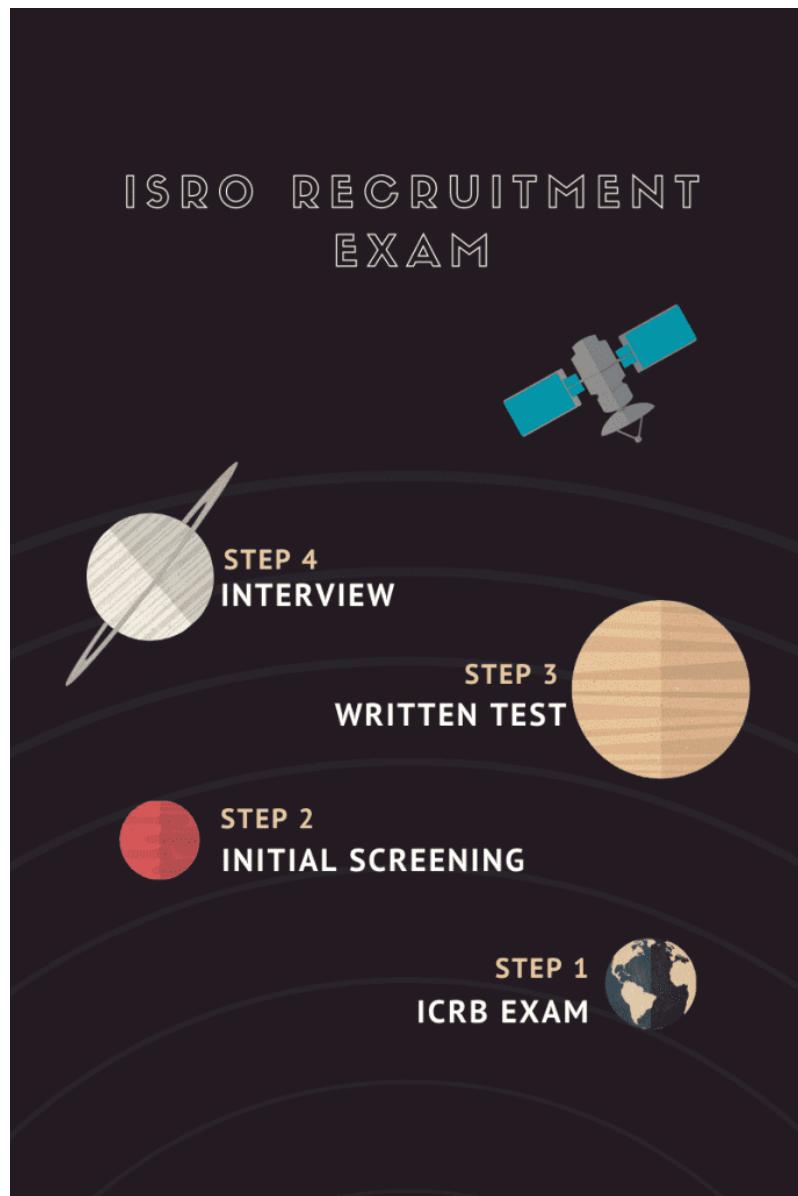


Who Is A Space Scientist?

Space science is the study of the universe by scientists. To become a space scientist in ISRO, you must pursue an engineering or science course. ISRO usually recruits professionals with a masters in mechanical, electrical or computer engineering or a PhD in Astronomy, Physics, or Mathematics. Physicists concentrate on the field's theoretical aspects as well as laboratory equipment. They are in charge of how things work in space, while astronomers research stars, planets, galaxies, and other objects. All roads lead to a career in space science, regardless of the area you select.

How To Become A Scientist In ISRO

For the young minds who are wondering [how to become a scientist in ISRO](#), following a proper educational path with all the necessary subjects is of utmost importance. Directly or through the CRB examination, the candidates who have a sound knowledge and required skills pertaining to the fields of astronomy, physics, and mathematics are generally recruited by ISRO. Given below is a comprehensive summary of the education and specializations you need to know about before becoming a scientist in ISRO:



Step 1

First and foremost, the students need to have MPC subjects (Mathematics, Physics, and Chemistry) during their 10+2 level of secondary level education. They should have an excellent aptitude and sound knowledge in Mathematical as well as Physical concepts so taught to them.

