

A space shuttle is shown launching vertically against a blue sky with white clouds. The shuttle is white with orange external tank and boosters. Bright orange and white flames and smoke are visible at the base of the boosters.

# PREPARE FOR LAUNCH

**Number of Participants**  
**Maximum 30 Learners**

**Duration**  
**10am-2pm**  
*including a 1 hour  
lunch break*

**Price**  
**£7.00**  
*per learner*

## OVERVIEW

Just the mention of the planet Mars can call to mind images of 'Little Green Men' who might inhabit our close celestial neighbour. The Red Planet however offers much more than just this fantasy, as aerospace scientists today plan and prepare for a possible manned mission in the near future.

More than just a red glowing sphere in a distant night sky, Mars is there to be explored! Rockets, capsules and even robots have been sent on missions to discover critical information that might help humans one day to live there. We need you to join our expert team at the STEM Space Station to assist with this exploration.

Learners will receive a packed lunch on BDC campus.

## ACTIVITIES

**STEM Space Camp** - Astronauts are persons trained specifically within a spaceflight program to command, pilot or serve as a crew member of a spacecraft designed to travel into outer space. The training an astronaut has to go through is varied and intense, only the best can qualify. During this activity you will participate in astronaut training based upon aspects of physical skill related fitness as well as communication skills and following instructions. Will you get selected for space travel or get left on the ground?

**Mars Mission** – The advancement of robots has allowed the exploration of Mars without humans physically there. The purpose of this activity is to give students an insight into the planet Mars and the Mars Rover robots that visit the planet’s rocky, desert like surface to carry out experiments. Students will become familiar with how robots can be programmed to carry out a variety of Instructions.

**Blast Off** – Rockets have been used for thousands of years but rockets for use in space exploration have only been used since the 1960s. Since that time rockets have been used to explore outer space and the solar system. In this fun and exciting activity you will create and test your very own rocket, will yours fly the highest?

## KEY EMPLOYABILITY SKILLS

- Problem Solving
- Teamwork
- Communication
- Self-Management
- Planning
- Creativity
- Numeracy

## KEY STEM SKILLS

- Coding Skills
- Following a Design
- Evaluating Results
- Rocket Chemistry