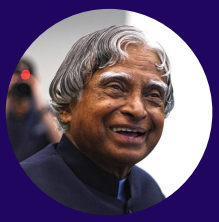
HOMI
LAB

MAKING OF AN ASTRONAUT

Future Explorers of Space



"I envision a Earth-Moon-Mars complex by 2050."

Dr. A.P.J. Abdul Kalam (1931-2015)

"We have made remarkable progress in the last 100 years, but if we want to continue beyond 100 years, our future is in space."

Stephen Hawking (1942 - 2018)

WHO ARE WE?

We make science easy to understand!

Homi Lab is the nation's first live learning platform which teaches science in fun and immersive manner. It aims to ignite the curiosity, creativity and passion for science in learners.

It serves as a medium for bridging the gap between the scientific community and the common masses. It is also an effective tool for extending scientific boundaries and for gaining wide public support for important research and developments happening in the world, which is indispensable for society's welfare.

WHY HOMI LAB?

Debunking Myths

We educate people about the mystical science which takes place beyond the sky and help them break the chains of ignorance.

Igniting Minds

We enable the child to harness its curiosity to the full potential and approach not just the science but life also with an inquiry-driven attitude.

INTERNATIONAL ASSOCIATIONS

Mine Analogue Research (MINAR)

MINAR is an underground extra-terrestrial analogue research program which is carried out in a two kilometre underground astrobiology laboratory at Boulby Mines, United Kingdom. In every expedition, around 30 scientists and researchers from institutions across Europe, NASA, the SETI Institute, Australian Space Agency (ASA) and the Kalam Centre-India gather to develop science and technology for the robotic and human exploration of Mars and the Moon. So far 7 expeditions of the MINAR have been organized to test rovers, life support system, radiation impact on life, low water life support, soil mapping, weather forecasting on Mars and several challenges which humankind is expected to face as we settle on the Red Planet.

Asteroid Search Campaign is an educational outreach program conducted by the International Astronomical Search Collaboration (IASC) which provides platform for students to make original astronomical discoveries and participate in hands-on astronomy.

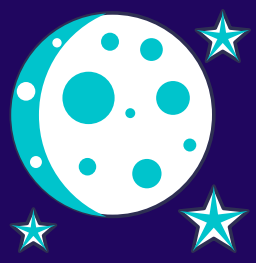
Sally Ride ISS EarthKAM is an international educational programme of NASA through which students can receive images of the Earth from a digital camera mounted in the International Space Station (ISS). We conduct workshop in schools teaching them imaging Earth from a unique perspective of space.

MAKING OF AN ASTRONAUT

Humanity's first space explorer, Soviet cosmonaut Yuri Gagarin, orbited around the globe on 12 April 1961, more than half a century ago. Since then, more than 550 people from 9 nations have blasted themselves into the deep black abyss.

By 2035, we will have the first humans to land and probably live on our next planet, Mars. Hence the next 15 years would see a series of giant leaps, present several critical challenges that will be overcome by some of the most ingenious minds humankind has produced. And who knows, you (children in schools today), could be the next Mars Walkers!

We offer three modules under this course



Understanding Universe and Space

Our quest to understand how the universe works starts with the study of the very basic building blocks of our existence - matter, energy, space and time - and how they behave under the different physical conditions.

Travelling Through Space

Interstellar space travel is fantasy of every five-year-old kid within us. Staple of science fiction serials. As we grow ever more advanced with our knowledge, the basic question arises: how will we travel to other world?

Voyage To A New Home

We have landed men on the Moon. We plan to send first batch of humans on the Red Planet by 2035. Can we colonize other worlds? Which will be the celestial bodies you would be walking on?

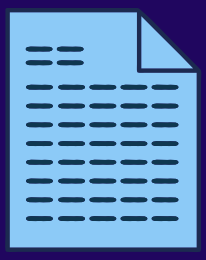
COURSE INCLUDES

Live Online Sessions

School goes online! This summer delve deeper into the world of astronomy through a series of classes conducted online.

Exciting Videos & Presentations

Get a visual treat to understand complex and difficult scientific phenomenon and process in simplified manner.



Customised Handouts

Digital handout for each session which includes interesting facts and stories, activities to do and recap of the sessions.

Guest Lectures

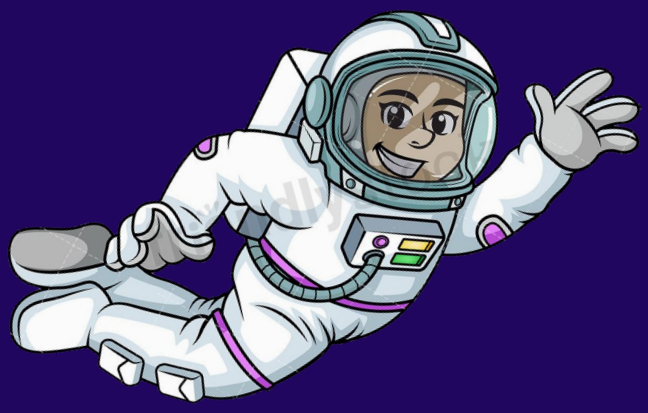
Apart from these sessions, there would also be some guests lecture by international and national experts.

