

# Space race

For close to a century, humans have dreamt about travelling into space. With science fiction leading the way and the space race of the 50s and 60s culminating in NASA landing on the moon in 1969, interstellar travel has proven a fascinating and captivating topic for world governments, astrophysicists, environmental scientists, and finally, commercial businesses at the forefront of scientific innovation

**W**ith the existence of personalised space travel, exploration of the galaxy has never felt so accessible. These companies offer unique and exhilarating experiences like no other adventure and aim to create more astronauts and more accessible space travel looking into the future.

## BLUE ORIGIN

Founded by Jeff Bezos, Blue Origin has a vision for the future of space travel, where people are able to live and work in space, to alleviate much of the strain on Earth's ecosystem. As part of this initiative, Blue Origin focuses on reusable launch vehicles, not only for sustainability but also as the key in reducing the costs

associated with space travel. Their motto translates from the Latin 'Gradatim Ferociter' to 'step by step ferociously', reinforcing their mission to make space travel more accessible to everyone.

Blue Origin's space flight experience begins with their astronaut training program, where customers can stay on site at the Astronaut village near Van Horn,

Texas. The two-day program includes a thorough exploration of the rocket, using a capsule simulator and learning safety and Zero-G protocols for the flight. The New Shepherd vehicle, which was named for astronaut Alan Shepherd, launches from the west Texas desert and travels at numbers over three times the speed of sound.

The eleven-minute flight allows passengers to experience weightlessness and view Earth from space. With a price tag of somewhere between \$200,000 and \$400,000, Blue Origin is currently taking bookings for 2022. [blueorigin.com](https://blueorigin.com) ➤

**Below: Blue Origin's New Shepard on the Texas launch pad in April 2018**







## SPACEX

Perhaps the most well-known and widely publicised private space exploration company, SpaceX was founded by Elon Musk as an alternative to NASA. Their primary objective has been focused on returning humans to the moon in partnership with NASA, known as the Artemis mission. They are currently working on developing space travel as an alternative to air travel, which will significantly cut down on travel time. As an example, a space flight from Los Angeles, California to London, UK would last just 32 minutes as estimated by SpaceX.

Commercial space flights with SpaceX are completely customisable, with options to orbit the Earth or visit the International Space Station as a commercial astronaut. Flyers will be custom fitted with a pressurised space suit with touchscreen compatible gloves, flame-resistant fabric and hearing protection from launch and re-entry noise. Customers can book the Dragon rocket for trips to see famous landmarks, hometowns or other meaningful



**Top: Sir Richard Branson with Susana Martinez, Congressman Steve Pearce and White Knight Spaceship 2 Above: Elon Musk**

locations – or even for payload services to transport cargo into space. While specific prices for customised trips are not known, these look to be upward of \$50 million, whereas cargo transportation can start from as low as \$1 million. All enquiries about flights should be directed to the SpaceX sales team, but they do not currently have available dates published on their website. [spacex.com](https://spacex.com)

## VIRGIN GALACTIC

Virgin Galactic's journey into space launched in July of 2021, but Richard Branson founded the company in 2004, with hopes to get a jump on the space tourism industry early. Spaceport America acts as the centre of all flight operations and is the first commercial spaceport. The initiative Galactic Unite is also an integral part of the company's mission, providing support through grants, community engagement, mentoring and scholarship programs to young people interested in STEM careers.

Virgin Galactic offers a comprehensive training program

before launch, three days spent at Spaceport America learning how to operate in microgravity as well as staying safe through high acceleration. They offer mental and physical preparation, guided by aerospace medical experts, as well as a custom fitted flight suit and personalised custom designed seats that provide support and comfort upon re-entry into the atmosphere. The flight begins with a runway-style takeoff up to 50,000 feet, where the spaceship detaches from the mothership and flies to 300,000 feet where passengers can unbuckle and experience weightlessness, as well as look through the 17 available windows at a view of Earth from space. Cameras inside the ship record the entire experience to ensure each astronaut will never forget the experience. While launch dates are not publicly available currently, bookings can be made for around \$450,000 through the Virgin Galactic website.

[virgingalactic.com](https://virgingalactic.com) ■