Step 2

After passing the higher secondary school with an exceptional CGPA or percentage (above 75%), the students should enroll in one of the many engineering branches available through JEE Advanced and JEE mains. Even though the list of best engineering courses is long, the students must pursue BTech or BE in courses such as Mechanical Engineering, Aerospace Engineering, Computer Science Engineering, Electronics Engineering, Electrical Engineering, Engineering Physics, Radio Engineering, and other related fields.

Step 3

On completion of the BTech/BE degree, the third step on how to become a scientist in ISRO is to give the ISRO Centralized Recruitment Board (ICRB) exam. The eligibility for taking this exam is that a candidate must hold a BTech or BE degree in Computer Science, Electronics, or Mechanical or any other related field with a minimum aggregate of 65% marks or 6.8 CGPA on a scale of 10. After clearing the exam, the shortlisted candidates have to appear for a written test and an interview round to join the organization successfully.

Note: ISRO prefers to recruit fresh graduates from the top engineering colleges in India such as IISc, IITs, NIT, IIST and other highly reputed government and private institutes. An advantage of pursuing an engineering degree from IIST is that a student with exceptional academic records will be absorbed in the organization.

Step 4

There is also another route on how to become a scientist in ISRO for those who have completed their Masters (MSc, ME or MTech) and PhD in related specializations.

Step 5

On completion of the degree program, Some of the top MTech courses include, such as geophysics, geoinformatics, instrumentation, applied mathematics, etc. For applying directly to the ISRO, the selection process includes a written test and an interview. Clearing this, the candidates can secure a job as a scientist at ISRO.

Step 6

One may apply for a position as a junior research fellow at ISRO, which allows them to conduct research as scientists and engineers. The selection process for a Scientist in such an organisation is extremely difficult and necessitates the highest level of intelligence, wits, and a very presentable and relaxed demeanour.

How To Become Scientist In ISRO after 12th

If you are planning to become a Scientist in ISRO after Class 12th, you need to get admission to one of the best institutes of India i.e. Indian Institute of Space Science and Technology(IIST) which becomes one of the best ways you can join ISRO as a Scientist.

- You can only be eligible for ISRO if you have qualified for BE/BTech with a degree in first class and a minimum aggregate of 65% or CGPA of 6.84
- Here are one of the three exams that you can take to reach ISRO after Class 12:
 - JEE Advanced
 - Kishore Vaigyanik Protsahan Yojana
 - State and Central Board based Aptitude Test taken by IISER

Courses To Go For In Space Science After 12th

- B.Tech in Aerospace Engineering

- B.Tech in Avionics Engineering
- B.Tech+M.S./M.Tech
- Bachelor's in Physics (BSc Physics)
- Masters in Physics (MSc Physics)
- PhD in Physics
- B.Tech. in Engineering Physics + M.S. in Solid State Physics, Astronomy, Earth System Science/ M.Tech. in Optical Engineering
- M.Tech in Electronics, Electrical, Mechanical and Computer Science
- PhD in Aerospace Engineering
- Masters in Astronomy (MSc Astronomy)
- PhD in Astronomy
- B.Tech + M.Tech in Engineering (Mechanical, Electrical, CS {Computer Science})

Top Space Science Colleges In India

Well, apart from answering your question on how to become a space scientist in the top institute in India i.e. ISRO, we have also compiled a bonus list of top and best space science colleges/institutes in India, just to ease your task of hunting where to study or where to begin from.

1. Indian Institute of Science, Bangalore
2. Indian Institute of Space Science and Technology, Thiruvananthapuram
3. Indian Institute of Technology, Bombay
4. Indian Institute of Technology, Kanpur
5. Indian Institute of Technology, Madras
6. Indian Institute of Technology, Kharagpur
7. Indian Institute of Astrophysics, Bangalore
8. Inter-University Centre for Astronomy and Astrophysics, Pune
9. National Centre for Radio Astronomy, Pune
10. Indian Institute of Space Science and Technology, Kerala
11. Aryabhatta Research Institute of Observational Sciences, Nainital
12. Centre for Earth and Space Sciences, (University of Hyderabad)
13. Physical Research Laboratory, Ahmedabad
14. Radio Astronomy Center, Ooty
15. Raman Research Institute, Bangalore
16. Hindustan Institute of Technology and Science
17. Manipal Institute of Technology
18. Birla Institute of Technology, Mesra
19. Madras Institute of Technology, Chennai
20. International Institute for Aerospace Engineering and Management, Jain University Bangalore

How To Become A Space Scientist In ISRO

For those confused about how to become a space scientist in ISRO, worry not as in this section we will provide a detailed step by step guide on how to become a space scientist in ISRO.

