

Interstellar Dreams Space Camp@ George Mason UniversitySession Descriptions 2023

# Overview:

Join Interstellar Dreams Space Camp if you are as crazy about all things space, an artist, a food lover, a fashion designer in your heart, want to save the Earth, want to learn how to build a website, want to design humane communities, love rocks, care about mental health and wellness, like building things, love solving problems, learn to code, or want to be an engineer.

#### Session 1: The Road to Mars June 26-30

Mars 2030 is the next destination for human deep space exploration. Our driving need to answer the question; "Is there life on other planets" is at the heart of our curiosity. Rich with scientific discovery, Mars, is an opportunity to ethically expand human presence in our solar system. Join Interstellar Dream's one-week space camp where you will assume the role of habitat planner, planetary scientists, geologist, space architects, and engineers to plan mission goals, design human living habitats, and build transportation vehicles. You will build websites, take 3D walks in space, learn to code to solve mission critical challenges, and host a Mars Press Conference.

# Session 2: The Interstellar Lunar Gateway July 10-14

Humankind is headed back to the Moon to build the next pathway to other worlds in our solar system. To accomplish this goal, we must organize a team of experts to analyze, prepare, and design working systems for scientist, researchers, and habitat designers. Join Interstellar Dreams one week space camp where you will design lunar research programs, lunar habitats, adapt a framework for international collaboration, and create Lunar life support plans for human survival. You will build websites, take 3D walks in space, learn to code to solve mission critical challenges, and host a Lunar Gateway Press Conference

# Session 3: Earth is Changing: Observe with Micro-Satellites July 17-21

Satellites are used as a vantage point from space to increase our understanding of our home planet, improve lives, and safeguard our future. We monitor Earth's vital signs of climate change with a swarm of satellite technology. Join Interstellar Dreams one-week space camp where you will collaborate with teams to develop a unique array of satellite prototypes designed to monitor, measure, and detect threats for an upcoming "CubeSat Constellation" Mission. You will build websites, take 3D walks in space, learn to code to solve mission critical challenges, and host a Satellite Warning Press Conference

#### Session 4: Planet Hunters Unite: Search for Strange New Worlds July 24-28

Habitable worlds have been a curiosity of humankind for thousands of years. Today, powerful ground telescopes and space satellites like Hubble and Kepler, have identified thousands of other planets called exoplanets (a planet that revolves around another star). Join our Interstellar Dreams one-week space camp as we utilize our current understanding of the atmospheres of exoplanets, the planets, moons, and minor bodies of the Solar System to look for signs of life in our galaxy. You will build websites, take 3D walks in space, learn to code to solve mission critical challenges, and host an Exoplanet Press Conference

#### Session 5: The Ferocious Sun July 31-Aug 4

4.5 billion years old, our Sun is the largest and most powerful object in our solar system. Without the Sun's energy, life as we know it could not exist on our home planet. Its power and ability to control everything we know as true is governed by its daily activity. Join our Interstellar Dreams one-week space camp to observe, analyze, and head-off serious impact eruptions, charged particles, and influences on Solar System visitors. You will build websites, take 3D walks in space, learn to code to solve mission critical challenges, and host a Solar Observatory Press Conference.