEM Camp – 1pm – 4pm – Grade Levels K – 5 You're a wizard camper! Enter a classroom at Hogwarts School of Witchcraft and Wizardry right here at LSF and get sorted into your house. You'll discover some potions that would even impress professor Shape and learn some incredible science-spells. Campers will even design their own wands! No Camp on Thursday, July 4th!

JULY 8TH - 12TH

ST EM Woodshop

STEM CAMP - 9am - 12pm - Grade Levels 5 - 8

Campers will have an immersive experience as they spend the week creating wood working projects independently and as a group. Learn the basics of safety, interpreting shop drawings, and how to use hand tools. The finished project you get to take home will be a fun reminder of a job well done!

Coding and Robotics, Level One Maker Space Camp – 9am – 12pm – Grade Levels K – 4

Young campers will be introduced to the world of coding and robotics during this engaging camp. Learn the basics of coding through "screen-free" card and block games. Campers will experiment with Scratch Junior and block programming with Edison robots.

Getting a Charge out of Electrical Engineering ST EM Camp – 1pm – 4pm – Grade Levels 3 -8

Enjoy a thermally energetic experience as you charge your way into small electronic engineering! Get magnetized by the strength of magnets and their invisible forces. Can you control the invisible? Explore thermo-dynamics as you figure your way in and out of heated situations. Transmit yourself into the world of Electrical Engineering for a week of handson fun!

JULY 15TH - 19TH

Emerging Engineers

STEM Camp – 9am – 12pm – Grade Levels 3 – 6 What two things do engineers enjoy the most? Challenges and building things of course! If this sounds like you, then this is your camp! Use common objects to make a fast-moving zip-line. Design a boat that moves using only the power of a rubberband. All of these challenges and more await you in this camp.

Coding and Robotics, Level Two

Maker Space Camp – 9am – 12pm – Grade Levels 4 – 8

Campers will explore Scratch, Edison, and Lego Mindstorm robots in this second-level robotics and coding camp. Build your computer skills as you learn about micro-controllers like Adafruit's Circuit Playground Express. This open-ended camp will give kids a chance to explore the world of robotics at their own pace.

Bubble Bonanza

STEM Camp – 1pm – 4pm – Grade Levels K – 3Oh my gosh BUBBLES In this bubbilicious camp, campers will learn all about bubbles and what makes them more than just air! Discover the different types of bubbles and even experiment with your very own bubble solution. You'll have so much fun you'll POP!

JULY 22ND - 26TH

High Steel Presents: Bridge Mania

STEM Camp – 9am -12pm – Grade Levels 4 -8
We have proudly been partnering with High Steel Structures, Inc to deliver this high-quality, hands-on bridge camp for several years! Campers will take a journey through the world of bridge engineering and technology. Explore structural behavior while you competitively build arches, paper bridges, and wooden trusses. Help erect a small steel bridge and perform actual welding! The camp concludes with a tour of one of the largest steel bridge companies in the country to see actual bridges being made on the shop floor!

Sewing and Circuits

Maker Space Camp - 9am -12pm - Grade Levels K -8

In this camp, the worlds of upcycling, fabric art, and electrical engineering collide! Campers will learn the basics of sewing and electronics while making a variety of projects to take home, like felted wool animals, upcycled accessories, and LED wristbands.

Encountering Wild Science

STEM Camp – 1pm – 4pm – Grade Levels K – 5 Experience the wild side of science! Get messy with differnt types of slime and the mysterious and wild substance: ooblek. Learn about the Dinosaurs while you make your own fossils to take home. Nothing is ordinary in this hands-on camp!

JULY 29TH - AUGUST 2ND

Art and Nature

STEM Camp – 9am – 12pm – Grade Levels 3 – 8 Science surrounds us in nature and nature is full of beautiful art, if you know where to look! Discover interesting scientific principles found in the world around us and use them to create your own art. Make a mobile to help you sleep, create a bird buddy, and so much more!

Mathemagician Academy, II

STEM Camp – 1pm – 4pm – Grade Levels – 4 - 8
It is recommended that campers take Mathemagician
Academy I (June 17th) before coming to this camp, but not required. The math and the magic will be all new and more challenging in this second round of Mathemagician camp!
Campers will leave with another box full of new tricks and a brain stuffed with mind-blowing magic and math!

AUGUST 5TH - 9TH

W hat ever the W eather ST EM Camp – 9am -12pm – K-4

Rain, rain, go away - we have weather science to learn!
Campers interested in the weather and seasons will love this fun and hands-on camp. From cloudy days to sunny ones, campers will discover just how our atmosphere makes weather. Experiment with snow and wind, learn about dangerous weather, and more in this thrilling camp!

Air and Space

Maker Camp – 9am – 12pm – Grade Levels K – 8
If you've ever been accused of having your head in the clouds, then this may be the Maker camp for you! Explore the world of flight and space while building and testing a variety of planes, helicopters, and rockets. You're sure to be flying high by the end of this fun and exciting week!

Mad Matter Scientists

STEM Camp – 1pm – 4pm – Grade Levels K – 4 Solids, liquids, and gasses - oh my! Be a State-of-Matter super sleuth and investigate mystery matter through games and experiments. Questions will be answered like: What makes oil different from water? And where can we find gasses outside of the chemistry lab? After this camp you'll be a subject MATTER expert!

AUGUST 12TH - 16TH

The Circus School of Lancaster Presents: Circus Science Spectacular

STEM Camp – 9am – 12pm – Grade Levels K – 8
Step right up for The Greatest Show at the Lancaster Science
Factory! During this camp, children will explore their
strengths in different circus arts and learn about the science
behind the feats! Try your hand at clowning, partner
acrobatics, hula hoops, juggling, act creation, and much more!
Circus has the potential to boost confidence, self-esteem,
connections to others, increase creativity and is a positive
outlet for kids. At the end of the week campers will hold a
personalized showcase to share with their family and friends.

Environmental Engineering Maker Space Camp – 9am – 12pm – Grade Levels 2 - 8

You have the power to save the planet (and our city) with engineering design! Campers will explore how engineers are tackling the climate crisis while building their own renewable generators. They'll also learn about water pollution and

stormwater management by modeling solutions and seeing how the City of Lancaster tackles these issues in the real world.

The Return of FrankenSLIME! STEM Camp – 1pm – 4pm – Grade Levels K -8

It's ALIVE It's slime time again at the Lancaster Science Factory and this time it will be even messier and sloppier than before. Campers will make all sorts of slime and slime-like concoctions while exploring the properties of polymers. You'll be the mad scientist at the Non-Newtonian camp (and you'll learn what non-newtonian means)!