Welcome to your Universe

SPACE TO INSPIRE

www.starcentre.org

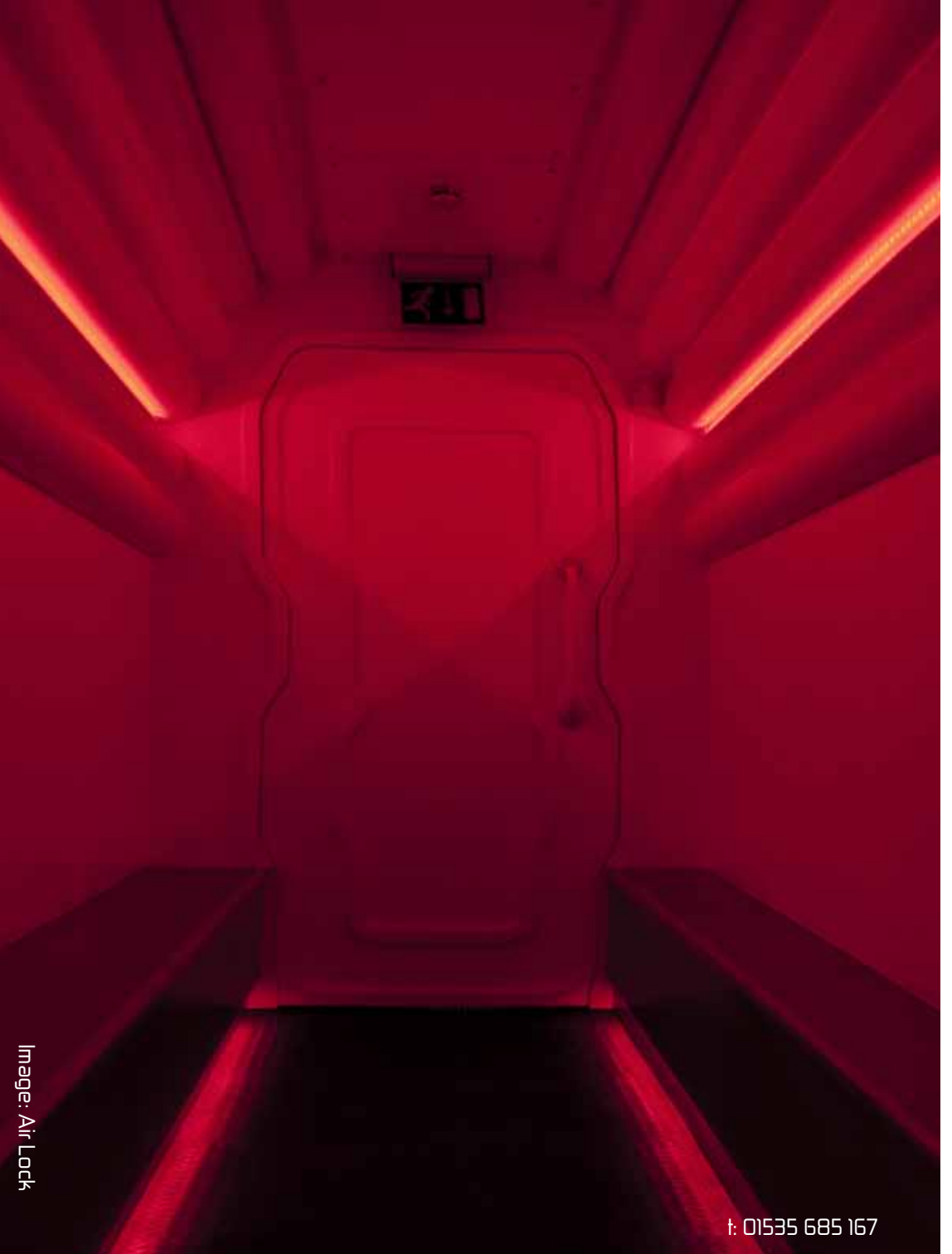

Image: Air Lock

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About The STAR Centre

Image: Planetary Surface

The STAR Centre is not just a high-tech environment with lots of flashing lights and computers, although we have all those things, the STAR Centre is about young people.

The STAR Centre aims to attract as many young people as possible and take them away from the normal, away from the mundane and into a world that is not anything like school. Our unique learning environment features several learning zones all purposefully designed to encourage and stimulate interest in Science, Engineering, Mathematics and Technology.

"In the first seven years, the STAR Centre delivered to over 45,000 young people of various ages and abilities."

The STAR Centre consists of a Mission Control Centre, a Space Science Lab, Briefing Suite, Planetarium, Astrobotics lab and a Planetary Surface complete with a range of robotic exploration units.

The STAR Centre aims to immerse young learners in science-related activities, in an inclusive way suitable for diverse backgrounds, ages and abilities.

In the first seven years, the STAR Centre delivered to over 45,000 young people of various ages and abilities. In addition we have had over 400 teachers undertake continuous professional development.

