

About CIPCE

"The staff of Rensselaer's Center for Initiatives in Pre-College Education believes that a 21st. century education for young people would be remiss if it did not include compelling, interactive technologies. It is in this context that we are offering to the youth of the Clifton Park community an opportunity to learn the basics of animation and robotics."

Lester Rubinfeld

Professor of Mathematical Sciences and

Director, Center for Initiatives in Pre-College Education



CIPCE seeks to impact the national educational reform movement in many ways. In addition to its main work of developing and implementing professional development initiatives and materials for teachers, it also works directly with K-12 students. It is our deep belief that there is a wide divide between the "real world" of youngsters today and the "world of their classrooms". Many young people, of all ages, intuitively engage in problem solving, and devote a lot of time immersed in the use of various technologies. These "real" non-linear environments contrast sharply with the often linear world of their classrooms, both pedagogically and physically.

www.cipce.rpi.edu



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Town of Clifton Park Parks, Recreation and Community Affairs

In Collaboration With:



Rensselaer



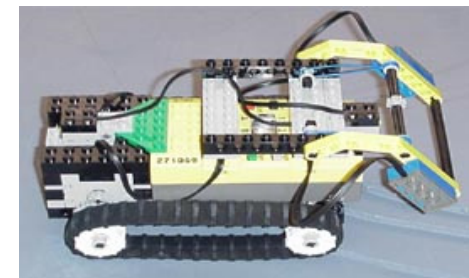
presents

LEGO Robotics

Engineering Academy



Animation and Gaming Academy



August 2010

LEGO Robotics Engineering Academy

August 9-20 (two week program)

half day afternoon sessions

Ages 11-14; no pre-requisites



- Dates:** August 9-20, 2010
(Monday - Friday, half days, two week program)
- Time:** 1:30 p.m. - 4:00 p.m.
- Location:** Town of Clifton Park Wood Room, One Town Hall Plaza
- Cost:** \$350.00

This program is limited to a total of 26 participants.

This academy will provide an opportunity for students to merge their creative interest in LEGO TECHNIC building elements with their “technological life styles.” Participants will use the LEGO NXT technology to design, construct and program robotic solutions to complex engineering challenges. Input from sensors will permit robots to autonomously navigate around obstacles or retrieve objects. Students will leave with an understanding of the relationships and common themes that connect mathematics, science and technology, and they will be able to integrate these principles into their every day life. Participants will be using an iconic programming language called ROBO LAB. This software, combined with the planned curriculum, creates a fun, fast-paced and exciting introduction to robotics! A preliminary breakdown of the ten half-days of the academy are below.

Day 1: Basics of Construction	Day 6: Lifting & Gripping
Day 2: Intro to Programming	Day 7: Final Challenge
Day 3: Using Touch Sensors	Day 8: Building Iterations
Day 4: Tracking Distances	Day 9: Applying Programming
Day 5: Reacting to Light	Day 10: Final Presentation

Animation and Gaming Academy

August 9-13 and August 16-20 (one week program)

half days, morning only

Ages 8-10; no pre-requisites



- Dates:** August 9-13 and August 16-20, 2010
(Monday - Friday, half days, one week program)
- Time:** 8:30 a.m. - 12:00 p.m.
- Location:** Town of Clifton Park Wood Room, One Town Hall Plaza
- Cost:** \$200.00

This program is limited to a total of 20 participants for each weekly session.

This one week, half day, academy provides young learners ages 8-10 with an opportunity to explore several aspects of video gaming and computer programming, and a chance to create a variety of digital media. Participants will spend time exploring how to make animations, music videos and video games, and how to create their own cartoon characters, as well as animate photographs. The computer software used is an iconic based program called SCRATCH that was developed at MIT to teach young children coding technique in an easy to understand and captivating manner. Projects will allow students to create and will include stories, games, greetings, music & dance and more.

To register:

Stop in our office at:
Office of Parks, Recreation and Community Affairs
One Town Hall Plaza, Clifton Park, NY 12065
or register online at <http://www.cliftonpark.org/cptown>

For more information, please call the Office of
Parks, Recreation and Community Affairs: 518-371-6667

