ExoNautics

Future of Robotics, programming and AI in Space Exploration

ExoNautics

@ Kennedy Space Center

Build and take home a robot!

Unlock the infinite possibilities of robotics, engage in imaginative problem-solving, and explore the frontiers of science and technology.

Here, students are immersed in the universe of robotics, using the globally acclaimed Arduino platform, scratch and text-based programming and and custom-designed robots.

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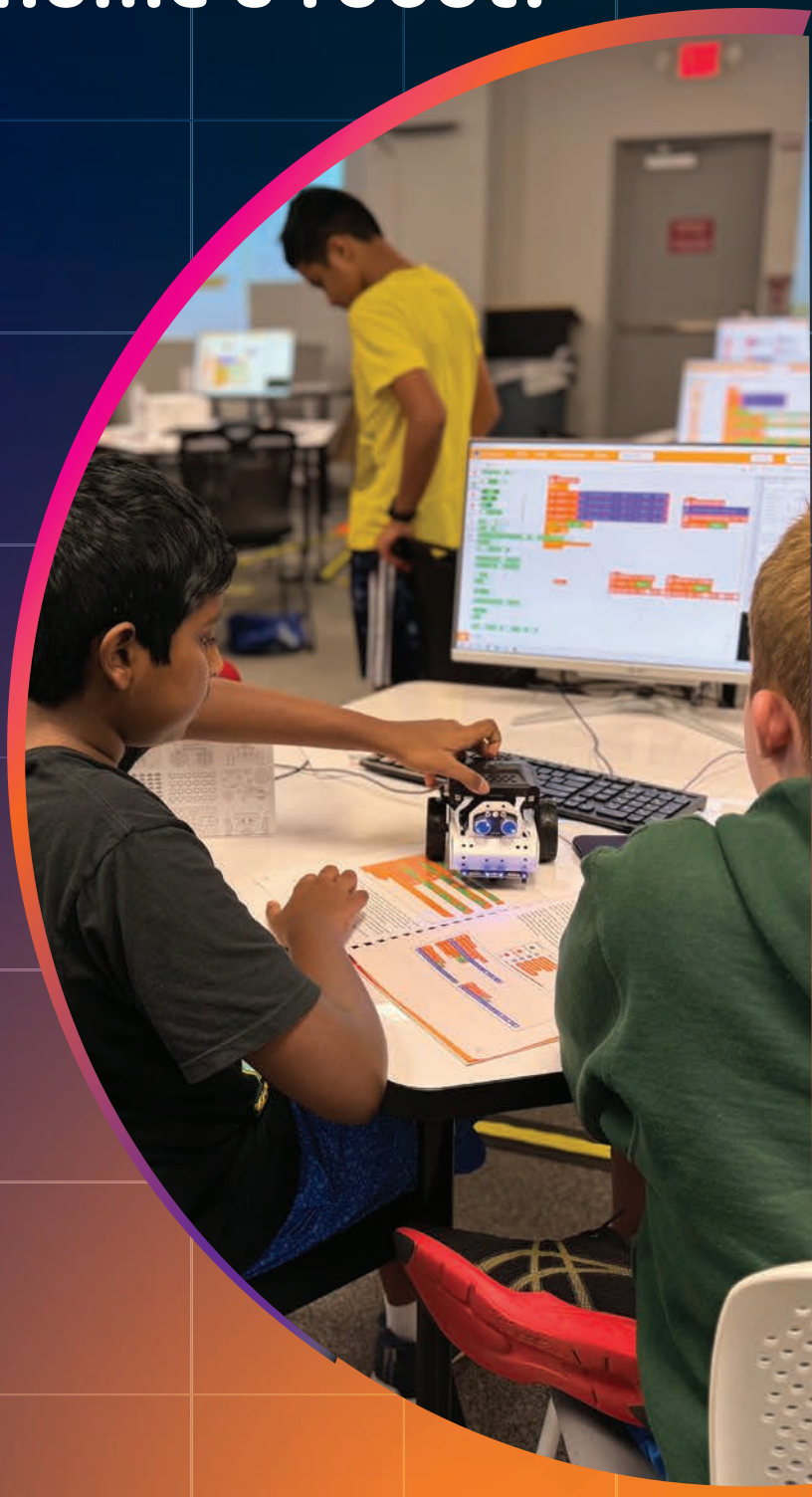
ExoNaut

ExoNaut stands as the pinnacle of innovation, beckoning students to explore its boundless capabilities.



