

Activity

A DAY IN THE LIFE AT SPACE CAMP

TIME ACTIVITIES

8 a.m. - 9:15 a.m. Prep for Day & Breakfast

9:15 a.m. - 9:45 a.m. Teambuilding Activity

9:45 a.m. - 10 a.m. Spaceflight Mission Planning

10 a.m. - 11 a.m. Simulated Spaceflight Mission

11 a.m. - 11:30 a.m. Mission Debrief

11:30 a.m. - 12 p.m. Expedition Living Presentation

12 p.m. - 12:45 p.m. Lunch in Crew Galley

12:45 p.m. - 2:15 p.m. Rocket Construction

2:15 p.m. - 3:15 p.m. Spaceshot, G-force, and Climb the Mars Wall Simulators

3:15 p.m. - 3:45 p.m. History of Spaceflight in Museum Part 1

3:45 p.m. - 4:45 p.m. Astronaut Training Simulator

4:45 p.m. - 5:45 p.m. Mission Patch Design

5:45 p.m. - 6:30 p.m. Dinner

6:30 p.m. - 8:30 p.m. Astronomy Show

8:30 p.m. - 9 p.m. Daily Debrief

9 p.m. - 9:45 p.m. Prep for Bed & Lights Out

9:45 p.m. Lights Out

Activity -1

Train like an astronaut on the 1/6th Gravity Chair, the Five Degrees of Freedom simulator and the Multi-Axis Trainer!

Construct and launch your own model rocket!

Learn what it's like to live onboard the International Space Station.

Discover the newest rocket that will carry NASA astronauts to Mars.

Use technology to design and construct a futuristic Martian colony!

Launch on simulated missions to the International Space Station and beyond!

Develop team-building and communication skills in an aquatic activity.

Compete in camp-wide Challenge nights!

Activity -2

Launch on missions to the International Space Station, the moon or Mars!

Train like an astronaut on the 1/6th Gravity Chair and the Multi-Axis Trainer.

Design, build and launch a team rocket.

Learn teambuilding skills on the low elements at our Area 51 Challenge Course and in one of our water facilities!

Put your creative thinking skills to work in our engineering design challenges!

Hear the inspiring stories about commercial pioneers like Elon Musk, founder of SpaceX!

Activity -3

Train like an astronaut on the 1/6th Gravity Chair and the Multi-Axis Trainer.

Design, build and launch a team rocket, and safely recover its payload.

Learn teambuilding skills on the high elements at our Area 51 Challenge Course.

Experience neutral buoyancy while SCUBA diving in the Underwater Astronaut Trainer! (Pending physician approval)

Test your skills in our Engineering Challenges by constructing a heat shield and building a Rover.

Fly jet aircraft simulators!

Discover the role the International Space Station plays in our global community.

Prepare for every contingency as you go to Mars on an extended-duration mission simulation!

Earn one credit hour of freshman-level general science from University of Alabama in Huntsville in this college-accredited program!

Activity -4

Learn engineering, programming and wireless control concepts using LEGO MINDSTORMS EV3 technology.

Put these concepts to the test as you design, build, program and test land-based robots to compete on the Challenge Table!

Use series circuits to build your own LED flashlight that you can take home!

Create and pilot underwater robots!

Train in the art of flying Unmanned Aerial Systems using RealFlight drone simulations!

Activity -5

Program robots to interact with the world using a variety of sensors and motors

Hands-on sessions in robot chassis design and building algorithms, remote-control design and operation and aerial operations make for an exciting adventure.

Master managing wireless signals in order to control and pilot robots on the Challenge Table

Choose from optional lessons such as building robotic attachments, programming with sensors and data functions, or using both tactile and touchless Human Interface Devices

Use the binary number system and basic logic functions to understand how machines "think"

Design, build and pilot underwater robots

Train in cutting-edge, custom-designed Unmanned Aerial Systems training simulation and fly quadcopters.

Activity -6

Learn navigation and air combat techniques and put them to the test in our jet aircraft simulators!

Explore aviation principles and airframe design.

