

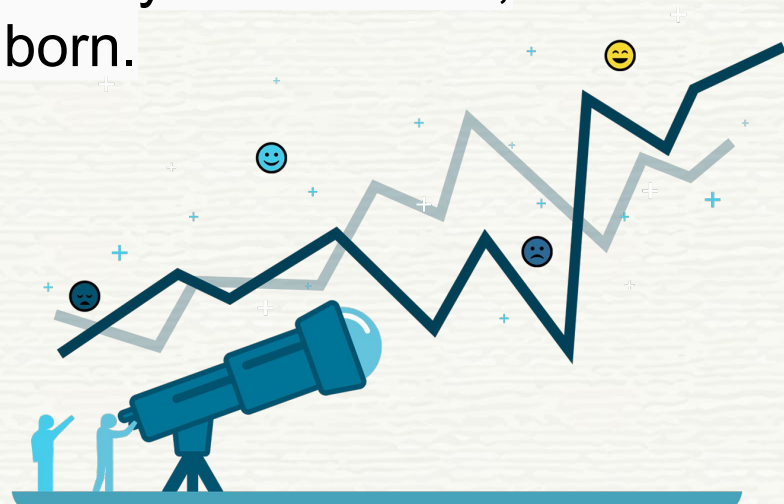


Astronomer

by: Elliott Kulm-Cookson

Career Description

Astronomy is my career because it is one of the oldest professions in science. For centuries people have been admiring the beauty of the night sky, wishing to learn what the stars and other celestial objects are, and how the Universe “works”. Astronomers are time travellers – they look way back in time, when the Universe was born.



Career Forecast

3 increasing careers

- **Data scientists and mathematical science occupations, all other 31%**
- **Solar photovoltaic installers 51%**
- **Wind turbine service technicians 61%**

2 declining careers

- **Nuclear technicians -18.9%**
- **Aircraft structure, surfaces, rigging, and systems assemblers -17.4%**

Education Required

- Most research astronomers have doctorate degrees in physics or astronomy and also bachelor's and/or master's degrees in a physical science, usually physics or astronomy.
- 10 years of education beyond normal high school education to become a research astronomer.



Salary Potential

In California, the average salary for this career with a doctoral degree ranges from: \$117,000 to over \$150,000.

In California, to teach community college with a masters degree ranges from: \$60,000 part-time to over \$120,000 full-time.



Schools With Programs in Astronomy

- O University of California - Riverside (B.A., B.S., M.A., M.S., and Ph.D. in Physics and Astronomy)
- O California State University - San Bernardino (B.A. and B.S. in Physics and Astronomy)
- O San Bernardino Valley College (A.S. in Astronomy)

Cost of Education



Associate of Arts in Astronomy - \$0 to \$50 per unit. The total cost of attendance per year is about \$3,000.

Bachelor of Arts or Science in Physics or Astronomy - approximately \$50,000 per year (Private) or \$12,500 (Public)

Master of Arts or Science in Physics or Astronomy - approximately \$25,000 (Public)

Work Styles

Analytical Thinking — Job requires analyzing information and using logic to address work-related issues and problems.

Initiative — Job requires a willingness to take on responsibilities and challenges.

Achievement/Effort — Job requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks.

Integrity — Job requires being honest and ethical.

Attention to Detail — Job requires being careful about detail and thorough in completing work tasks.

Skills

Reading Comprehension — Understanding written sentences and paragraphs in work related documents.

Science — Using scientific rules and methods to solve problems.

Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.

Abilities

Deductive Reasoning — The ability to apply general rules to specific problems to produce answers that make sense.

Inductive Reasoning — The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).

Mathematical Reasoning — The ability to choose the right mathematical methods or formulas to solve a problem.

Oral Expression — The ability to communicate information and ideas in speaking so others will understand.



My Dream Job:



My dream job is to be an astronomer at an observatory. I have been to the observatory in the Rancho Mirage library and I will go to the N.A. Richardson observatory in the future. I am also interested in visiting the Big Bear Solar Observatory. These could be tremendous places to work and teach people about outer space.



Pros and Cons

Pros

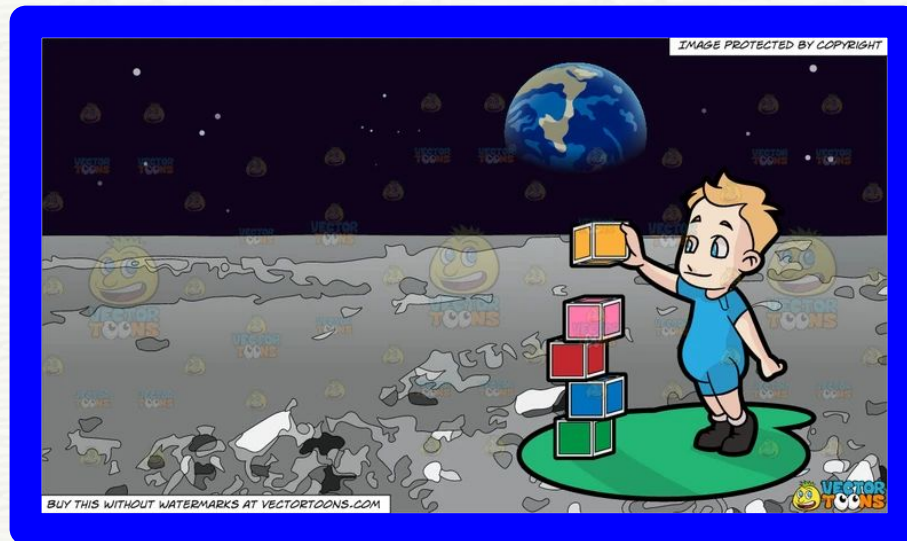
- ❑ It is about stars, planets, and science.
- ❑ I can educate people when they come to visit the observatory.
- ❑ The salary for an astronomer would give me a good quality of life.

Cons

- ❑ It takes a lot of education and hard work to be an astronomer.
- ❑ There are limited opportunities in the field of astronomy.

I'm interested in this career because . . .

Ever since I was a little boy I loved everything that had to do with space and the stars. In fact, most of my favorite toys looked like stars and planets.



Astronomy is a HOT career!



Neil DeGrasse Tyson on *Hot Ones* with Sean Evans

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