



Career of the week

Astronaut

Astronauts fly spacecraft and do experiments in space

Average salary (a year): variable

Typical hours (a week): variable (days/nights/weekends)

You can get into this job through:

Direct Application

You can apply for astronaut training with the European Astronaut Corps or with NASA.

You need to be between 27 and 37 years old and able to speak English fluently. It'll be helpful if you can also speak basic Russian because it's spoken with English on the International Space Station.

You'll have an advantage if you're a pilot with at least 1,000 hours of flying experience in a high-performance aircraft like a fighter jet.

You'll also need a degree and a postgraduate qualification in a relevant subject like:

- biology, chemistry or physics
- engineering
- medicine
- aeronautics
- mathematics

You must hold US citizenship or US dual citizenship to become an astronaut with NASA.

Career tips

There's only a small number of astronaut training places available and there's a lot of competition for them.

You'll need to do rigorous physical and psychological testing as part of the application process so you'll need to maintain excellent health and endurance.

Skills and knowledge

You'll need:

- the ability to use your judgement and make decisions
- the ability to operate and control equipment
- physical skills like movement, coordination, dexterity and grace
- to be thorough and pay attention to detail
- leadership skills
- observation and recording skills
- the ability to accept criticism and work well under pressure
- thinking and reasoning skills
- to be able to use a computer and the main software packages competently

Restrictions and Requirements

You'll need to:

- pass a medical check
- have a good level of fitness

Day-to-day tasks

As an astronaut, much of your time will be spent training to carry out tasks before going into space. Once there, you could:

- clean and test air filters and air quality
- repair, maintain and test oxygen production systems
- clean and maintain water systems and testing for bacterial growth
- package and dispose of waste
- replace worn or broken parts on the spacecraft
- install or repair scientific instruments and equipment
- set up, carry out and monitor experiments
- take samples, like blood, from astronauts to assess their health
- communicate with Earth by satellite to transfer data and send reports

Working environment

You could work at a training centre.

Your working environment may be physically and emotionally demanding, cramped and you may spend nights away from home

Career progression

You'll have several years' training before you're ready for a mission. It may take you years to be selected for a space flight. Once you're selected, you'll get mission specific training. Your flight in space could last between 6 months and a year.

With experience you could:

- be selected for other missions
- move into management, teaching or research
- set up your own consultancy business

You can find out more about related career opportunities in space exploration from the European Space Agency.