Learn basic survival skills for land and sea and utilize these skills in our wooded camping area and simulated helicopter crash!

Get up close and personal with a wide range of retired aircraft available onsite!

Learn about Unmanned Aerial Systems and their applications.

Experience team building in our nightly challenges.

Test patrolling, teamwork and outdoor skills in a Field Training Exercise

Learn basic drill and ceremony commands and movements

Activity -7

Experience the unique sensation of feeling three times your normal weight in our one-of-a-kind centrifuge!

Practice water-survival skills using our helicopter simulators for a water crash and rescue by a survival lifter.

Learn about aeronautics, propulsion and aviation history.

Fly in a UAV drone simulator to reinforce lessons learned at our static displays and artifacts.

Master aerial combat and compete to be the best of the best in Top Gun!

Embark on a search and rescue mission to bring a downed pilot back from behind enemy lines while communicating as a team and evading hostile forces!

Activity -8

Unite as a team at the Area 51 Challenge Course with high- and low ropes elements.

Brave the centrifuge, the 150-ft. zip line*, and all of our training simulators!

Reinforce leadership, teamwork and decision-making skills in our immersive F-18 cockpit simulators.

Use a UAS simulator to plan for missions and provide real time data to a command center during mission execution.

Learn wilderness survival skills and orienteering.

Plan and carry out three missions, each with their own challenges!

Compete to be the best in a bracket style head to head competition where only the best can claim the title of Top Gun.

Activity -9

SPACE

Take part in interactive lab activities led by our education department

Experiment with International Space Station science projects

Learn rocketry principles by building and launching rockets

Gain an understanding of a day in the life of an astronaut

Draw and design a mission patch

Explore museum activities, including museum exhibits and simulators like the Mars Climbing Wall and Space Shot

Learn how Huntsville took man to the moon

Enjoy water activities during your weeklong adventure (weather permitting)

AVIATION

Gain an understanding of the principles of flight

Fly an F-18 cockpit simulator

Learn basic survival skills

Train in water-survival scenarios

Construct a model balsa wood glider

Explore design principles of aviation with our 12 on-site aircraft

Enjoy outdoor activities, including simulators and swimming (weather permitting)

ROBOTICS

Work in teams to design and build robots

Explore basic computer programming

Sharpen communication and team-building skills

Complete engineering and design projects

Participate in critical thinking and logic-building activities

Design a rover

Learn principles of digital design and modeling

Compete in end-of-the-week team robotics challenge

Enjoy water activities during your weeklong adventure (weather permitting)

Activity -10

Launch on simulated missions to the International Space Station and beyond!

Train like an astronaut on the Multi-Axis Trainer!

Construct and launch your own model rocket!

Learn about the past, present and future of space exploration.

Activity -11

Space Program Activities:

Build a model rocket, train like an astronaut and work in mission control or launch as part of the flight crew on a simulated space mission!

Simulated Space Mission

Five Degrees of Freedom Chair

Multi-Axis Trainer

Public Museum Simulators

Gift Shop

National Geographic Movie

On-site meals

Aviation Program Activities:

Learn land survival techniques, fly air-to-air simulated missions and compete in a Top Gun competition!

Centrifuge

Flight Physiology

Flight Simulators

Introduction to Land Survival

Introduction to Principles of Flight

Gift Shop

National Geographic Movie

On-site meals

Robotics Program Activities:

Learn how to design, engineer and program aerial, land and underwater robots to compete in a timed robotics challenge!

Learn to program with LEGO® MINDSTORM® EV3 software

Design, build and modify robots

Operate aerial and underwater remotely operated vehicles

Compete in a specially designed challenge

On-site meals

Activity -12

- Science Presentation
- Action-Reaction Rocket Activity
- Astronaut Training Simulators
- Digital Movie
- On-site meals

Activity -13

Train like an astronaut on our Multi-Axis Trainer!

Construct and launch your own rocket!

Learn teambuilding exercises on our Low Elements Ropes Course.

Test your engineering skills in designing a protective heat shield!

Perform an extended-duration simulated mission!

"Lots of information and some interesting stories of the space race."