

Spaceflight Test Engineer

What is it?

A Spaceflight Test Engineer designs, carries out and analyses tests on spacecraft, satellites, rockets and their components to make sure they are safe, reliable and ready for launch. They play a vital role in the UK's growing space sector, helping ensure spacecraft can survive the extreme conditions of launch, space travel and re-entry.

Qualifications/Experience Required:

A **degree** in aerospace engineering, mechanical engineering, electrical engineering, physics or a related subject.

Some roles prefer a master's **degree in aerospace** or space systems engineering.

Strong GCSEs and A levels, particularly maths and science.

Experience through industry placements, internships, sandwich degrees or graduate schemes is very valuable.

Some engineers also enter the field via degree apprenticeships in aerospace or engineering.

Type of person who may be suited to this job:

- Strong interest in space, science and engineering.
- Excellent problem-solving and analytical skills.
- Highly detail-focused and methodical.
- Comfortable working with complex technology.
- Able to work calmly under pressure and meet deadlines.

What the Work Involves:

- Planning and running tests on spacecraft and rocket components.
- Simulating space conditions such as extreme temperatures, vibration and vacuum.
- Collecting, analysing and reporting test data.
- Troubleshooting faults and improving designs.
- Working with design engineers, scientists and mission teams.
- Making sure systems meet strict safety and quality standards.

Money/Wage Guide:

- **Starting Salary: £32,000-£42,000**
- **Experienced Salary: £75,000-100,000+**

Future Prospects – Labour Market Information:

The UK space sector is growing rapidly, with increasing demand for engineers in satellite technology, launch systems and space exploration. With experience, Spaceflight Test Engineers can progress to **Senior Engineer**, **Lead Test Engineer**, or **Systems Engineer** roles

Typical weekly hours – 37 to 40 hours per week.

Extra hours may be required when tests are running or ahead of launches and major project deadlines.

Related Opportunities:

- **Aerospace Engineer**
- **Satellite Systems Engineer**
- **Propulsion Engineer**
- **Systems Test Engineer**

Further Information:

<https://nationalcareers.service.gov.uk/job-categories/engineering-and-manufacturing>

<https://www.ukspace.org>

https://www.esa.int/About_Us/Careers_at_ESA