2009 Summer Camps

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and *Blast-Off* on an "Out of this World" Summer Adventure with

iSPACE!

iSPACE invites YOU to sign on as a crew member and take part in an incredible summer experience. Fire up your imagination as YOU build and program robots, discover the "ups and downs" of living and working in space, experience the thrill of building and launching radical rockets or encounter exciting engineering activities!

REGISTRATION opens

February 13, 2009

Week-Long Camps for Space Explorers Ages 5 - 18

Ages 5-6*	**(9:00-noon/5days)**	**$175**
Ages 7-8, 9-10, 11-12, 13+	**(9:00-2:00/5days)**	**$225**

*"Not So Simple Machines" also offered from 1:00-4:00 p.m.

Sign Up Early - "Space" is Limited!

Apply online at www.ispacescience.org

iSPACE

Camps offered in June and July at Northern Kentucky and Cincinnati Locations.

Need Additional Information?

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2009 iSPACE Camp Schedule

June Week-long Sessions at Northern Kentucky University (Highland Heights, KY)
July Week-long Sessions at Scarlet Oaks (Sharonville, OH)

	Weeks of June 15 and July 13	Weeks of June 22 and July 20	Weeks of June 29 and July 27
Ages 5-6 (Half-Day)	**Roamer-Bots** Grab your overalls and hard hat as you embark on a different Roamer-Bot adventure each day. Stories, games & science experiences plus programming a Roamer robot all add up to a safari full of fun! It's a roaring grrrr-eat time. *Daily themes include safari-bots, dino-bots, bug-bots, farm-bots, & builder-bots.*	**"Not So Simple" Machines** Even the youngest campers will enjoy exploring engineering skills and architectural design as they build with LEGO Duplo to create some crazy contraptions. Connect these hands-on building adventures with favorite children's literature selections and this camp will be cranking out serious fun. *(Offered as an AM or PM Session)*	**Three Bears in Space** Join our three space bears, Gemini, Mercury and Apollo as they explore the wonders of our Solar System. They'll help you create your own constellations, experiment with UV and IR light, discover just how giant those giant planets really are, and "high five" you as you launch your own rocket.
Ages 7-8	**LEGO Engineering FUNdamentals** Are you a LEGO-Maniac? Use motors, gears, pulleys, levers, wheels & axles to go radical and create awesome LEGO creations! Mom and Dad will love the fact that you're learning awesome engineering skills. You will love the fact that you are having an awesome time with new friends who share your love of LEGO. Make plans for building some fun this summer.	**LEGO WeDo Robotics** Lions and tigers and...airplanes? That's right...airplanes! Get set for the newest and wildest adventures in LEGO robotics. Build and program roaring lions, chomping alligators, spinning tops and much more. Do you think it sounds like fun? WeDo!	**Astronaut Training Challenge** iSPACE challenges you to take on the role of an astronaut in training as you build, test and launch rockets, create your own space food recipes, check out the G's in gravity, investigate the inner workings of spacesuits, design habitat modules, and discover just what it does take to be an astronaut. Come see if you have the right stuff and still be home in time for dinner.
Ages 9-10	**Robo-Blast** Calling all cadets to enlist in this exciting summer camp adventure where you will work in teams to build and program LEGO Mindstorm robots using the Robotics Invention System and the RCX controller. A successful mission is sure to take place when you combine LEGO robots, fun challenges, a rocket and lots of new friends.	**Mechanisms in Motion** *(LEGO + T-Bot II)* Get a lift out of your summer as you build and operate mechanisms that are powered by pneumatics and hydraulics. You are in control as LEGO models and Syringe-Bots come to life in your hands. Mighty machines are about to get mightier. Get ready to pump up the action with *mechanisms in motion* at camp this summer.	**Space Systems Engineers** *All systems are go*...depending on your engineering and teamwork skills, that is. Design and test launch recovery systems, use your creativity to problem solve during V.E.E.P. (Vertical Egg Experiment Project), watch your carefully designed air-powered rocket soar sky high and launch a rocket carrying precious cargo. Make it your mission to engineer some fun this summer.
Ages 11-12	**The NXT Challenge** Are you ready for the next challenge in robotics? Step up to the newest generation of LEGO robots. Expand your engineering, programming, and teamwork skills as you build and program autonomous LEGO NXT robots in order to meet the challenge of the day. Challenge yourself to see what's NeXT.	**Bio-Bots** *(Biomimicry + Robots)* Discover where and why NASA looks to nature for answers when designing robots to explore our solar system. Using LEGO NXT robots, some creativity and maybe just a little "animal instinct," things are sure to be hopping (and crawling) this summer.	**Radical Rockets (ages 11+)** Looking for an exciting way to beat the heat this summer? Forget the water hose – launch a water bottle rocket instead! We bet you won't even notice how wet you are as you watch your rocket soar high above. Then, it's back to the drawing board to design an even better rocket. (Warning: you might get wet more than once!) Take your rocketry skills to the next level by using computer simulations to test rocket designs and flight conditions before launching your own model rocket. Put it all together and you'll discover that teamwork makes for a successful, fun-filled and action-packed week of high flying fun.
Ages 13+	**Space Base E-3** ***(Engineering Extreme Environments)*** Go the distance and use simulations, modeling and hands-on testing to explore engineering disciplines and concepts. Participants will design and build bridges as well as discover how to unleash the power in kinetic, wind and solar energy. Use your engineering skills to overcome some extreme environments at Space Base E-3.	**Lunar-Bots** NASA is going back to the moon and they need robots to pave the way for a sustained human presence there. Campers will embrace this same challenge by incorporating previously acquired skills with LEGO Mindstorm robots and relying on some serious teamwork. A successful mission depends upon building a fleet of robots that will work *together to construct a lunar base camp!* *(NOTE: Previous RCX or NXT programming experience is strongly suggested.)*	