- CoreX controller
- Encoder motors
- 4-channel line follower
- Luminous ultrasonic sensor
- RGB LEDs
- AI Vision

Our standard edition, armed with the AI Vision module, is primed for immersive AI games such as Autonomous Driving, Vision Line Follow, and Tag Tracking.

Scratch Programming.

Loaded with a CoreX controller, encoder motors, a 4-channel line follower, and a luminous ultrasonic sensor, ExoNaut masters tasks like line-following and obstacle avoidance with finesse

One-Click Training and Learning

ExoNaut's AI vision module is more than just technology; it's an invitation to explore. Infused with advanced learning algorithms, ExoNaut surmounts diverse AI vision projects, from image classification to feature learning.

Support for Varied Programming levels

ExoNaut embraces all explorers, whether they're novices or seasoned pioneers. Begin your coding journey with beginner-friendly graphical programming, ideal for those taking their first steps. For the intrepid, the Arduino platform beckons, offering a deeper voyage into the coding universe.

Build, Learn, and Take Home Your ExoNaut!

In our program, students don't just learn about robots; they become robotic engineers. Building and mastering ExoNaut is only the start. At the program's conclusion, students proudly take their ExoNaut home, ensuring that their cosmic journey continues.

The Ultimate Challenge: Conquer Mars!

Teams hone their programming skills and tackle intricate challenges in readiness for the ultimate Martian surface mission. Specializing in programming the robot's movements, members will face the final test on our 16ft x 16ft Martian surface replica, complete with iconic landmarks like Olympus Mons and Schiaparelli Crater.

