

LEGO® Robotics – Space Challenge

Workshop	LEGO® Robotics – Space Challenge
Key Stage	Key Stage 3 (see footnote)
Recommended Age Group	8-14 (see footnote)
PoS	Maths and Computing
Course Description	Bring Maths and Computing alive outside of the classroom. Through hands on approach, students get to complete a series of space challenges with their LEGO® MINDSTORMS Education Robots. Students develop and use their problem solving skills to learn Algorithms, Boolean, Sequences, & Inputs and Outputs, through building and de-bugging programmes. Maths concepts covered include estimation, measurement, precision and modelling
Duration	45 Minutes
Equipment	Windows 7 Computer LEGO® MINDSTORMS® Education EV3 Core Set LEGO® MINDSTORMS® Education EV3 Space Challenge Set LEGO® MINDSTORMS® Education EV3 Space Challenge Activity Pack
Capacity	16 students
Lesson Objectives	<ul style="list-style-type: none"> ✓ Students will demonstrate how to create a sequence of instructions (codes) using the MINDSTORMS® Software ✓ Students will demonstrate how to effectively transfer sequences of codes to their EV3 Robot and complete Space themed challenges to include: Activating a Communications Tower / Rescuing a Mars Robot and Collecting Mars Rock Samples ✓ Students will enhance their understanding of angles, estimation and measurements ✓ Students will understand the need for Computers and Robotics in the park and everyday life scenarios

Footnote: Although these are guidelines, students at KS2 can complete these activities if suitable

