

Summer 2019 K-3rd Descriptions in Alphabetical Order

Curricula	Title	Description
Captain Energy Pants	Engineering Energy	<p>For ages people have believed that energy equals progress. As a worldwide search for cheaper and cleaner energy continues, we are on a mission ... a mission to energize young scientists and engineers to think about energy! Join Energy Pants on an amazing adventure where participants explore various forms of energy, from potential to kinetic and electrical to renewable sources like wind and solar. Participants will design and build paddle boats, water wheels, wind mills, and solar ovens.</p>
Creating with Code	Computer Programming	<p>This is an exciting introduction to computer programming. SCRATCH Jr, is a program designed specifically for very young children to be introduced to computer programming. Participants learn the basics of creating using computers through some unplugged activities followed by drag-and-drop programming; They apply their programming skills to create simple programs, animations and games.</p>

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Discover Robotics	WeDo 2.0 Robotics	Discover the exciting world of LEGO WeDo 2.0 robotics. Campers will use LEGO kits to build robots and code them. Campers will see just how many ways we depend on robotics. By the end of the week they will be confident enough in their building and coding skills to plan, build, and code their very own robots!
Engineering Design challenges	Engineering Design Challenges	Engineers are the world's greatest problem solvers! Come see how amazing it is to be presented a challenge and a budget and friends to work with. Each day participants will work collaboratively to find a great solution to various challenges. Can you build a swing for under \$10 in supplies? Can you build a boat that carries 30 passengers, uses only 3 materials and costs less than \$15?!
Entrepreneur Exhibition	Entrepreneurship	Have some great ideas you want to share? Entrepreneurs take their ideas and make them reality. What problem do you see that you can resolve? Imagine a solution, design and 'build' a prototype, create a sales campaign, make a webpage informing the world of your amazing innovation. The world needs problem solvers that are willing to bring their ideas to life; perhaps that is YOU!

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Maker's Movie Magic	Multiple Engineering Curricula	Try out your engineering skills to tackle some of your favorite movie's challenges! Make some Flubber, design a wing for Toothless, design a rocket for Emmit in the Lego Movie, create a time machine for Lewis and the Robinsons, and build a zipline for Big Hero 6! The possibilities are endless! Dive into the movies and find ways to help your favorite characters!
Mystery of ME!	Biomedical Engineering	Discover how engineers help the medical professionals solve the mysteries of human health! Gain an understanding how amazing the human body is and just how engineers strive to provide ways to help us overcome challenges. Design a cast, test out medical equipment, create prosthetics, and use hydraulics to make a joint!
Sustainability Mission	Sustainability Engineering	Did you know that each of us tosses a car worth of trash every year! While clean drinking water is taken for granted in industrial economies, globally, 1 in 9 people lack access to it. Sustainable engineering deals with designing systems and processes that use our natural resources responsibly. In this program, participants will explore sustainability at home as they design a sweet sustainable home for their client. The clients include the TechMex family, the McMassive family, the ScoutOut family and the Flower family. Clients have their unique lifestyle habits and are assigned at random. Children will get into "trash talk" and experience Garbology, engineering design of a

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		warm home, rain barrels and critical thinking.
Taste of STEM	Multiple Curricula	Not sure where to start?! Try out a summer camp that provides you with fun opportunities to discover the world of Science Technology Engineering and Math! Enjoy a day of game making, another day of coding, another day of engineering challenges, and more! Our aim is to introduce the campers to the large variety of inspiring experiences in STEM!
Underwater Exploration	Marine Biology Engineering	Explore the fascinating world of marine animals and the incredible ecosystems they spend their time creating and thriving in. Discover just how humans can learn from the intricate interdependent relationships the marine animals have with both their environment and fellow marine habitants. Have a blast with hands on activities and travel into the world of a marine biologist!