

North Carolina A&T State University

Office of Continuing Education

Summer Youth Programs

Aggie CSI (6-9 years)

Description: “Young Investigators”, you have been chosen to uncover several mysteries for Aggie CSI Crime Patrol. You will explore several crime scene investigations with a variety of hands-on activities.

Students will learn how to uncover clues on specific crime scene events, identify various types of fingerprints, recognize and describe parts of the human anatomy and interact with community professionals related to forensic pathology.

Algebra Made Easy (7th - 9th grades)

Description: Get the extra help you need to do well in Algebra I! You will learn successful problem-solving strategies to help you master beginning algebraic concepts. Make $x + y = A+$ on your tests or quizzes this upcoming academic school year. This class is suited for first time students scheduled to take Algebra I.

All Things Seuss (6-9 years) **NEW**

Description: For years, Dr. Seuss has captivated the minds of children and adults. With the help of Dr. Seuss books, this camp class will focus on reading, rhyming, playing games, acting out story lines, and create colorful keepsake pieces from Dr. Seuss’s journeys. In addition to hearing the original stories, campers will let their imaginations be their guide and create their own Dr. Seuss inspired stories, drawings, songs to share with their fellow campers, create inspiring foods from the books, and design their own Dr. Seuss book. Oh, the fun you will have spending a week long at North Carolina A&T State University in the magical world of Dr. Seuss!

Amazing Science (6-9 years)

Description: ATTENTION Young Einstein! The Amazing Science Camp will have you discovering how exciting science is. Each day campers will be exposed to a specific theme. The camp will daily incorporate literature and science while students are engaged in two hands-on science activities each day.

At the conclusion of the camp, the children will have hands-on as well as written assessment that covers the materials covered during the week.

Angles, Lines, & Vertex - Oh That's Geometry! (8th-10th grades) **NEW*

Description: Understanding geometry is essential for all students today! Get an early jump on geometry basics before school start in the fall. We bring the postulates of Euclidean geometry to life through engaging lessons. We cover definitions, postulates and theorems, as well as angles, parallel lines, congruent and similar triangles, quadrilateral figures, polygons, circles and arcs, and the Pythagorean Theorem. Students learn how to compute both the area of plane figures and the surface area and volume of solids. Students will apply basic principles of algebra where appropriate and demonstrate flexibility with coordinate geometry.

AutoCAD Fun (10-13 years) **NEW**

Description: Begin with basic tools and then explore efficiency tools, complex objects, use of external reference and image files, advanced plotting, and customizations. Get a thorough grounding in the main features of Students will work hands-on with 2D and 3D modeling workspaces, AutoCAD's advanced 3D Modeling workspace and hands-on practice you need to master the fundamentals of the 2D commands and 3D modeling tools in AutoCAD 2011-an essential design tool used in mechanical and Civil engineering, architecture, and facilities planning and management.

Computer Gaming (10-13 years)

Description: In this weeklong camp, you will learn the basics of computer game development. You will learn how to develop back-stories and bring your characters to life with coding and graphics. You will get a high level glance at what really goes into creating the games we all love to play.

Design it, Building it, and Demolition (10-13 years) **NEW**

Description: Design a residential house, build it, and test it to ensure it will not collapse. Students will learn about blueprint reading, estimate the amount of materials, and understand the operations of planning and scheduling. Students will learn the basic principles of managing small to large construction projects. A great opportunity for students to learn about possible career choices; and as managers in construction management during this week for designing, building, and testing your own creations!

Engineering Exploration (6-9 & 10-13 years)

Description: Ever wonder how a space shuttle ventures to outer space? How your favorite game system was made or how your favorite candy is made? Learn about how engineers design, construct and improve our favorite everyday items, from houses to computers to food products. Explore the various fields of engineering through hands on activities related to those fields. Students will design and build various models of houses, rockets and even make slime using everyday items.

If It Flies and Flutter - Sign me, up! (6-9 years) **NEW**

Description: An exciting summer adventure for children to learn about the life cycle and lifestyle of butterflies. There is nothing like watching butterflies dancing over fields or in the skies. In addition to creating your own beautiful butterfly art, the week will include monarch butterfly conservation, butterfly gardening, and what you can do to attract these creatures to your own backyard. Children will travel to a butterfly farm, tour the facilities, participate in demonstration of all stages of development, and release your own butterfly. You will get a chance to interact with these luscious Lepidoptera “up close and personal” using a special netted enclosure!

Flight Command in Aggieland (6th - 8th grades)

Description: Rising 6thm 7th and 8th grade students will explore flight using quad copters to aerial drones during this one week summer. Students will be introduced to old technology and explore new methods to affect a positive impact in this growing field of technology. Students will use the team approach in building the group quad copter, model planes, and rockets to fly as they learn and apply science, technology, engineering, math (STEM) principles. Along with developing their own skills to build model airplanes and rockets, this program give students the confidence to continue embracing new innovative service ideas in which the group drone can assist or solve a problem.

