Anatomy and Robotics
Here’s a class for the aspiring physician, scientist or roboticist! Learn the anatomical concepts of the bones and muscles that make up the human arm. Dissect a chicken wing to see the components and how it functions. Discuss extension and flexion of the arm and how the elbow and wrist move. Diagram the muscles and bones and make life-sized models. Program a Hummingbird circuit board (created at Carnegie Mellon University and available at BirdBrain Technologies) and make your arm model come to life. Use servos, LEDs, and sensors as you apply robotic technology to make your anatomical model move in a very realistic way. When science meets technology you will be amazed --- we’re not twisting your arm! Grades 5-7. Cost $325

Green Engineering
How does a bike become a bike? Or a computer become a computer? What happens when we’re done with them? We will explore where “stuff” comes from, and where “stuff” goes. Along the way, we’ll see how green engineers involved in designing these products reduce the impact they have on the environment. Favorite activities in this class include taking apart objects such as radios and phones and building structures using newspapers. Grades 5-8. Cost $300

July 13-17, (9am-noon)
Beginning Alice Programming
(see description above)

Anatomy and Robotics
(see description above)

July 20-31, (9am-noon)
Robotics Programming and Designing
This course is an introduction to robot-building and robot-programming. Using LEGO® pieces and the MIT Handy Board, design and build desktop mobile robots, then program them using IC programming language to do dances, follow lines, and "sense" different objects in the environment. Will you be able to program your robot to bowl? Will your robot successfully be able to navigate through a maze without getting stuck? This is a team-based, hands-on course. No experience in robotics is required. Grades 6-8. Cost $325