We offer bespoke training for STEM teachers around Yorkshire and Humber and also offer activities and resources to local youth group organisations, such as Scouts, Guides and Air Cadets.

Image: Collecting rock samples

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"Today I put on a space suit, travelled to Mars, collected a rock sample and brought it back to Earth to perform experiments on it"

School Space Days

We specialise in accommodating Primary and Secondary School visits to the STAR Centre for half or full day sessions.

We have developed a complete learning package to inspire students into learning. A typical day encompasses Science, Technology, Engineering & Mathematics and includes space science, the planets, computer assisted learning, living in space, space travel and a space walk!

Our days can also be tailored to meet national curriculum requirements as activities can be made to match curriculum criteria.

Why not learn about the Earth, Sun and Moon using our cutting-edge hardware...

Our unique learning centre comprises several zones. A Mission Control with 20 touch sensitive computers and three large projection screens, a space lab consisting of 20 tablet PCs used to deliver state-of-the-art ILT-driven science based curriculum from KS 1 to KS 4 and above. A Media Suite with wide-screen digital video projection, a Planetarium for looking at the night sky and exploring our universe, a planetary surface for students to explore and our astrobotics lab used to explore and control robots.

Our teaching modules cover Key Stages 1- 4.

We endeavour to include as many of the learning zones possible in a standard school space day.

We can cover almost any Science or Technology based National Curriculum subject so please don't hesitate to contact us.

Image: Astrobotics

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Image: Space Lab

Learning Zones

Mission Control Centre

Earth Side

Briefing Room

The briefing room has a raked seating bank for up to 60 people. The seating looks down onto a presentation area which is equipped with a podium and interactive whiteboard. The room is also equipped with a 3 meter HD video screen and 5.1 surround sound for showing presentations and films. In addition the seating can be rolled back to make a standard size classroom if required.

Mission Control

Mission Control is an innovative and dynamic way of delivering curriculum-using missions as a platform to engage students actively within the Star Centre programme. Missions include launching rockets, keeping a crew healthy during their journey to mars, landing a spacecraft on the moon, controlling robotic planetary explorers and exploring our solar system. New missions are being added all the time.

Mission Control can be used as an operation centre to organise activities and investigations in the various parts of the Star Centre as well as out in the field, which will enable participants to develop team building and problem solving skills.

It also has the facility to track and communicate with satellites and the International Space Station, which includes voice communications as well as receiving images from space.

Transit Pod

The transit pod is used to link the earth side of the STAR Centre to the space side using a virtual space flight.

Cosmodome

The Cosmodome is a new generation planetarium and 360 degree cinema where the film totally surrounds the audience. Our state-of-the-art equipment allows spectacular and amazing images to zoom across the dome, recreating the excitement of a major planetarium for the students.
Our range of exciting films, which all have an educational theme, include "Earth's Wild Ride", "Oasis in Space" and "Future Moon", new films are being added all the time.

The films that are shown inside the Cosmodome are the same big budget productions played at major museums and planetariums throughout the world.

Films are complemented by "Stellarium" - our planetarium software which includes instructor led night sky and astronomy shows tailored to each level of the national science curriculum; "Earth and Beyond".

We also use "Solar System" which allows us to take the students on a tour of our solar system and look at the planets and their major moons while learning interesting and fun facts about each planet.

Learning Zones

Space Side

Space Lab

The Space Lab has been specifically designed to create a multi-use space to explore all aspects of science. The Lab features a central work station with an overhead display pod for working in groups. The Labs main delivery is via a suite of 20 work stations, each with a PC allowing direct interaction with touch sensitive screens.

Astrobotics

The Astrobotics lab is our Robotics Lab. There are four workstations that are directly connected to robot arms. The arms can be controlled and programmed from the touch screen PCs.

The Lab also features a window wall looking out onto our planetscape. This is equipped with four touch screen computers to control our exploration rovers on the planetscape or run virtual robot simulations.

The central work surface is used to demonstrate robotic principals and build rovers.

Air Lock

The airlock is a themed area used to link the Space Lab, Astrobotics, Transit Pod and Planetscape. It is equipped with spacesuits and helmets for the students to wear.

Planetscape

The Planetscape is used for our EVA (Extra Vehicular Activity) or Moon Walk. Once the students have donned a spacesuit, they can study the five types of geological formations and look for evidence of past life. Using PMR Radios (walkie talkies) the students learn about Morse code, the phonetic alphabet and can talk to each other on the Planetscape.

Image: Space Suits

Image: Martian Landscape

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Visits To Schools

Space Exploration

In addition to its unique on-site learning facilities, the STAR Centre operates an educational visit service for schools. This service is National Curriculum based.

Each visit is tailored to suit the needs of the school. Presentations can be given to individual classes, groups of students such as year groups and full school assemblies.

Previous visits have included space science, the solar system, astronomy, space travel, robotics, rocketry and living in space. Weather permitting, students can enjoy the excitement of launching model rockets within their school grounds and controlling robots on our mobile planetscape.

