

# How to get a mechanical engineering job at NASA

- This article will help you decide if you've got what it takes to work at NASA!
- We've got some guidance for you on how to apply for and land a mechanical engineering job at NASA.
- We'll cover details on what qualifications and skills you need to succeed. We'll even provide examples of some typical interview questions you might expect.
- On a side note, did you know that NASA use AI to sift through initial job applications?

If you were one of those kids that spent their whole childhood fantasising about working at NASA, then this article is for you. So, without further ado, let's take a look at how you can land that dream mechanical engineering job at NASA.

## What do NASA Mechanical Engineers do?

Mechanical engineers are vitally important to NASA's operations and space projects; whether it's designing mechanical ground support equipment, developing shutter mechanisms for space telescopes, or testing engine components, there are literally hundreds of jobs you could be asked to work on.



If you like variety, NASA is a great place to work as once one project finishes, you'll start work on another that may be in a completely different department. You certainly won't get bored, and you'll also get a chance to work with cutting-edge technology and be exposed to the latest materials, research, and engineering concepts.

## What skills and qualifications do I need?

Let's start with qualifications. You need to either be working towards or have completed a bachelor's degree in an appropriate field of engineering from an accredited college or university. Obviously, a mechanical engineering degree is the best bet, but they will accept applications from graduates of degree courses that are closely related to the type of work and that demonstrate the relevant knowledge, skills and abilities.

The main skills required for a mechanical engineering job at NASA are problem-solving, communication, team-work, perseverance and adaptability. As with all engineering jobs, you'll need a keen eye for detail and the ability to act on feedback or criticism.

## What training programs does NASA offer?

There are various routes to getting a mechanical engineering job at NASA. If you're a student who is interested in working and studying at the same time, the NASA Pathways Intern Employment Program (IEP) is ideal for you. For people that have graduated within the past two years, the Pathways Recent Graduates Program (RGP) offers the best opportunity to get started on a career at NASA. The Presidential Management Fellows (PMF) program is for applicants that have completed a doctorate, masters, or professional degree within the past two years.

Upon successful completion of any of the NASA programs, there is a good chance of permanent or fixed-term employment of up to six years.

## How to apply for a mechanical engineering job at NASA

NASA has their own automated recruiting system called NASA STARS. You set up an account on their website, and you can then upload a maximum of 5 resumes, with a character limit of 32,000 for each. You will also have to answer some screening questions at this stage.

NASA's (as you would expect) highly advanced AI system then sifts through the applications to find the most promising candidates. You will be notified of whether you have been successful at reaching the next stage or not once the decision has been made. If your credentials fit the requirements, your information will be passed on to a hiring manager, and you will be called to interview.

Therefore, it is very important to get your resume(s) top-notch before applying. Make sure you make yours stand out and include extra-curricular skills and abilities you have that may be applicable to the job.

## NASA's interview process

NASA don't publish too many details of their interview process. Anecdotal evidence suggests that interviews for potential engineers are fairly casual. Do expect to answer some fairly challenging questions, however. Here are a few interview questions that candidates have reportedly been faced with, that with a bit of homework you should be able to answer with no problems.

- How do you stay up to date on aerospace-related current events?
- What has been the biggest breakthrough in aerospace engineering in the past decade?

- Give us an example of a time when you applied your ability to use analytical techniques to define problems or design solutions.
- Describe any projects or coursework which equip you to work on design issues for rocket propulsion systems.

## Think outside the box

The most important quality that NASA look for in a mechanical engineer is ingenuity. You need to be able to demonstrate how you can solve problems that others can't, and how you can apply yourself to coming up with innovative ideas and solutions. Be sure to include any details of projects, events, competitions, etc. where you have demonstrated these abilities. Ask yourself this, what is going to make me stand out from a crowd of potentially hundreds of other applicants?

