Step Into Space

Encounter the frontiers of space exploration at Kennedy Space Centre Florida and Johnson Space Centre, Houston
Why should you travel with ISSET to Kennedy Space Centre in Florida and Johnson Space Centre in Texas?

- Maybe you would like to be at the heart of the world’s largest scientific and engineering exploration: the human space programme.
- Maybe you would like to meet astronauts and rocket scientists where they live and work
- Maybe because you want to gain the NASA “You can do it” spirit that is so much a part of the space programme: “failure is not an option”.
- Maybe because KSC, on the Florida coast, is the world’s premier space port where the space shuttle launches and lands.
- Maybe because you would like to sit at the very consoles in Mission Controls JSC in Houston, Texas that controlled the historic moon landing and now control the International Space Station and the Space shuttle.
- Or maybe, for the excitement, fun, inspiration, and wildlife – and that’s just the start!

For over ten years the International Space School Educational Trust has helped young people with up close, first hand experiences of the people and places at the heart of the world’s leading space exploration project.

You’ll discover brilliant hands-on activities such as the Astronaut Training Experience, visit the awesome Vehicle Assembly Building where the space shuttle is assembled, visit mission control, tour the amazing wildlife reserve seeing alligators, manatees and armadillos and meet astronauts, space engineers and scientists.

Space Centre visits are a fantastic experience in themselves, but the major benefit is that young people can see that they too can fulfill their dreams and ambitions, and in fact can become anything that they want to be.

“As we are growing up, we have dreams of things that we would like to do, but we think those dreams are impossible. I can tell you that with time, persistence and hard work, your dreams can pay off.”

-Dafydd Rhys Williams, Welsh-Canadian astronaut and space walker

Feedback shows that over 85% of the young people who have participated in our Kennedy and/or Johnson Space Centre experiences have gone on to study mathematics, science, technology or engineering in higher education. Others have gone on to careers in the media, medicine and economics.

Our students have seen for themselves the cutting edge of technology and that excitement has helped them believe they can achieve their greatest dreams and ambitions.
About the International Space School Educational Trust (ISSET)

The International Space School Educational Trust, has worked with Kennedy and Johnson Space Centres for almost a decade, to develop a range of inspirational STEM-based programmes that make a real difference to engaging young people in educational achievement, especially in science, maths and engineering.

ISSET is a charitable, not-for-profit organisation that has raised funds and operated student and teacher programmes since 1998 to utilise the power of the human space programme to encourage young people to:

- Increase individual and personal ambitions
- Aim higher in academic achievement
- Understand what humans are capable of achieving
- Place a greater value on scientific, mathematical and technological achievement
- Develop what we describe as the NASA ‘can do’ spirit.

ISSET annually enables around 200 students and 150 teachers from the UK to benefit from life changing experiences at Kennedy and Johnson Space Centres. The students and teachers gain first hand experience of meeting and working with people at the heart of the human space programme, the world’s biggest and most prestigious science and engineering challenge.

ISSET works in partnership with the Astronauts Memorial Foundation that is based at Kennedy Space Centre. The AMF honors those astronauts who have sacrificed their lives for their nation and the space programme, by sponsoring and implementing national innovative educational technology programmes.
What do you do in the USA with ISSET?

The KSC/JSC programme is an amazing opportunity for your students to explore in close-up humans’ exploration of space. Learning comes alive with a hands-on experience of space hardware, astronaut training and contact with astronauts, space and rocket scientists and engineers.

During the programme, you will:

• Take a behind-the-scenes tour of Kennedy Space Centre, seeing the Space Shuttle launch pads, training facilities, the Vehicle Assembly Building, one of the largest buildings in the world, where mission vehicles are prepared for launch and the

• Experience the Astronaut Training Programme and participate in a simulated Space Shuttle launch

• Meet the people who drive the awe-inspiring human space programme, including astronauts and scientists

• Tour and study a fully restored Apollo-era Saturn V rocket that took astronauts to the Moon

• Work with the Kennedy Space Centre & Johnson Space Centre education teams

• Take a behind-the-scenes tour of Johnson Space Centre, seeing the Mission Control Centre and astronaut training facilities

