



Your Degree What Next:

Physics and Astrophysics

Physics and Astrophysics explores astronomical instrumentation, spectroscopy, the solar system, stellar evolution, supernovae, galaxies, interstellar matter, black holes and cosmology. Trinity students have an opportunity to study with world-leading experts, and study modules designed to develop knowledge and expertise across various astrophysics areas.

What skills can I develop at Trinity?

You gain a wide range of skills while at College, through academic study, clubs and societies, voluntary work, student politics, work and other commitments. These are important to recognize as they inform your career decisions and are a critical ingredient in your applications for postgraduate study and jobs. Here are some skills you can gain through your course:

- 1. Critical Thinking** - The most fundamental part of a university education is learning to work on your own and to make independent judgments. You have to discover the information that you need to analyse complex questions and develop your ideas about them and to present your arguments clearly and persuasively.
- 2. Teamwork** - Learning to work as part of a team is an important skill; sharing the workload, agreeing roles and working as a team to develop ideas, analyse information and present a coherent group argument.
- 3. Independent Research** - You will have learnt how to use the library and other complex information resources and co-ordinate information from a wide variety of sources.

4. Logical argumentation - You will know how to bring together facts and arguments in order to answer a specific question or analyse a problem.

5. Time and project management - By working on assignments and studying for exams you will have developed the ability to revise and consolidate your work and know how to extract the essential points from a mass of information. You will also have learned how to manage your own time and to work under pressure of deadlines.

6. Verbal communication - You will know how to present your ideas orally and to contribute constructively to discussions.

7. Written communication - You will have had the opportunity to present your ideas in writing accurately and concisely, using convincing arguments which are based on solid evidence; responding flexibly to different types of questions and expressing your thoughts concisely; carrying out in-depth research on a specialised topic and develop the sustained writing skills needed.

8. Digital Skills - You will have the opportunity of developing your computer skills both from typing up your own essays and papers and from undertaking searches on the web & using databases.

9. Personal Development – You are managing the learning required for a degree and recognising the gaps in your understanding and ensuring that these are addressed in ways that best suit your learning style.

What can I do with Physics and Astrophysics degree?

Physics and Astrophysics students have various options available upon completion of their degree. Careers are available in academic research and industry in the areas of: electronics, telecommunications, healthcare and aerospace. Here are some examples of employment opportunities:

Roles

Materials Scientist
Polymers Technologist
Robotic Process Automation SD
Aerospace Mechanical Engineer
Research Assistant
Data Scientist
Process Engineer

Employers

Intel
CRANN
Trinity College Dublin
Imperial College Dublin
Max Planck Institute for Solid State Research
University of Cambridge

Many students go on to postgraduate courses such as masters or PhD to develop skills in specific disciplines: polymer physics, high-performance computing, bioengineering, physics and astrophysics and non-physics related courses, such as science communication.

Useful Resources

The organisations and professional bodies listed below are useful resources for career / sector specific information:

Resources

gradireland (IE)
Targetjobs (UK)
Prospects (UK)
Sciencemag (Global)
Vault Career Insider (Global)

Professional Bodies/ Resources

Science's Next Wave
Materials Science Gateway
Physics World
American Chemical Society
Summer School Alpach

How can the Careers Service help you?

The Careers Service supports students in exploring their career options and connects students with employers. You can book an appointment with your careers consultant to help you deciding your next step in your career.

Login to MyCareer at www.tcd.ie/careers and book your appointment today.

Contact Us

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