Interactive Quizzes

Solve the quiz and test your knowledge at the end of each session. Show your score to your friends and challenge them.

e-Certification

On successful completion of the course, you will be issued an e-certificate.



JUNIOR ASTRONAUT

Young Sailors To Stars

- Why an ASTRONAUT?
- What is Space and Time?
- Heroes of Space Exploration
- Journey of Spacecrafts
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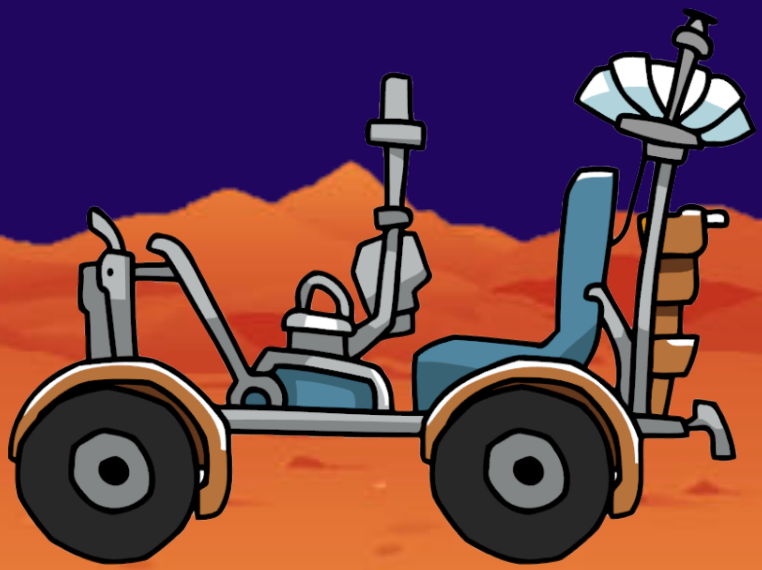
- Tomorrow's Spaceships
- ISS: Our Home Beyond Earth
- Racing Towards Moon
- Is Mars Our New Home?



MISSION CONTROL

CAPTAIN: SRIJAN PAL SINGH

Srijan Pal Singh is an author, public speaker, education innovator and social entrepreneur. He served as the Officer on Special Duty and Advisor (Policy and Technology) at the Office of Dr. APJ Abdul Kalam where he worked as a close aide to the former President on various consulting works.

PREKSHA SETHIA

Preksha Sethia is a physical science graduate and space enthusiast. She worked as research assistant for Reignited 2, a sequel to Reignited written by Dr. A.P.J. Abdul Kalam, 11th President of India.

- **The course consists of 10 sessions (9 sessions + 1 workshop) and is offered in English.**
- **Each session would be of 50 minutes. Special Q&A session every Sunday**
- **Recommended Age Group: 10 years onwards**

THINGS YOU WILL BE FLUENT ABOUT AFTER THIS COURSE

Space Walk

Space Suit

Orbiter

International Space Station

Rover

Space Shuttle

Saturn V

Galaxies

Command Module

Zero-Gravity

Matter & Anti-Matter

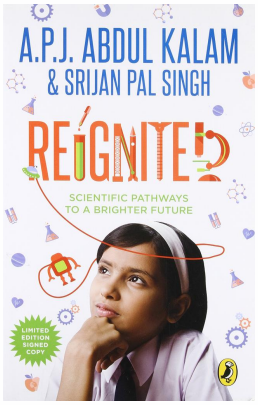
Asteroid

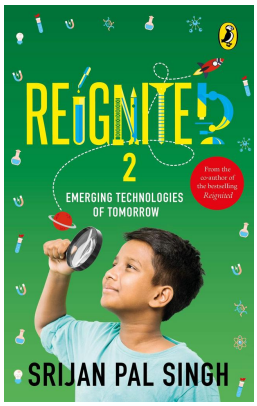
Apollo Missions

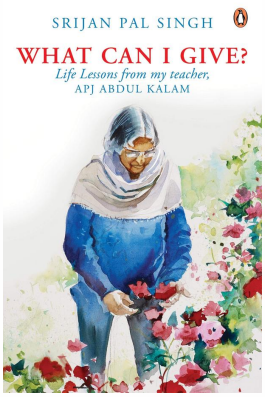
Big Bang

Spaceships

And much more...







COURSE TO BE TAUGHT BY AUTHOR OF THESE BOOKS

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