• Visit Sea World, learning about the environmental dangers that our oceans face

• Visit a world-class planetarium for an awe-inspiring laser light show and explore the night sky

• Dine with astronauts and rocket scientists, with the opportunity to ask and discuss questions about science and space

• Learn about the history of space flight at the Astronaut Hall of Fame

• Visit Cape Canaveral Air Force Station, where early spaceflight took place

• Explore and study the huge Merritt Island wildlife refuge and discover the amazingly diverse animal population that lives alongside the technology of the space exploration

• Watch incredible 30 metre IMAX 3D movies of life in space

• Meet, tour the Space centre and make friends with US students
Step Into Space
Encounter the frontiers of space exploration at Kennedy Space Centre, Florida and Johnson Space Centre, Houston

What do people say about the programme?

“This trip has been amazing and we have learnt so much. It’s been a fantastic experience and we know that we will always remember it. We’ve met so many lovely people and done so many brilliant things. It really has been the experience of a lifetime. Thank you so much.”
- Rebekah Wiler, Andrea Adamou, Natalie Barber, Aamira Challenger-Mynett - Enfield Community School, London

“I just wanted to let you know, that before going to NASA, I did not think I could get into university, and that there was no point in even thinking about it. However, having met so many academically driven contemporaries on the trip in America, and having met such an extraordinary selection of people (mostly consisting of astronauts) encouraged me to follow my dream. The visit to Rice University and the NASA centre (where they had the underwater zero gravity simulator) consisted of people who genuinely reinforced the idea that they wanted people like us to come back and to work for them when we are older, which truly inspired me to fulfill my potential.

“Since then I have gained my A-levels, taken a gap year and am studying Biology at Imperial College in London.”
- Samuel Hosseini - formerly of Cathays High School, Cardiff

“An amazing opportunity that has surpassed all expectations. During the past 2 weeks we have been astounded by the amount of recognition from NASA’s employees and by the amazing group of people we have been able to join in this unique experience”
- Richard Flower, Joanne Hopper, Kate Hannaby, Laura Cousins - Framwellgate School, Durham

“We think that this trip has been a fantastic experience and has changed our outlook on life generally”
- Devon & Elle Buchanan, Christopher Sandford, Simon Clark - Welsway School, Bristol

“Before I start, I would like to say that no words can describe how incredible this trip was to the both of us. We’ve experienced things we only dreamt we would. The trip has given us the motivation and determination to do absolutely anything we want to - an invaluable gift that will last a lifetime.”
- Christopher Saunders, James Sadler - West Calder High School, West Lothian

“What we find difficult to believe is that we are not just having a fantastic time we are also learning a lot. We will cherish these memories for the rest of our lives. Astronaut training was incredible and so exciting. However, the best part of the entire trip was meeting all the astronauts, rocket engineers and former directors.”
- Michael & Jean Louis Rawlence, Graeme Taylor, Zareen Butt - Shenley Brook End School, Milton Keynes
Kennedy Space Centre, Cape Canaveral and the Wildlife Refuge

Kennedy Space Centre is where the hopes and dreams of human exploration are made real and sent out into the vastness of space.

Kennedy Space Centre was developed to take humans on journeys to the moon. It is now the launch and landing centre for the incredible space shuttle and the launch site for the components of the International Space Station.

Among the Centre’s main work areas are:

• The world’s longest runway where the space shuttle lands from space
• The International Space Station components are made ready to be launched into space
• The space shuttle is maintained and prepared for space travel
• The Vehicle Assembly Building, one of the largest buildings in the world, where the space shuttle is assembled
• The Launch Control Centre
• The Space shuttle Launch Pads

Cape Canaveral is the site of the USA’s first launches into space during the 1960’s. It is the home of the first launch pads and space control systems. It was from Cape Canaveral that NASA not only first ventured into space, carried out space walking, space rendezvous and docking of spacecraft.

