



**KALPANA CHAWLA  
SPACE ACADEMY**

A division of Vidya Niketan Education Trust



# ASTROKIDS DISCOVERY PROGRAMME

STELLAR SCIENCE INITIATIVE

KCSA HYBRID CERTIFICATION PROGRAMME



FOR ACADEMIC YEAR 2026-27



**DURATION : 1 MONTH**



ADV. BAPUSAHEB BHONDE HIGH SCHOOL LONAVALA, MAHARASHTRA 410401, INDIA



9326283767 / 9969356348



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**KCSA**



# ASTROKIDS DISCOVERY PROGRAMME



## INTRODUCTION

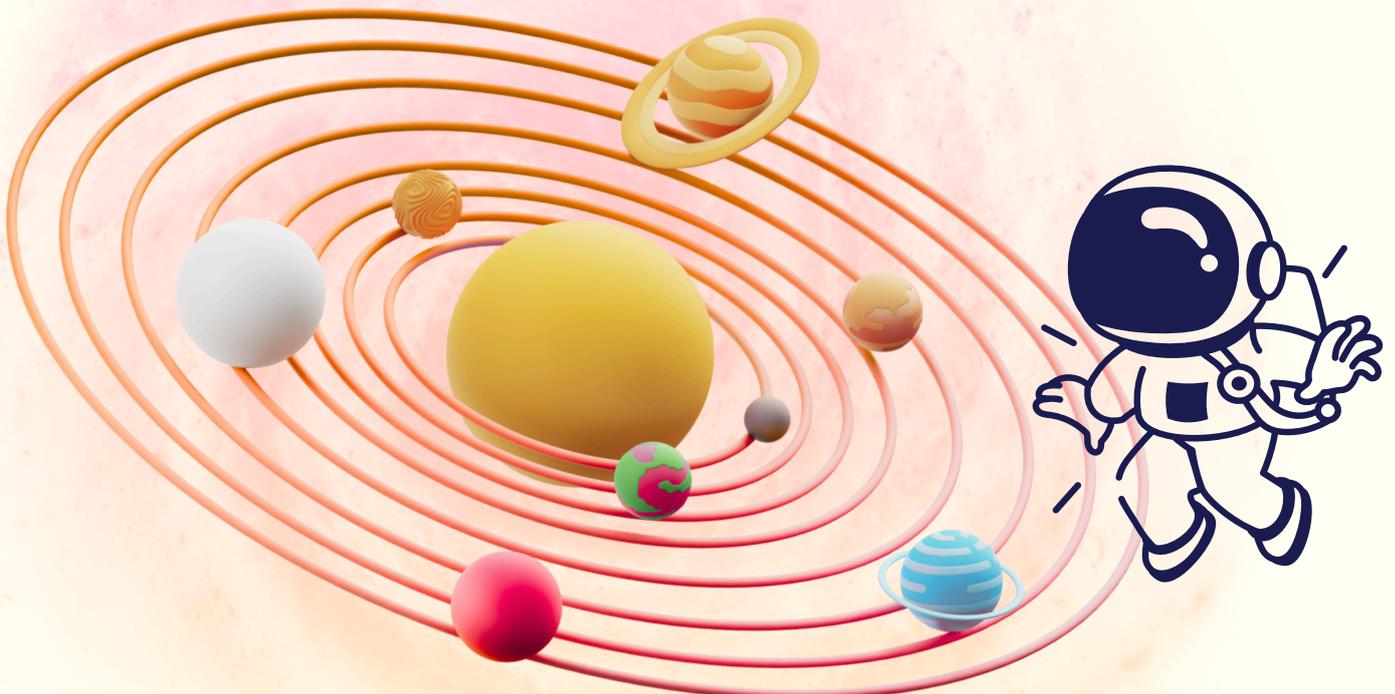
The Short-Term and Long-Term Space Science Programme invites young explorers to dive into the exciting world of space! An immersive learning experience designed to introduce participants to the wonders of astronomy, space technology, and scientific exploration. This programme provides hands-on activities, interactive sessions, and real-world insights into how scientists study the universe. Mode of delivery is a mix of online and onsite sessions. It further aims to encourage an informed appreciation of the significance of space science in modern research and global technological progress. We look forward to fostering an enriching learning environment that supports curiosity, critical thinking, and future scientific endeavour. At KCSA we have adopted a method of learning such as Learning by Doing with 80% of practical and 20% of theory. Together, let us embark on a journey of discovery that broadens our perspective of the universe.

