

Camp Description

The Center for Advanced Studies is offering the seventh annual Science Spectrum Summer Camp. The camp is designed for rising 7th, 8th, and 9th grade students who have an interest in science and engineering. This five day camp will offer students the opportunity to explore an array of science and engineering fields including Robotics, Chemistry, Forensics, Electronics, Biotechnology, and Drafting. During the first two days of the camp students will attend small group application-based workshops in each of these areas.

After this exposure to each area, students will then choose an area of focus in which they will spend two and a half days. During this phase the students will complete a take-away project related to their area of interest. During the afternoon of the final day the students will come back together to share their experiences and results.

A maximum of 60 participants will be accepted on a first-come basis. The camp is subject to cancellation if there is a lack of participants. Participants will be notified by early May if the camp is cancelled.

Registration ends April 13, 2012

Coming on I-75 South

Take I-75 South to North 120 Loop(265) Take left onto 120 loop, take the first exit ramp to 120, make a left onto 120, at the 3rd light (Sherlock Package) make a right onto Robinson Rd. at the first light make a right onto Holt Rd. About one mile on right enter at the Coker Music building

Coming on I-75 North

Take I-75 North to South 120 Loop(263) Take right ramp toward Roswell, take the first exit ramp to 120, make a right onto 120, at the 2nd light (Sherlock Package) make a right onto Robinson Rd. at the first light make a right onto Holt Rd. About one mile on right enter at the Coker Music building entrance (past main parking lot)

Registration forms will be available in the Center for Advanced Studies office located in the Coker Building or may be requested by email or phone from Stacy Regitsky at stacy.regitsky@cobbk12.org or (770) 578-3286. Registration forms may also be downloaded from www.wheelermagnet.com. Return your completed registration form and check made out to "Wheeler High School" to:

Stacy Regitsky

375 Holt Rd.

Marietta, GA 30068

The deadline for registration is April 13, 2012

Contact Information

Stacy Regitsky - (770) 578-3286

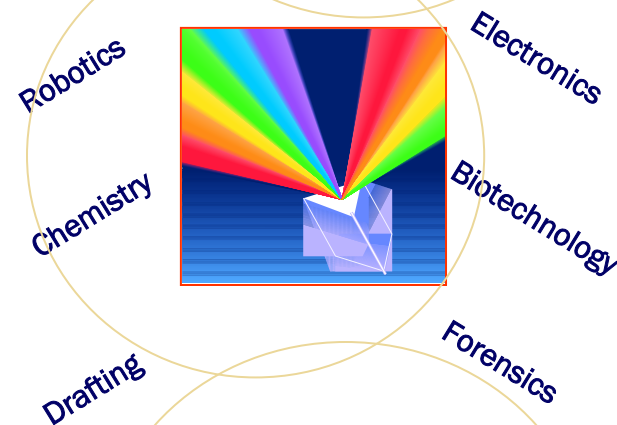
Camp Director—Tiffany Stark

Email: tiffany.stark@cobbk12.org



**Wheeler High School Center
for Advanced Studies**

**SCIENCE
SPECTRUM**



Science and Engineering Camp

June 4-8, 2012

Completed 6th, 7th, or 8th Grade

9:00 AM—3:00 PM Daily

\$300 Registration

Includes: Instruction by certified teachers, lunch daily, supplies, a take away project, and Camp T-Shirt. Registration forms will be available beginning January 23, 2012 online and in the Magnet Office. Contingent on Minimum of 45 Participants.

Sessions Descriptions



THE SHOCKING TRUTH ABOUT ELECTRONICS

This session will introduce students to the exciting world of electronics. They will receive an introduction to basic electrical concepts, components, circuitry, safety, and soldering techniques. Those choosing to focus in this area will get in-depth experience in these areas and will complete a hands-on kit that will be part of a final take-

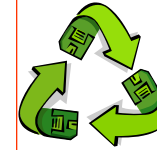
Sessions Descriptions



ROBOTS IN LEGOLAND

This session introduces students to the popular field of robotics. Students will learn about the use of robotics in a variety of settings and will learn many of the basic scientific and engineering principles involved in their use. Students will be introduced to the design and construction of robotics through the ever-popular Lego's Mind Storm Robotics kits used by many leading universities. Students choosing this as their area of focus will use the kits to learn some of the basic design principles, mechanical concepts, and programs as they work to build a competition robot and a final take-home project

Sessions Descriptions



ENVIRONMENTAL SCIENCE

In this session students will be introduced to principles related to environmental science. They will learn some scientific concepts, principles, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Students focusing in this area will complete a hands-on project that will also serve as a take-home project.

CHEMISTRY EXPLOSION



In this session students will be introduced to different types of matter and observe chemical reactions taking place. They will discover physical and chemical properties of matter and learn how to change those properties. Students will complete a variety of experiments. Students will take home a chemistry kit or project at the conclusion of the camp.

CSI: WHEELER HIGH



In this session students will be introduced to forensic science techniques and tools used to solve crimes. Students choosing this as their focus area will master the techniques of fingerprinting, hair, fiber, and document analysis as well as the use of luminol for blood splatter detection. A mini-crime will be simulated for students to solve. Real life problem solving, collaborative techniques, and analytical thinking skills will be emphasized. Students will take home a mini "crime solving kit" at the conclusion of the camp.

ENGINEERING DESIGN AND FABRICATION



In this session students will be introduced to computer based modeling and the engineering design process. They will explore various industry standard modeling software programs. Students choosing to focus in this area will use the software to design a device for manufacture. They will then fabricate their device. This device will be used as part of a final take-home project.