

ASTROPHYSICIST

Astrophysicists or Astronomers are scientists who specialize in studying space, stars, planets, and the universe. Their responsibilities include analysis of data and statistics, archiving, plotting, logging, evaluating and reporting the results of the research. They may have to coordinate data received from various satellites and telescopes, and use theoretical models to compare this data and align images.

PERSONAL COMPETENCIES



- You enjoy Science
- You would like to take up a course related to Physics
- You can use a computer to solve a scientific problem



The approx course fee ranges between **INR 5,000 - 5,00,000***

**These figures are estimated numbers and will vary from Institute to Institute.*

SCHOLARSHIPS

• National Scholarship Portal - Visit www.scholarships.gov.in. Under this portal there are Central Government schemes, UGC/AICTE Schemes and Assam Government Schemes offered by different departments*

• Visit www.buddy4study.com for details on available scholarships. This is a gateway to scholarships starting from Class XI*

• Scholarships are also available in the institutes based on merit*

**(Availability of these scholarships can vary from time to time)*

LOANS

• VidyaLakshmi, www.vidyalakshmi.co.in, is a portal for students seeking education loan. This portal has been developed under the guidance of the Department of Financial Services, (Ministry of Finance), Department of Higher Education (Ministry of Human Resource Development) and Indian Banks Association (IBA)

• Some states have student credit cards with low interest rates, for instance, West Bengal, Odisha, Bihar, etc.

• All banks give education loans



ENTRY PATHWAY

1. Complete 10+2 in Science (Physics, Chemistry and Maths)
2. Complete a Bachelor's degree (B.Sc.) in Physics

OR

Complete a Bachelor's degree followed by a Master's degree (M.Sc.) and Ph.D. in Astronomy and Astrophysics

Please check the duration of the course during enrolment



EXPECTED INCOME

**The figures are indicative & subject to change*

The approx. salary of an Astrophysicist ranges between **INR 1,00,000 - 2,00,000*** per month.

Source: <https://www.salaryexpert.com/salary/job/physicist-astrophysics/india>

WHERE WILL YOU WORK?

Places of Work: Public and Private Research and Observation Centres

Work Environment: It is not a desk job. You will not handle a team. Local travel is a part of this job role. Part-time work and contractual jobs may be available. Organizations usually work for 5 to 6 days a week and 8 to 9 hours every day. This may vary from organization to organization. Shift system may be available

Opportunities for work exist for differently abled in this field

EXPECTED GROWTH PATH

Junior Researcher → Astrophysicist → Head of Department

Search keywords...



astrophysics, astronomers, astrophysicists

WHERE WILL YOU STUDY?

This course is offered by the Department of Mathematics. This list of institutes is indicative only

GOVERNMENT INSTITUTES

1. IIT - Guwahati
2. Cotton Univeristy, Silchar
3. Dibrugarh University, Dibrugarh
4. Tezpur University, Tezpur
5. NIT Silchar
6. Assam University, Silchar
7. Indian Institute of Technology, Jodhpur
8. Indian Institute of Technology, Kharagpur

PRIVATE INSTITUTES

(Please check if the institute is affiliated and accredited with UGC before applying)

1. Assam Down Town University, Guwahati
2. Royal Global Univeristy, Guwahati
3. St Joseph's College, Bangalore
4. PSG College of Arts and Science, Coimbatore
5. Assam Don Bosco University, Guwahati
6. Dr DY Patil Arts Commerce and Science College, Pune
7. Presidency University, Kolkata
8. St Teresa's College, Ernakulam

Information on the institute rankings can be found at - <https://www.nirfindia.org/2022/Ranking.html>



DISTANCE LEARNING INSTITUTE

Indira Gandhi National Open University (IGNOU)

ONLINE COURSES

- NPTEL* Swayam - <https://swayam.gov.in/explorer?searchText=astrophysics>
- Udemy - <https://www.udemy.com/courses/-search/?src=ukw&q=astrophysics>

**NPTEL- National Programme in Technology Enhanced Learning. It is by the Government of India and offers a variety of courses in an audio - video form*

EXAMPLE FROM THE FIELD

Annapurni Subramaniam is currently the director at Indian Institute of Astrophysics, Bangalore. She has a BSc and MSc from Calicut University. She completed her PhD at IIA, Bangalore. She is known for her work in areas like star clusters, star formation, galactic structure, stellar population in galaxies and Megellanic clouds*.

Source: <https://www.iiap.res.in/IIA50/sites/default/files/Women-Astronomers-IIA.pdf>

**The above information is for training purposes only and will not be used for any commercial gains*