Program Schedule

Day 1

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

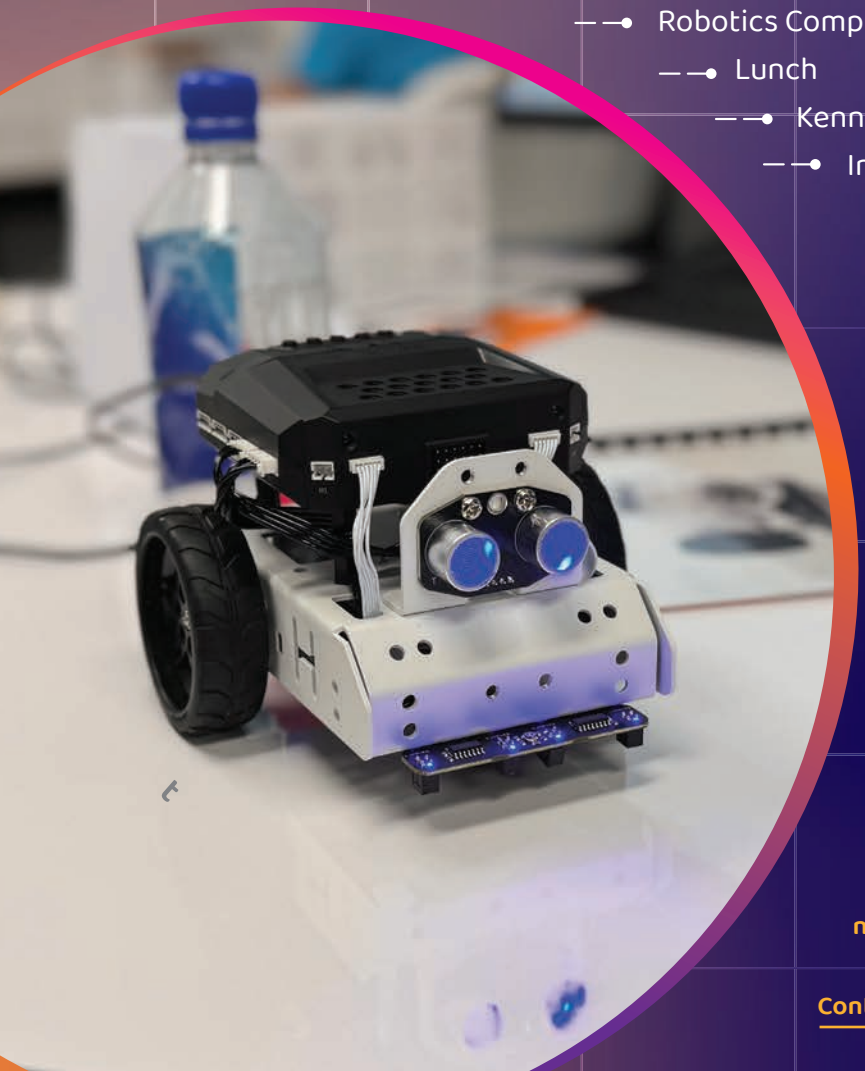
Cost: $549.00 per student

3 Day

KSCVC tickets included

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

Please note that while ExoNauts offer introductory AI capabilities paired with a vision camera, our 3-day camp does not currently include introductory AI lessons.

Contact us for a custom 5 day immersive AI robotics experience.

Conquer Mars!

Curriculum Highlights:

- Introduction to Programming Logic
- Basic and Advanced Programming Concepts
- Knowledge Reinforcement Through Challenges
- Significant Teamwork
- Innovative and Critical Thinking

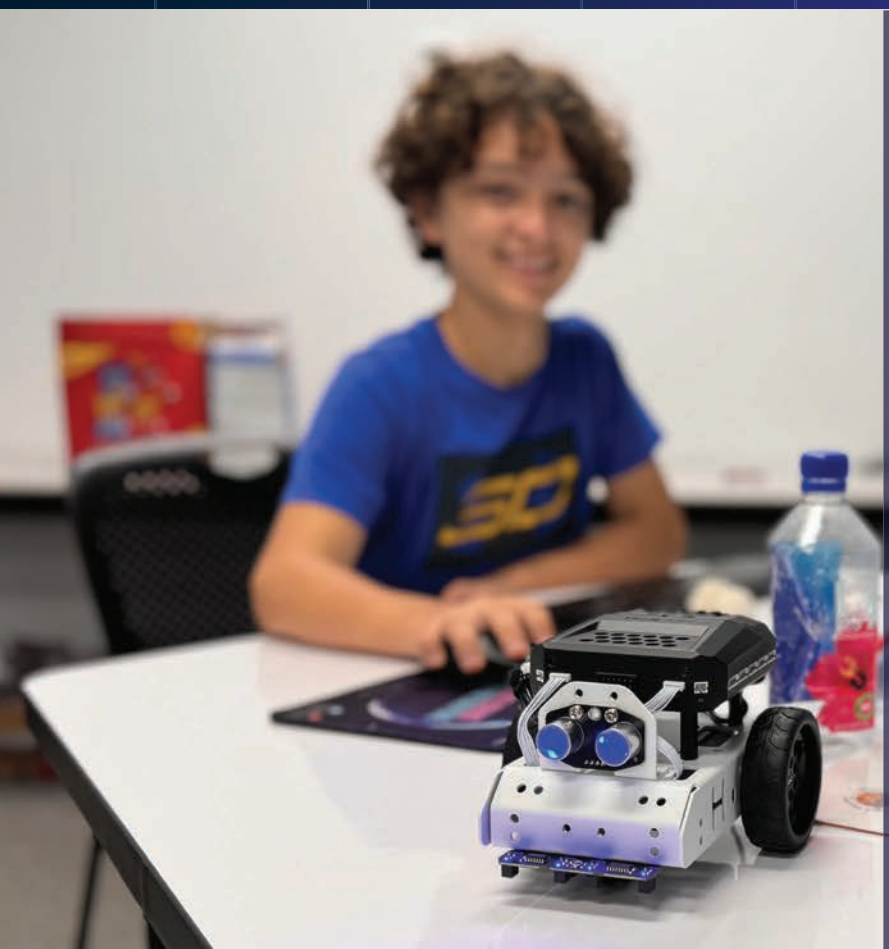
Final cosmic challenge:

- A surface map
- Advance control console
- 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. You will navigate various obstacles while completing your mission objectives.

Winning team will be awrded medals • Participation certificate for every participant •

- Medal for winning team
- Participation Certificate



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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.