This service makes an ideal starting point for future studies, or in preparation for a visit to the STAR Centre itself.

Image: Rocket

Information For Schools

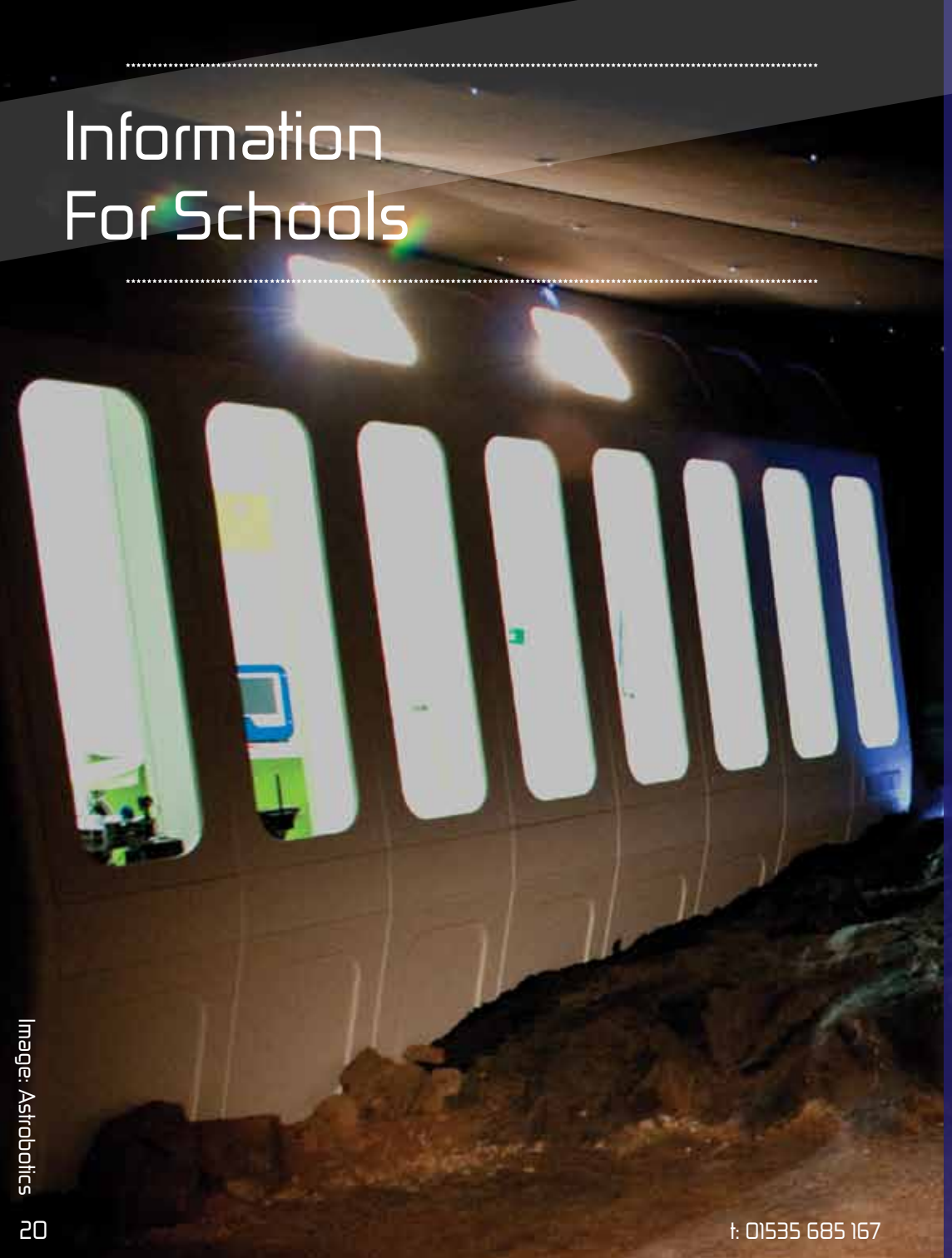

Image: Astrobotics

School Sessions

The STAR Centre is designed to run with a full class. It can accommodate a maximum of 40 students at a time.

Half Day Morning	10:00am to 12 noon
Extended Morning*	9:30am to 12:30pm
Half Day Afternoon	12:30pm to 2:30pm
Full Day	10:00am to 2:30pm
Extended Day*	9:30am to 3:00pm

All timings are approximate

Groups of 20 students or less may be eligible for a reduced rate.

We would be pleased to discuss your requirements and can accommodate most requests.

Evening sessions are available on Mondays, Tuesdays and Wednesdays Please contact us for further details.

Teachers Continual Professional Development

We offer a series of workshops to help teachers in space science delivery.

Contact us on: 01535 685 167
www.starcentre.org

** An extended session typically consists of the normal session finishing with a team based group activity.*

Contact Information

The Star Centre is based at Keighley Campus, Leeds City College directly adjacent to Keighley Railway Station

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Image: Martian Landscape

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