The Space Centre is in a 140,000-acre National Wildlife Refuge that is the home of over 500 species of wildlife including alligators, manatees, turtles, wild pigs, eagles and armadillos.
Johnson Space Centre, Houston

Johnson Space Centre is the home of Mission Control and Astronaut Training. JSC is set in the world class city of Houston, one of the largest cities in America.

Built for the moon missions, Johnson Space Centre (JSC) is now the control centre for all activity on board the International Space Station and space shuttle missions.

Johnson Space Centre’s main work areas are:
- The Neutral Buoyancy Laboratory, where astronauts train underwater for spacewalks
- Astronaut Training Facility
- The world’s largest vacuum chamber
- Mission Control Centers (MCCs)
- Ellington Field air force station
- The Lunar Vaults

Johnson Space Centre is a fascinating part of NASA’s mission, showing a different side to space exploration than Kennedy. It will provide you with a wonderfully inspirational experience, full of exciting innovations.

You will meet people who love to share their knowledge and are truly enthusiastic about how space and advanced technology can change and improve our lives.

You will also have the opportunity to visit the world’s most advanced space engine, the plasma rocket engine with ion drives, as seen on Star Trek.
**Step Into Space**
Encounter the frontiers of space exploration at Kennedy Space Centre, Florida and Johnson Space Centre, Houston

**Provisional Itinerary**

**Day 1: Tuesday**
Arrive in Florida
Check in to hotel and have dinner

**Day 2: Wednesday**
Kennedy Space Centre behind the scenes tour
- Vehicle Assembly Building
- Space Shuttle launch pads
- Space Life Sciences laboratory
- International Space Station facility
IMAX 3D Movie - “Magnificent Desolation”

**Day 3: Thursday**
Kennedy Space Centre - Saturn V programme
- Tour of the Apollo Saturn V Centre
- Apollo 8 Launch Presentation
- Lunar theatre Moon landing presentation
- Astronaut’s Shuttle Launch Simulation
- Tour of Space Shuttle Plaza
- IMAX 3D Movie - Space Station 3D Exploration Centre

KSC Visitor Complex
- Cape Canaveral tour
- Historic launch site
- Original launch control
- Launch pads for unmanned rockets

BCC Planetarium and Observatory
- Solar Max
- Laser Show - “Amazing Universe”
- Observatory telescope viewing
Step Into Space
Encounter the frontiers of space exploration at Kennedy Space Centre, Florida and Johnson Space Centre, Houston

Day 4: Friday
Complete Astronaut Training Experience (ATX)
• A full day learning to be an astronaut
• Work in the space shuttle or mission control simulators
• 3 Axis trainer
• 4g Centrifuge
• Zero gravity wall
• Simulated exercise in a shuttle flight deck and mission control

Day 5: Saturday
Seaworld
• ‘Save our Seas’ presentation and activities
• Behind the scenes environmental training program
• Theme park rides

Day 5: Sunday
Merrit Island wildlife refuge tour
• Guided tour
• Refuge field trip programme
• Lagoon survey

Day 6: Monday
Flight from Orlando to Houston
Check into hotel in Houston
Visit San Jacinto Museum
Day 7: Tuesday
Johnson Space Centre tour
- Current & historic mission control
- Vacuum chamber
- Astronaut Training Space Vehicle Mock-up Facility
- Neutral Buoyancy Lab

Day 8: Wednesday
Visit Space Centre Houston
- Tour of the Starship Gallery
- Tours of the Lunar Vaults
- Explore interactive simulators
- Watch a range of IMAX movies

Day 9: Thursday
Rice University
- ‘Space and Solar Science’ presentation
- Student activities

Houston Museum of Natural Science - Challenger Mission

Day 10: Friday
Flight from Houston to Heathrow
Step Into Space
Encounter the frontiers of space exploration at
Kennedy Space Centre, Florida and Johnson Space Centre, Houston

Contact
For any further information or questions, please contact:

Chris Barber
Director
The International Space School Educational Trust
5 Herbert Terrace
Penarth
CF64 2AH
UK

Telephone: +44 (0) 2920710295
Fax: +44 (0) 2920 706786
E-mail: cbarber@isset.org