



Science & Math Interactive Learning Experience For Academically or Intellectually Gifted Students Summer Camp 2014

What is SMILE?

An unequaled S.T.E.A.M. (Science, Technology, Engineering, Art & Mathematics) experience where the emphasis is on hands-on experiences, and the campers are actively learning and creating in a collaborative, highly interactive laboratory environment mentored by college students.

Science: We will use Materials Science experiments and analytical equipment in the Materials Science & Engineering department at NCSU as the medium to explore the underlying science, engineering, design, physics, and chemistry principles.

Math: Students will become familiar with numbers, structures, equations, and develop a sense of scale of things as we explore advanced materials phenomena from the macro scale down to the micro and nano.

Interactive: Small groups of 3 – 4 campers per college student mentor create a safe and highly interactive environment. The campers will carry out the experiments, drive the electron microscopes, and operate the analytical equipment while interacting with mentors, engineers and scientists and fellow campers.

Learning: The campers will do and learn things not available in a regular school setting. The goal is to expose these students to what happens beyond the classroom to encourage interest in the curriculum that they receive at school and encourage these gifted students to go above and beyond. Our goal is to open up each camper's mind to real-world applications of science, math, technology and engineering that they do not see at school.

Experiences: In this camp we will do really cool stuff! These are experiments that normally only college students would have access to. In addition, the campers will have an opportunity to meet students like themselves. Campers will be creating, designing, building, growing things, and bringing home what they create.

Six 2014 Summer Camp Programs

Best of SMILE Camp: This weeklong camp is comprised of a set of some of our best experiments gleaned from the last 4 years of SMILE camp...

Advanced SMILE Camp (the "best-of" week is not a prerequisite): For those campers that have attended the "Best of" week, this camp continues the path with different and more in-depth...

Rocketry: This camp will cover all things rocketry. We will build and launch a variety of rockets – small, medium, and large. We will build...

Energy: This camp will explore energy and energy conversion. Students will perform experiments that explore...

Programmable micro controller - Arduino: This camp will cover all things Arduino. What these affordable programmable controllers can do is amazing. We will use the Arduino...

3D printing and modeling software: This camp will be a full week of design and print in 3D. We will teach campers how to use a 3D drawing package to make designs...

Dates and times

Full week camps the weeks of June **16th – 20th**, **June 23rd – 27th**, **June 30th – July 3rd**, **July 7th – 11th**, **July 14th – 18th**, **July 21st – 25th**, **July 28th – Aug 1st**, **Aug 4th – 8th**, **Aug 11th – 15th**. The camp program starts at 8:30 and ends at 4:30. Drop-off before 8 and pick-up after 5 is available.

Location

Engineering Building I, NCSU Centennial Campus Address – 911 Partners Way, Raleigh NC 27606

Cost

Tuition - \$495 per student per session. All experimental supplies are provided (no extra fees) including t-shirt, camp bag, safety glasses, etc. Lunch, morning and afternoon snacks are provided. Need based scholarships are available.

For more information: registration, dates, map, etc.: <http://go.ncsu.edu/smile> and smilecamp.org

For questions or comments please contact us

SMILE,

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Hosted by The NCSU Materials Science & Engineering Department
Sponsored by WCPSS AIG Department