



## Session I: Academic Enrichment

### Week of June 9<sup>th</sup>

#### **Science Theme: Up...Up...and Away**

Students will use their iPads, Window Surface, or other tablets to develop, plan and fly a mission in the Mission Quest Flight Simulator Lab using B-1s, B-2s and F-15s! The objective is to spark their interest in aerospace engineering. Students will learn the basics of aircraft flight, types of aircraft, components of aircraft, helicopters, and spaceships etc. Students will learn about aircraft design, build, and fly competitions, and participate in aircraft simulations and flight demonstrations.

#### **Math Enrichment: Learn How to Fly a Drone**

Everyone goes through different struggles when piloting a quadcopter for the first time. Students will prepare for their first flight, stay safe, get airborne, and learn some basic and advanced quadcopter flying techniques. Our goal is to give them a personal flight guide from going through a pre-flight checklist, learning the controls, controlling your quadcopter's flight pattern, and even some advanced techniques.

#### **Field Trip: Friday, Week of June 12<sup>th</sup>: Delta Air Line Museum**

Students will have an opportunity to learn more about aviation and aerospace engineering. They will tour the museum, flight operations and have an opportunity to fly a Boeing 737 in their state of art facility. Every student will have unique experience of being in actual cockpit, taking off and landing the aircraft!

### Week of June 16<sup>th</sup>

#### **Science Theme: A Mind of Design and Imagination---DC Comics and Marvels Artist**

Students will learn how to create and design various imagines, storyboards, and other digital arts in ADOBE to create their own Comic Book. Our instructors will introduce a comprehensive course and teach our students how to become graphic artists and creative design specialists. The course has various levels from beginners to advanced artists. Students will be placed and taught based on his or her skill level and knowledge!

#### **Math Enrichment: Architecture: Explore the World of Designing Buildings**

Have you ever wondered what it is like to be an architect? To design the buildings that we all live in. Join us as we explore this exciting profession in a camp run by a Georgia Tech instructor and Atlanta architect. We'll work with the College of Architecture Design Studio officials, drawing and building intriguing towers and homes. We will also visit imaginative new buildings on campus and observe a Georgia Tech student drawing class. Campers will leave with an understanding of the role of creativity in architecture, and with a design project to take home.

#### **Field Trip: Friday, June 13<sup>th</sup>: Top Golf Midtown**

The Ultimate in Golf, Games, Food, and Entertainment. Students will enjoy a day playing high technology golf!



### **Week of June 23<sup>rd</sup>**

**Science Theme:** Is it a **Car, Spaceship, Robot...What is going on?** Robotics & Transportation Systems Engineering

Students will push the boundaries of modern transportation, and learn about transportation systems engineering, and incorporate STEM concepts to build their own miniature cars. Additionally, students will learn how to fly drones and build rocket ship launchers. The program will move beyond simple scenarios, with designs and programming inspired by new technologies.

**Math Enrichment: The World of Money...Learn How to Create Them**

Students are introduced to the world of finance and how money moves throughout the world. They are exposed to financial literacy, investing, hedging, and trading. The curriculum includes personal finance, and wealth building. Students will develop an understanding of investment strategies that build financial security through learning derivative securities and the mechanics of trading stocks, bonds, and other securities. Students are taught how to read 10-K reports, financial charts, how to place market orders, and how the major markets operate. The students will spend the week constructing and analyzing their own portfolios using state-of-the-art analysis and trading tools.

**Special Field Trip: Wednesday, June 25<sup>th</sup>: Porsche Headquarters, Tour the Museum and Drive-Along Experience Center**

**Field Trip: Friday, June 27<sup>th</sup>: Fast and Furious—GENUIS Style—Andretti's Indoor Karting & Games**

Andretti Karting is your one stop destination for fun. Students will enjoy racing with go-karts, simulators, video games, and more!

### **Week of June 30<sup>th</sup>**

**Science Theme: Roll...Roll...Roll Your Boat!**

Students will learn how to create and design a raft. It must be stable and can sustain the weight of their team as they go down the Chattahoochee River. Either they will sink or swim down the river! Students will learn about transportation systems engineering. The program will move beyond simple scenarios, with designs and programming inspired by creativity, physics, and earth science.

**Math Enrichment: Don't Just Play Video Games...Learn How to Create Them**

Students will learn how design video games, develop apps for iPhone® and Android™, model 3D characters, mod with Minecraft, and more. They will get fully immersed in technology by competing in gaming tournaments, touring a game design studio, creating a cutting-edge college portfolio, and interacting with industry professionals.

**Special Field Trip: Wednesday, July 2<sup>nd</sup> Hi-Rez Studio, Tour the Corporate Headquarters, Meet with Game Coders, Graphic and Animation Designers, and Experience the New Games Center**

**Field Trip: Thursday, July 3<sup>rd</sup> Rafting down the Chattahoochee River—Shoot the Hooch**

*\*Schedule is subject to change.*



### **Other Special Events or Activities:**

Students will sit in and observe various college classes from Physics, Chemistry, to Engineering. They will have an opportunity to meet with the professor and students.

Students will need to have his/her own computer tablet—iPad, Windows Surface, or another tablet device.

Every Tuesday and Thursday: Student will go swimming at the Piedmont Park or Washington Park

Aquatic Center

Field Trip (s): Every Friday, students will have a field trips plan from movies, museum, skating to Six Flags. Each field trip will have a minimal cost associated to cover the student's admission.

***Our goal is to present an exploratory learning session where each camper develops and enhances his or her critical and analytical thinking skills. We want to develop the next generation of scientists, engineers, inventors, and leaders from our community.***