Step 1: Students must complete their 10+2 level of secondary education with Mathematics, Physics and Chemistry as their compulsory subjects. They should have knowledge of the physical concepts of Mathematics.

Step 2: After completing schooling, students must go on to pursue engineering in their higher studies.

They can pursue any of the following specialisation in B.Tech/B.E – Mechanical Engineering, Electronics Engineering, Electrical Engineering, Aerospace Engineering, Computer Science Engineering, Engineering Physics, Radio Engineering, and other related fields.

Step 3: Once candidates have completed their B.E / B.Tech, they must appear for the ISRO Centralized Recruitment Board (ICRB) exam. The eligibility for taking this exam is that students must have completed BTech or BE degree in Electronics, Computer Science, or Mechanical or any other related field with a minimum aggregate of 65% marks or 6.8 CGPA on a scale of 10. Students who have cleared the exam, will be asked to appear for a round of written test and interview conducted by ISRO.

How To Become An Astronomer In ISRO

ISRO hires astronomers in two manners:

- Through reputed institutions
- Through off-campus hiring

If you wish to become an astronomer in ISRO, you must study in an ISRO dedicated group for astronomy studies at IISc Bangalore, PRL Ahmedabad, Indian Institute of Astronomy, Bangalore, or Tata Institute of Fundamental Research.

Once you have completed your BTech or MTech, you need to take the GATE exam in Astrophysics. You need to have a position under 200 to get in the top institutes where ISRO comes for recruitment.

How To Get Job In ISRO After Computer Engineering

In order to get a job in ISRO after Computer Engineering, you need to follow this process:

- You need to score at least 65% in your BTech/ BE program
- Your age should be below 35 years of age
- You must take the test by the ISRO Centralized Recruitment Board
- The test includes a written test and an interview to join the team

List of Top Aerospace Engineering Courses
List of Colleges for Aerospace Engineering in India 2021
Aeronautical Engineering

FAQs on How to Become a Scientist in ISRO

Naturally, the candidates would have numerous questions and doubts after reading about how to become a scientist in ISRO. To clear some of your doubts, here are some of the most frequently asked questions asked by many aspiring candidates:

What is the meaning of 'SC' in the scientist exam for ISRO?

SC is the foremost grade at ISRO. After clearing the written exam and interview, the candidates can be recruited as scientist/engineer 'SC'. After gaining the requisite experience, the employees can go up to SD, SE, SF, SG, SH levels.

How to apply for the post of Scientist/Engineer 'SC'?

To apply for the post of Scientist/Engineer 'SC', you can visit the 'Careers' portal on the official website of ISRO. Click on the corresponding advertisement for the post you are looking for and then on the "visit page" and scroll down for the application link.

For those pursuing a diploma with BE/BTech (Lateral Entry), the course consists of only 6 semesters and not 7th and 8th, how to proceed with the online application?

In the third step of your online application, you can select the Diploma+BE/BTech option. Therein, you will see all the fields having only 6 semesters.

What are the qualification for ISRO?

Candidates must have completed a B.E/B. Tech or equivalent qualifying degree in first class with an overall minimum of 65 percent marks or a CGPA of 6.84 on a scale of ten.

How can I join ISRO after 12?

You can enter ISRO as a scientist or an engineer in one of two ways. You will take the IIST exam (Indian Institute of Space Science and Technology (IIST), Trivandrum) after or during your 12th grade. The IIST website, www.iist.ac.in, has more information about this test.

Can I join NASA from ISRO?

The short and simple answer to your question is that there are no positions available at ISRO or NASA after 12th grade. A bachelor's degree is required for employment at ISRO, with a master's degree preferred. To get a position at NASA, you must already be in the United States with a valid work visa and a decent bachelor's degree.

Do ISRO employees get a pension?

The most important advantage is work security. You get a long-term job with the assurance that your job will be secured. After retirement, all ISRO employees are responsible for their pension