

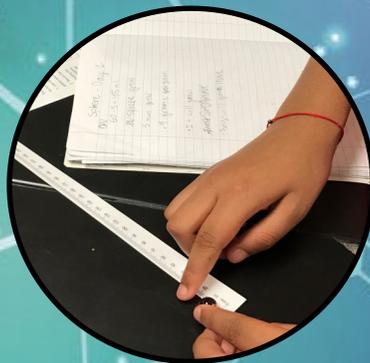
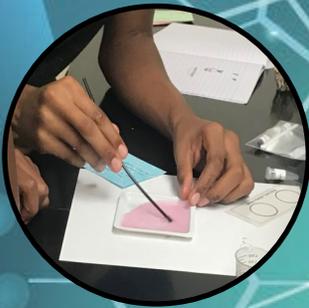
# Summer Camp

For GEAR-UP Jefferson County  
8th and 9th Graders

**Hands-On, Kit-Based Distance Science  
Camps Led by Live Instructors**

## How Does Distance Learning Camp Work?

Your child will attend live classes via wi-fi enabled devices and work through real experiments using a kit of materials that we provide along with the guidance from a live instructor!



**Rising 8th Graders  
Camp 1**

**Chemical Engineering**

Offered: June 22nd-26th  
and July 13th-17th

**Camp 2**

**Food For Thought**

Offered: June 29th– July 3rd  
and July 20th-24th

**Camp 3 (8th and 9th Graders)**

**Build Your Dream House**

One Two Week Session  
June 8th -19th

**Rising 9th Graders  
Camp 4**

**Road to Robotics**

Offered: June 15-19  
and July 13-17

**Camp 5**

**Computer Programming**

Offered: June 22-26  
or July 20-24

**We'll bring the lab to you in an engaging week of some of our  
favorite science and engineering activities!**

**Register today at [uab.edu/cord](http://uab.edu/cord)— NO COST to GU-JC Students**

# **CORD 2020 Summer Camp Descriptions**

## **Camp 1— Chemical Engineering for Rising 8th Graders**

Offered (select one week): June 22nd-26th and July 13th-17th

Chemical engineers work to design just about every type of product you interact with daily, from toothpaste and shampoo to food and medicine. They even help design new products to make the world a better place. Using our at-home kits and live daily instruction, bring together all the fun of chemical reactions and your innovative skills to work as a chemical engineer and design new products, fun toys, and tasty treats!

## **Camp 2 — Food For Thought for Rising 8th Graders**

Offered (select one week): June 29th-July 3rd and July 20th-24th

From how we cook and store food to what tastes good, the kitchen is all about chemistry! Grab your lab coat and put on an apron in this fun week of some of our favorite food-based experiments! You'll have fun exploring essential elements of some of your favorite foods and you'll get to make a few tasty treats!

## **Camp 3 — Build Your Dream House For Rising 8th and 9th Graders**

Offered (Two Weeks) : June 8th—19th

An engaging course that will teach the student the skills to design and construct a scale model of their dream house. The student will understand the basics of scaling and then use that knowledge to draw out a scale model of their dream house. The course ends with students designing and building to scale a 3D model of their dream house from poster board, including everything down to roof trusses and roof angles. All materials needed will be supplied to the student. This will require access to the internet, a webcam and a microphone or at least a smart phone. At the end of the course, students will compete for gift card prizes including, Best House Design, Best 3D Buildout and Most Creative House.

## **Camp 4 — The Road to Robotics for Rising 9th Graders**

Offered (select one week): June 15th-19th and July 13th–17th

In this camp students will learn the basics of computer and electrical engineering. They will work to learn basic and advanced programming topics in the C programming language. In addition, students will learn how to build circuits and design circuits using the Arduino micro controller. They will learn about open-source software and hardware and how the world is powered by this and how they can create future devices to power the world. Students will expand their understanding of problem solving with logic. This will help to improve critical thinking and problem solving when it comes to mathematics and life.

## **Camp 5 — Computer Programming for Rising 9th Graders**

Offered (select one week): June 22nd-26th and July 20th-24th

In this computer science course students will learn programming skills by building video games. Students will gain the skills to create the games they wish they could play. They will learn both basic and advanced topics related to C# programming. This knowledge will be learned by building several video games in the Unity Game engine which is used to create some of the biggest games on the market today. Students will expand their understanding of problem solving with logic. This will help to improve critical thinking and problem solving when it comes to mathematics and life.

**Tuition** (includes daily live instruction and a full kit of materials) **No Cost to GU-JC Students**

**Session Times:** 9am-11am daily with additional time with instructors in afternoon

In order to maintain a safe and effective learning environment, camp size will be limited. Please register early to secure your child's spot. Students will need to provide a device capable of connecting to Zoom via internet or phone call for daily live instruction. Recorded videos will be available for those who wish to participate but may not have a stable internet connection.