What to do with a degree in

ASTROPHYSICS

Astrophysics is the application of physics to the study of astronomical objects and phenomena. The goal is to understand and explain how astronomical objects and phenomena occur and work.

**Key Skills & Knowledge**

**Analytical** - Organize, analyze and interpret scientific data; Compare and contrast ideas and information; Articulate and analytical; Careful attention to detail

**Technical** - Computer simulation/modeling; Laboratory techniques; Operation of scientific equipment and safety procedures; Programming and systems analysis skills

**Communication** - Preparing technical or research reports; Synthesizing complex information to present ideas and data clearly

**Organizational** - Conceptualize and implement projects and meet deadlines; Observation and decision making skills

**Critical thinking** - Critical thinking and problem solving

**Research** - Utilize survey research methods research skills; Defining problems and developing research designs and models; Curiosity, imagination, and creativity; Provide relevant perspectives ability to make projections

**Mathematical and observational skills** - Utilize the appropriate mathematical formulas to perform calculations

**Sample Job Titles**

- Aerospace Research Scientist
- Astronaut
- Astronomer
- Astrophysicist
- Biophysicist
- Computer Programmer
- Environmental Analyst
- Environmental Health Specialist
- Geneticist
- Inorganic Analyst
- Laboratory Technician
- Occupational Health & Safety Specialist
- Physicist
- Quality Assurance Assistant
- Research & Development Scientist
- Science Laboratory Technician
- Systems Analyst
- Teacher/Professor
- Technical Writer

Some of these roles may require further training, certification or education. Check out the Alberta Government’s occupational profiles for salary info and more detail: [alis.alberta.ca/occinfo](http://alis.alberta.ca/occinfo)

**Need help deciding what to do?**

Formal Career Assessments like the Strong Interest Inventory and the Myers Briggs Type Indicator can be helpful tools for your career development. Request an assessment via CareerLink
**Potential Industries**

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**Associations & Professional Development**

Associations provide an opportunity for continued professional development. Many also offer networking opportunities and other events for their members.

- American Institute of Physics: [www.aip.org](http://www.aip.org)
- Canadian Association of Nuclear Medicine: [www.canm-acmn.ca](http://www.canm-acmn.ca)
- Canadian Association of Physicists: [www.cap.ca](http://www.cap.ca)
- Canadian Astronomical Society: [www.casca.ca](http://www.casca.ca)
- Canadian Nuclear Society: [www.cns-snc.ca/](http://www.cns-snc.ca/)
- Canadian Organization of Medical Physicists: [www.comp-oepm.ca](http://www.comp-oepm.ca)
- Rothney Astrophysical Observatory: [www.ucalgary.ca/rao](http://www.ucalgary.ca/rao)
- TRIUMF - Canada's National Laboratory for Particle and Nuclear Physics: [www.triumf.info](http://www.triumf.info)

**Additional Resources**

- Careers in Physicists by American Institute of Physics
- Careers in Focus: Mathematics & Physics by J.G. Ferguson Publishing Company
- Careers in Science by Thomas A. Easton
- Landing Your First Job: A Guide for Physics Students by American Institute of Physics

**Faculty Contact**

Science B 605  
T: 403.220.5385  
E: office@phas.ucalgary.ca  
W: phas.ucalgary.ca/  
W: ucalgary.ca/admissions/programs

**Student Clubs**

Physics and Astronomy Students’ Association  
[ucalgary.ca/~physasstr](http://ucalgary.ca/~physasstr)

**Aligned Majors:**

- Environmental Science, Natural Sciences, Mathematics, Physics