

Mission Robotics Program

Your Cosmic Adventure
Awaits

@Kennedy Space Center



Will unmanned robotic missions be able to detect microscopic life-forms that might be lurking below the surface of Mars, or beneath the murky seas of Jupiter's jumbo moon, Europa?

Curriculum Highlights:

- Introduction to Programming Logic
- Basic and Advanced Programming Concepts (C, C++)
- Knowledge Reinforcement Through Challenges
- Significant Teamwork
- Innovative and Critical Thinking

Program Details:



**Mission Robotics
Genius**



**Duration
2 Days**



**Cost: \$359.00
per student
Tickets Included**



Day 1:

- Check-in at KSCVC Turnstile
- Space Trek Introduction
- Introduction to Programming
- Programming Linear & Curvilinear Motions
- Robotics Competition #1
- Lunch
- Kennedy Space Center Tour



Day 2:

- Advanced Programming
- Robotics Competition #2
- Lunch
- KSCVC Exhibit
- Graduation
- Program Adjourned





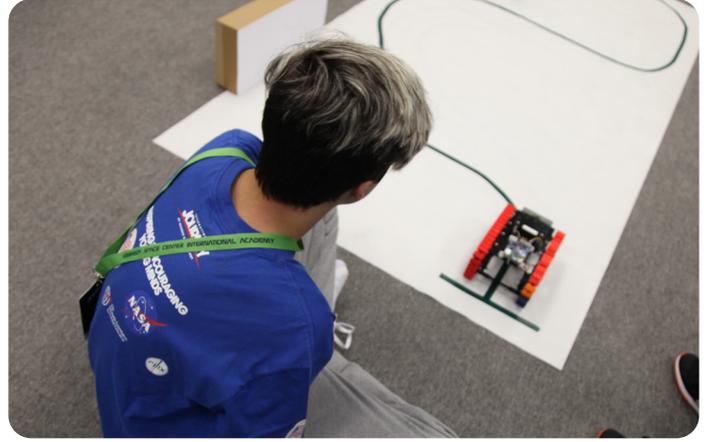
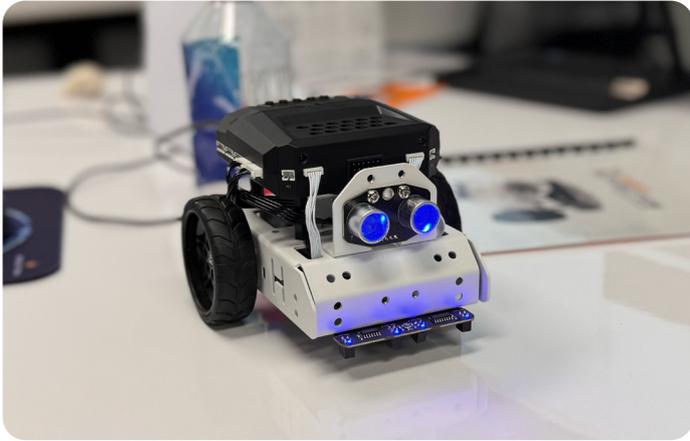
**Mission Robotics
Expert**



**Duration
3 Days**



**Cost: \$459.00 per
student
Tickets Included**



Day 1:

- Check-in at KSCVC Turnstile
- Space Trek Introduction
- Introduction to Programming
- Linear & Curvilinear Motion
- Lunch
- Robotics Competition #1
- KSCVC Exhibit

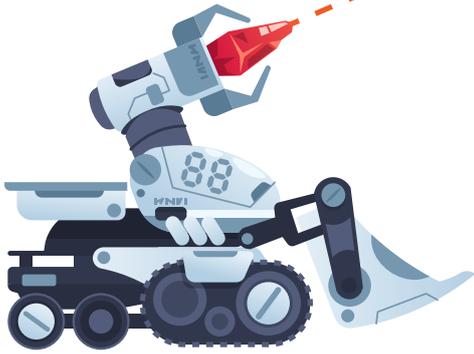
Day 2:

- Advanced Programming with Sensors
- Robotics Competition #2
- Lunch
- Kennedy Space Center Tour
- Introduction to Final Mars Challenge

Day 3:

- Teams Begin Martian Competition
- Rocket Garden Tour
- KSCVC Exhibit
- Lunch
- Space Shuttle Atlantis Museum
- Shuttle Launch Experience
- Graduation
- Program Adjourned





Prepare for an extraordinary voyage that will ignite your curiosity and propel you into the captivating world of robotics and programming.

- Work with custom-designed 3D printed robots equipped with an array of sensors
- Learn to program a rover
- Train to operate a robotic arm with 6 DOF (9 degrees of freedom)
- Learn to analyse and present data
- Operate a rover on Martian surface simulation
- Participate in challenges

Your Companion in the journey:

This versatile rover is engineered for navigating the mock martian terrain and is equipped with an array of sensors to guide you through the obstacles.

The Cosmic Challenge: Conquer Mars and Beyond!

Learn programming concepts and challenges in preparation for the Mars surface mission. The final challenge unfolds on our expansive 16ft x 16ft Martian surface replica, featuring iconic landmarks like Olympus Mons and Schiaparelli Crater and other craters and valleys.

Mars Surface mission tool kit will have:

- A surface map
- Computer for programming
- A wireless camera as your source of vision

Like real NASA engineers, you'll remotely guide your robot exactly to designated target zones for precision sample collection.

**Winning team will be awarded medals
Participation certificate for every participant as a testament to their cosmic journey**

Powered by



SPACE TREK[®]



Inclusions (subject to availability)
Shuttle Launch Experience, IMAX Movie Shows, The Explorer Bus Tour, access to various KSCVC exhibits, Shop at the biggest Space store

Note:

Please note that the schedule accommodates KSCVC activities, with adjustments based on group size and punctuality. While every effort is made to adhere to the schedule, activities may be altered or removed to ensure program timelines are maintained. Event times and availability are subject to change without notice.