## OBJECTIVES

- To provide a structured introduction to the fundamental concepts of space science: Students gain a well-organized and foundational understanding of key scientific concepts. Students are introduced to essential principles such as the nature of celestial bodies, the physical processes occurring in space, and the technological systems used to study the Universe.
- To develop a foundational understanding of celestial bodies and cosmic phenomena: Students will learn how scientists use mathematical models and theoretical principles to explain the behaviour of celestial objects, this objective strengthens conceptual clarity and supports scientific reasoning.
- To strengthen analytical and problem-solving skills: Students engage in activities that require interpreting scientific data, applying equations, and using critical thinking to analyse space-related problems. This objective prepares them for research work, technical roles, and higher-level academic studies.
- To encourage interdisciplinary thinking: Space science overlaps with physics, engineering, environmental studies, data science, and computer technology. This objective helps students appreciate how multiple scientific fields contribute to space exploration and encourages them to think beyond disciplinary boundaries.
- To inspire sustained academic interest and career orientation: Students will be motivated to pursue further studies or careers in space science, aerospace engineering, research, or STEM-related fields. By exposing them to diverse topics and practical experiences, the programme encourages long-term engagement with science and innovation.

## **LEARNING OUTCOME**

- A structured introduction means that topics are presented in a logical sequence, starting from basic concepts and progressively moving toward more advanced ideas.
- Demonstrate a comprehensive understanding of fundamental space science concepts, including celestial mechanics, planetary systems, space environments, and basic space technologies, gained through a combination of online instruction and onsite learning activities.
- Identify academic pathways and career opportunities in space science and allied STEAM fields, reflecting increased motivation and informed interest in further study or professional engagement.
- Demonstrate practical understanding through onsite exposure, such as laboratory demonstrations, observational sessions, model-based learning, or facility visits, reinforcing theoretical concepts learned online.
- Apply analytical and problem-solving skills to space science challenges, including data interpretation, basic simulations, and quantitative analysis conducted through virtual tools and onsite exercises.
- Career awareness in space science opens up a wide range of academic pathways, professional roles, and future opportunities available in the field of space exploration and related sciences.
- Utilize digital platforms and scientific tools effectively for online learning, simulations, data visualization, and collaborative activities related to space science and exploration.





## **ASTROKIDS DISCOVERY PROGRAMME**

<b>Duration</b>	<b>Total Hours</b>	<b>Modus Operandi</b>	<b>Fees</b>
1 month	15 Hours	Online + Onsite	INR 2500/- (Inclusive of Tuition fees + Food and accommodation for student only for 2 days at hostel & exclusive of any travel fares; additional charges of INR 2000/- applicable for any extended services such as accommodation for parent /guardian (only 1) and food facility at hostel)

## **ASTROKIDS DISCOVERY PROGRAMME**

- DURATION OF THE COURSE: 1 month
- Total = 15 hours (covering in 30 days)
- 8 online sessions = Each session is of 1 hour (2 sessions in every week - one on week days and one on weekends)
- 1 onsite sessions = 7 hours (Morning 3 hours + Afternoon 4 hours)
- (Make and take + lab visits + aligned practical + Activities)



## **COURSE CURRICULUM**

### **Session 1: Launching into Space Science**

(Discover what space science is and why exploring space helps us understand the universe and Earth.)

### **Session 2: A Journey through Our Solar Family!**

(Explore the Sun, planets, moons, and asteroids that make up our amazing solar system.)

### **Session 3: Why Planets Don't Fall Off: The Rules of Space Motion**

(Learn how gravity and motion keep planets moving safely in their paths around the Sun.)

### **Session 4: From Baby Stars to Black Holes**

(Understand how stars are born, grow, and sometimes turn into powerful black holes.)

### **Session 5: From Earth to Orbit: Rockets and Space Gadgets**

(Find out how rockets work and how satellites and spacecraft are launched into space.)

### **Session 6: Notable space missions by Indian and foreign space agencies**

(Discover famous space missions by ISRO, NASA, and other agencies that changed space history.)

### **Session 7: Satellites and Remote Sensing**

(Learn how satellites help us with weather forecasts, maps, communication, and Earth studies.)

### **Session 8: Blast Into Your Space Career!**

(Explore exciting careers in astronomy, engineering, and space research.)

### **Session 9: Onsite session**

(Experience hands-on activities, experiments, and real-life learning at our Science Floor)



## **REGISTRATION PAYMENT PROCESS**

The registration fees can be paid through online bank transaction following adoption of digitization. All interested parents and students are requested to complete the payment process by following guidelines and deadlines. Provide accurate details while completing the payment process.

### **Account Details**

Account name- Vidya Niketan Education Trust-  
Kalpana Chawla Space Academy

Account type – Saving

Account Number – 924010028068565

IFSC Code – UTIB0002773

Bank name – Axis Bank Ltd.

Bank address – Lonavala



## **CONTACT DETAILS**

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