

# 8 CLASSES FEATURING LEGO® BRICKS

## AEROSPACE

Launch your imagination to new heights as you explore **aerospace engineering!** Discover the secrets of working in space – efficiency and compact design. Create a trussed space station module, then connect it with others to create a massive modular spacecraft.



## TOWERS

Reach for the sky! Find out how **structural engineers** use ideas from physics to solve problems. Work together to build a structurally sound tower with a working elevator, then test and improve your design for strength and stability.

## CARNIVALS

Feel the thrill as you build a spinning swing ride! Learn about the forces and **mechanical engineering** concepts behind some of your favorite amusement park rides. Then improve and test the design to create an even wilder ride.

## BRIDGES

How can you build the strongest bridge? Work together with your fellow **civil engineers** to build and test different bridge designs. Then use what you've learned to create the strongest bridge possible.



## CREATURES

Discover nature's engineering secrets as we investigate **biomimicry!** We can learn a lot about efficient design from observing plants and animals. Build a walking insect machine then test different ways to help it climb up the steepest branch.



## BOATS

Create a sea-worthy vessel as you set sail with **nautical engineering!** Build and test a boat powered by potential and kinetic energy. Then try changing specific variables to improve speed, buoyancy, and stability.

## VEHICLES

Get in gear as an **automotive engineer!** Build a motorized vehicle and learn how to optimize it. Use wheels, axles and gears to reduce friction and make it work better. Then shift things into a higher gear to get a hands-on understanding of transmissions and gear ratios.

## MACHINES

Engineering is creative! Learn how gears, levers, and pulleys are useful tools for **mechanical engineers** then combine them with art and design to create and test a motorized drawing machine.



**BRIXOLOGY**



Give your child the best  
**BIRTHDAY PARTY EVER!**

Call MAD SCIENCE: (413) 584-7243 or (800) 338-5711



Mad Science of Western New England

413-584-7243

[westnewengland.madscience.org](http://westnewengland.madscience.org)

[afterschool@madsciencewne.com](mailto:afterschool@madsciencewne.com)

SPARKING IMAGINATIVE LEARNING



# Mad Science @ Broad Brook Elementary

*\*Sponsored by East Windsor Parks & Recreation\**

**Brixology**  
**Mondays 10/17-12/5**  
**8 Weeks 3:45-5:00 PM**  
**Grades 1-4**  
**Cost: \$125**

SPACE IS LIMITED!

TO REGISTER: Return form below with full payment and mail or bring to  
**Parks & Recreation: 11 Rye Street, Broad Brook, CT 06016**  
**CHECKS are payable to Mad Science of Western New England**  
For more info on Mad Science go to [westnewengland.madscience.org](http://westnewengland.madscience.org)

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## Mad Science Brixology at Broad Brook

(Sponsored by East Windsor Parks and Recreation)

Fill out and mail or bring this form to East Windsor Parks and Rec

Child's Name: \_\_\_\_\_ Parent Name(s): \_\_\_\_\_

Parent Email(s): \_\_\_\_\_

Telephone (H): (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ (C): (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ (Other): (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Emergency Contact: (other than adults listed above) \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Teacher Name: \_\_\_\_\_

DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_ Gender: \_\_\_\_\_ Grade: \_\_\_\_\_

Health Concerns: \_\_\_\_\_

My child will be picked up by (name of pickup) \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

\_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_

My child will walk  My child will attend after-school care

Do you consent to this child being photographed/videoed during the activity for promotional purposes?  yes  no

Interested in being a parent volunteer? Call us about details and benefits

Payment:  Credit/Debit: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Exp: \_\_\_\_/\_\_\_\_

Card type: VISA/MC/DISC/AE Security code: \_\_\_\_\_ Amount: \$ \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Check (**Payable to MAD SCIENCE WNE**) Check #: \_\_\_\_\_ Amount: \$ \_\_\_\_\_