Is There a Doctor In the House? (Animal Doctor) (6-9 years)

Description: Wonder what it's like being a veterinarian or just want to take better care of your pet or/and farm animals. Participants of the animal science camp will have the opportunity to learn what it is like to be a veterinarian and how to understand and care for your pet and farm animals. Campers will engage in hands-on activities that will help campers explore the world of laboratory and farm animals. Campers will have an opportunity to be photographed with their favorite animal as a keepsake.

Objectives: The objectives of the Animal Science Summer Camp Program are:

1. To develop and foster life skills through positive interactions with others.
2. To teach scientific principles of Animal Science and Veterinary Medicine to young people (How to care for Animals).
3. To increase the awareness of animal industry and farm management issues among youth.
4. To inform youth about careers in animal agriculture and educational opportunities at NCA&TSU.

Jr. Cyber Security (10-13 years) **NEW**

Description: Today, cyber-attacks is a real and recurrently hot topic. The digital age is full of cyber-attacks, cyber-espionage, and cyber-crimes that affect our economy. Financial institutions, utility networks, defense databases, major business industries, and intellectual properties are constantly at risk of attack. This course offers students the opportunity to gain valuable experience investigating computer crimes, processing digital evidence and employing tools and techniques used by federal, state, and local law enforcement agencies. Students will be involved in many activities designed to protect and defend personal privacy and information systems, and they will learn techniques for information system restoration by incorporating protection, detection, and recovery capabilities. Cybersecurity personnel are in high demand and a great opportunity for students to learn about possible career choices.

Lego Robotic (6-9 & 10-13 years)

Description: During this week-long experience, participants will be introduced to the skills necessary to build and program a robot kit provided by the camp. Participants will develop programming logic through use of the NXT Mindstorms kits. Students will also learn the basic concepts of teamwork as they work together in small groups. The camp will culminate with students being challenged to develop a robotic design that responds to a themed, objective-oriented challenge that represents a real world problem. High school students will learn and develop the same techniques need to program and build robotic using a different type of robot.

Lights, Camera, Action (10-13 years)

Description: See what it's like operating a camera or editing a program or being an anchor person on your own news station. You will learn this and much more at the media workshop where we will introduce you to TV camera, editing, special effects and TV production. This camp is designed to inform participants of the host of careers in TV production and explore the field of Journalism and Mass Communication. Participants will produce and record a program at the end of the camp.

Paul Robeson Theatre (6-13 years)

Description: Do you enjoy acting, singing, dancing, writing and crafts? Come join NC A&T's theatre arts summer program with exciting activities that will develop your theatre skills and talents on stage and off. This camp is designed to give young people and teens training in several different areas: acting, improvisation, costume, crafts, movements and voice. Each week has its own theme and culminates with a final performance showcasing the participants' experiences from that week.

Summer Math Fundamentals (2nd-5th grades and 6th - 9th grades)

Description: The Summer Math Fundamentals program at North Carolina A&T State University gives 2nd through 5th and 6th through 8th grade students the core skills needed to be successful at the next grade level. The program reviews and reinforces skills taught in math during the previous school year. Students attend classes to review, reinforce and improve their math skills, and will preview upcoming concepts that will be covered in the upcoming academic year. Note: Curriculum will vary depending on the grade level.

Using Scratch Programming for Gaming - Beginners (6-9 years) (NEW)

Description: Scratch, developed by MIT Media Lab is programming that introduces students to the world of programming in a fun way. Scratch stimulates creativity and offers the young programmer a rewarding experience that promotes critical thinking skills and self-esteem. Scratch is easy to learn and lets students program their own interactive stories, games and animations. Another great feature of Scratch is that students can see the programming code working in action, allowing them to understand what is going on when their programs are running. Scratch is an excellent way to introduce students to video game design and possible career choices.

Website Design Ages: 10-13

Description: Want to design and build your own website? Become a webmaster by learning the fundamentals of web design. This camp will have you creating a website from scratch. You will learn color theory, creative text effects, graphics and much more. Make your website stand out by learning how to add flash and animation.

WHEN I GROW UP – Kids-n-Business Ages 6 -9 years (NEW)

Description: Ever wonder how a business is run. What it would be like to be the boss. This and many other exciting subjects will be covered in this one week entrepreneurial experience. Campers will learn the importance of money management, basic business vocabulary, advertising and selecting the right business for their area.

To accomplish this venture, campers will use their math skills to develop their budget, enhance their public speaking skills in creating their commercial and explaining their business, discover their design and artistic skills as they create their advertising materials.

Through teamwork, campers will create a retail or service business that can be run by children their age.