Get a JUMPSTART at USC

JUNE 4-9
ADVENTURES IN COMPUTER GAMING
Rising 6-9 graders
Venture into the exciting, interactive world of computer gaming! You’ll use a game engine to learn graphics skills, modeling, animation, multi-level game design, artificial intelligence and basic programming techniques such as if/switch, for/while loop, and more. Through instruction by USC’s Computer Science department and hands-on programming, you will work in a group to create a finished product—your own video game!

JUNE 11-16
ADVENTURES IN AEROSPACE
Rising 9-12 graders
Have you ever wondered what it takes to be an aerospace engineer? Spend the week with us and you will learn about the research, design, development, and manufacture of aircraft, including the basics of composite materials, computer aided design and manufacturing, program industrial-scale robots, test manufactured products, and the future of 3D printing! Discover new innovations in the USC McNair Center for Aerospace Innovation and Research, and then head over to the Challenger Learning Center of Richland School District One to learn about rocketry. End your week by creating your very own composite aerospace part!

ADVENTURES IN MEDICINE: ULTRASOUND
Rising 9-12 graders
Welcome to the stethoscope of the future—ultrasound. Using sound waves, ultrasound provides images of the inner workings of the body in a non-invasive way so doctors can make quick, lifesaving decisions. Using a handheld ultrasound probe and an ultrasound unit the size of a laptop, you will learn to scan the body in the same labs and with the same doctors as our medical students at the University of South Carolina School of Medicine. You will practice these techniques on a real-life simulator and real patients, learning anatomy and physiology along the way.

ADVENTURES IN NATURAL HAZARDS AND CIVIL ENGINEERING
Rising 9-12 graders
Have you ever wondered how engineers design and build dams, roads, buildings and other civil infrastructure to withstand floods, earthquakes, or other natural hazards? In this adventure, you will build structural models in our experimental labs and test them under conditions simulating earthquakes, floods and other hazards, using sophisticated sensors to evaluate the structure’s performance. Your adventure will conclude with your own design of a civil engineering structure like a bridge, miniature building of the future, or making concrete!
and making different types of medicine. Where you may even try your hand at compound-
preparing medications, counsel patients, under-
will show you how to read prescriptions, help
real-life pharmacists
records and medical files. Real-life pharmacists
will show you how to read prescriptions, help

Rising 9-12 graders
Venture into the exciting, interactive world of computer gaming! You’ll use a game engine
to learn the skills behind graphics, modeling, animation, multi-level game design, artificial
intelligence and basic programming tech-
niques such as if/switch, for/while loop, and
more. Through instruction by USC’s Computer
Science department and hands-on program-
ning, you will work in a group to create a
finished product: your own video game.

Rising 9-12 graders
Expand your writing skills, discover new tech-
niques and polish your prose in your chosen
genre. Visit the local art museum or botani-
cal gardens to release your creativity in your
writing and expand your imagination. Work with
distinguished and published faculty from the
USC Poetry Initiative and English department to
employ a variety of styles and themes in your
distinguished and published faculty from the
USC Poetry Initiative and English department to
employ a variety of styles and themes in your

Rising 9-12 graders
Do you think you have the “knack” to be a future
engineer but not sure which area you want to
specialize in? You will experience different types
of engineering and find out what engineers really
do in mechanical, electrical, civil, chemical and
biomedical engineering to get a clearer picture
of what it means to earn a degree in one of
those fields. Your experience includes hands-on
activities and building sessions in university labs
in each area of engineering so you can personally
experience how each field is unique and fascinat-
ing. This experience will help you decide which
area of engineering you want to pursue.

Rising 9-12 graders
Discover what it takes to become a pharmacist!
Pharmacists work in communities, for educational
institutions, drug manufacturers and hospi-
tals, and with nuclear medicine to build patient
records and medical files. Real-life pharmacists
will show you how to read prescriptions, help
prepare medications, counsel patients, under-
stand poison warnings, and learn patient drug
regimens. This adventure includes working in the
Pharmacy Lab at USC’s School of Pharmacy
where you may even try your hand at compounding
and making different types of medicine.

JUNE 18-23
ADVENTURES IN COMPUTER GAMING
Rising 9-12 graders

JUNE 25-30
ADVENTURES IN ELECTRICAL
ENGINEERING – POWER-UP &
EXPLORE RENEWABLE ENERGY
Rising 6-9 graders

ADVENTURES IN AVIATION-LEARN TO FLY, BE A PILOT
Rising 6-9 graders

ADVENTURES IN BUSINESS-ENTREPRENEURSHIP
Rising 9-12 graders

JULY 9-14
ADVENTURES IN LAW
Rising 6-9 graders

ADVENTURES FOR WOMEN IN ENGINEERING
Rising 6-9 graders

ADVENTURES IN SPEECH-LANGUAGE PATHOLOGY: MORE THAN JUST TALK
Rising 9-12 graders

JOIN US!
Visit us online for registration and program information.
discover.sc.edu/youth
Phone: 803-777-9444
Email: pups@mailbox.sc.edu

YOU’RE INVITED TO JOIN US AT ADVENTURES IN...

University of
South Carolina