



Learn beyond the  
classroom

# JUNIOR SPACE SCHOOL

An International Study Program

+ HIGHLY ENGAGING EXPERIENTIAL LEARNING

+ LEARN FROM EXPERTS + ON-SITE AT NASA

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# JUNIOR SPACE SCHOOL

Space School programs are delivered in collaboration with NASA, and various scientists, professors, and educational personnel. The aim is to develop students' interest in space science. The program extends to combine team management principles, motivational applications and experiential learning on-site at NASA. This highly engaging and empowering approach makes the Space School renowned all over the world.

## PROGRAM FEATURES

### ***Exploring space, science and managerial principles***

Space School is one of the few short-term youth study programs in the world covering science, management and space, to provide students with a most exciting motivational study platform. During Space School, NASA astronauts, engineers, scientists are specially invited to give professional and interactive presentations to students.

### ***Get to know NASA, talk to the best in the field***

Students will gain a deeper knowledge of Space School through mission simulators to Mars and the Moon, engage in unique and insightful discussions with the best engineers, scientists and managers of NASA. There have the opportunity to visit mockup facility for the assembly of the international space station, design the Mars exploration rover, build and launch rockets, visit the Apollo mission control center and much more.

### ***Highly engaging experiential learning***

Space School students will be placed in mission control and taking part in simulated space missions. They will learn about goal-setting, project planning, resource management, crisis management and teamwork. Students develop independent thinking, empowering creativity, resilience as well as developing team spirit and encouraging them to truly reach for the stars.

### ***Space mission simulators and supporting earth science***

A project-program design that focuses on the student, with the incorporation of space mission scenarios, problem-based learning and technically-challenging anomalies, leads to the most efficient and exciting learning experiences within a minimal timeframe.

### ***US Space Center and Space School Certificates***

Upon completion students will be awarded two international certificates:

- Certificate from the US Space and Rocket Center
- Certificate from Space School International Study Program



Astronaut training, Extra-Vehicular Activity (EVA)



Build and launch rockets



Space Multi-Axis Simulation Machine



Manned Maneuvering Unit, frictionless simulation



Graduation ceremony

# THE JUNIOR PROGRAM

## **Outline**

- Understand key principles of rocket and space travel
- Teamwork and collaboration
- Crisis management
- Motivational themes and their applications
- Application of the Problem-Based Learning (PBL) approach to challenging scenarios
- Understand the activities of NASA mission control at the Lyndon B. Johnson Space Center, Houston
- Attend astronaut training in the Space Academy at the U.S. Space & Rocket Center

## **Activities**

- Tour of NASA facilities
- Discussion with NASA scientists, engineers, mission control and astronauts
- Attend lectures and teamwork in labs
- Hands-on experiments in cellular analysis
- Team building and motivational activities
- Investigate marine biology
- Explore energy production
- Astronaut training
- Mars and Space Shuttle missions simulators
- Study space exploration
- Study experiments on the International Space Station
- Astronaut physical training equipment
- Motivated personal development
- Rocket construction and launch

## **Learning Outcome**

- Development of critical thinking and problem solving skills
- Skills in goal setting and project planning to set and achieve targets
- Effectiveness in collaborative teamwork
- Application of STEM in challenging space missions
- Greater initiative, responsibility and leadership through influence
- Curiosity and imagination
- Pursuit of personal values and long-term goals

# PARTICIPANTS

## **Junior Space School**

Years 8, 9 and 10

# TIME & LOCATION

Available during New Zealand school term breaks on site in Houston, Texas, USA, and Huntsville, Alabama, USA

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*Empower Youth for Future Success*

# THE SPACE SCHOOL DIFFERENCE



Other providers

Space School delivers a more profound learning outcome than other providers.

Space School provides a forward-looking, unique and experiential based study program that compliments conventional school education, and strengthens critical developmental skills for students. It utilises the school term breaks to deliver engaging learning experiences, in which the students will receive the most exciting education and the most effective learning program within a short period of time.

## actura

Actura provides the leading STEAM learning solution spanning in-class and out-of-class environments. From the ultimate robotic in-class FlipRobot range to the exclusive Space School International Study Program, students will be empowered for their future success.

## IMPORTANT INFORMATION

- Program cost includes: Tuition fee, admission to program events, accommodation and meals.
- Travel costs are indicative and include: Airfares and insurance
- Accommodation: Students share 2-3 per room in a 4 star business hotel. The hotel is secure, well serviced and provides rooms for group activities.
- Medical doctor arrangement: Doctors from Houston Medical Center.
- School nurse set up at the hotel, medical facilities nearby.

## actura

Actura New Zealand Limited, Level 4, 17 Albert Street Auckland CBD 1010 New Zealand  
Tel: 0800 118 911 | Email: enquiries@actura.co.nz | actura.co.nz

## STUDENT TESTIMONIALS

*" My experience at Space School has been amazing. I loved almost everything, mainly all of the astronaut speeches and the inspiration they gave me to follow my dreams and never give up, I liked all of the activities planned throughout the day and learnt all about the Seven Habits which I never knew even existed."*

Loreto Kirribilli, Sydney

*" I wanted to go on space school as I have always had a passion for science, space and engineering and thus I wanted to explore into those disciplines. The Space School program was a perfect opportunity to ignite my passion for these three areas. I also understood how this opportunity would be once in a life time which really enticed me to participate."*

Santa Sabina College, Sydney

*" This Space School trip has inspired me to travel beyond my capabilities. I understood qualities of others and discovered new qualities about myself in this trip. My connection with my crew trainers improved my learning and giving my group and I a better experience there for learning new areas of science I thought I could never learn."*

Wesley College, Melbourne

*" It was amazing, I did not only learn about the world of space and all the people associated with it, I learnt a lot about how to succeed and to work hard and most of all I had one of the most reliable experience in my life."*

Loreto Mandeville Hall Victoria

*" Dr H Paul was so inspirational and she showed how successful a women can be in a previously male dominated field."*

Santa Sabina College, Sydney

*" From the beginning to the end, there were fun activities, amazing people and supportive elders. All of the experiences made you realize how lucky we are to be on this trip. I have learned never to give up on your dreams and anything is possible no matter how hard your dream may be."*

Knox Grammar School, Sydney