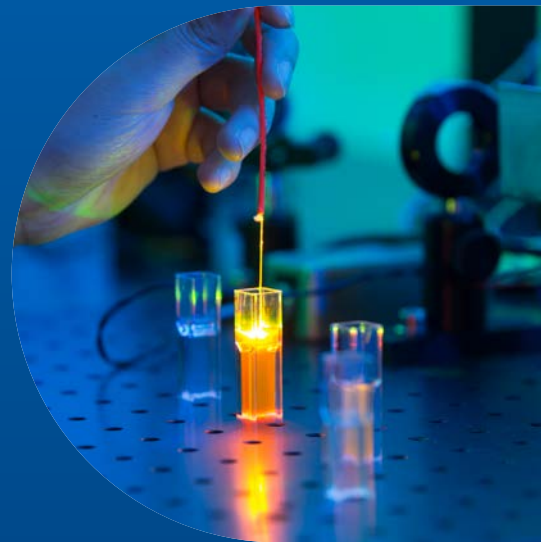


Mātai Ahupūngao Undergraduate Physics



Understanding physics means to understand the laws of nature, and the nature of matter. Physics is arguably the most fundamental of all sciences – study Physics if you want a sharp insight into the world around you, and you want to apply that knowledge to environmental, medical, communications, and other real-world applications.

What is physics? And what can I do with it?

Physics is the study of how matter, energy, and forces work at scales from the very smallest fundamental particles up to the grandest scale of the Universe itself, and importantly everything in between!

It's also about using our understanding of physics to do useful things. This means we frequently work beyond physics in both inter- and trans-disciplinary studies. For example, to create new medical imaging or communication technologies.

What you will learn

All of modern science and technology is underpinned by physics. As a Physics student you'll gain an understanding of matter as well as training in experimental methods and the mathematical analysis of physical processes, such as energy and force.

Prerequisites

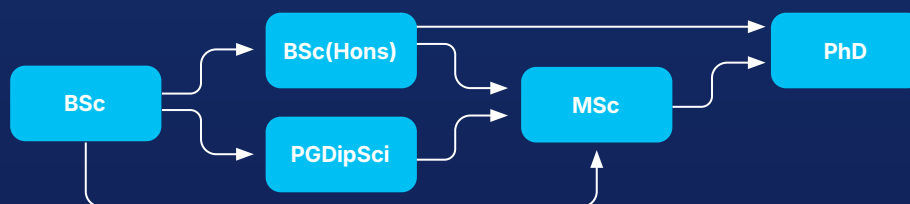
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Choosing a subject

With so many options it's sometimes hard to choose what you want to study, but we've got you covered. You can study a double major with our Bachelor of Science to gain a broader base of skills and knowledge.

Complementary majors include:

- > Chemistry
- > Computer Science
- > Earth Sciences
- > Environmental Science
- > Mathematics



Career opportunities

A door to a range of opportunities

A Physics degree provides students with the skills they need to succeed and our graduates are found in a host of interesting jobs in New Zealand and around the world.

It's important to know the applications of physics are wide, so there is no 'typical physicist' job. Graduates have a wide range of career paths available to them. From patent consulting to weather forecasting, diverse opportunities await. You might find yourself in research, business, finance, IT, teaching, or the environmental and engineering sectors.

With a Physics degree you can plot a professional pathway that will take you places you've never been before.

Our Physics graduates are employed in a wide and varied range of careers and industries, for example:

- › R&D for Fisher & Paykel Healthcare
- › R&D for MacDiarmid Institute and Dodd-Walls CoRE spinout companies
- › Software developer at Rocket Lab
- › Teacher, Western Springs College
- › Tester, Planit Software Testing - New Zealand
- › Technical writer, Integrated Control Technology (ICT)
- › Policy analyst, New Zealand Treasury
- › Programmer, Catalyst IT

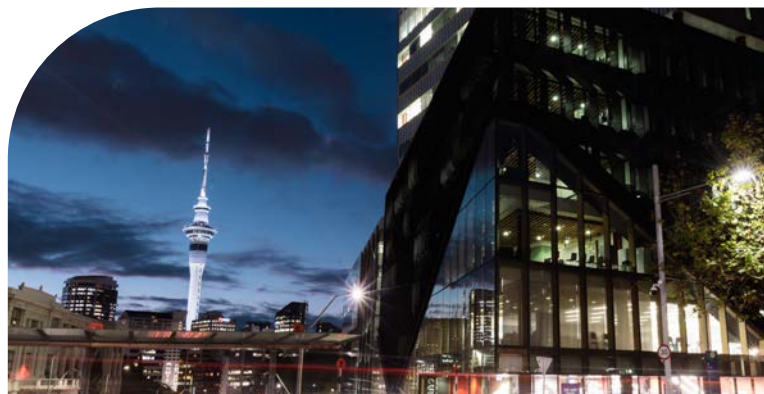
Other positions and roles include:

- › Materials development
- › Patent consulting
- › Weather forecasting

What you can study

BSc, BSc(Hons) in Physics

- › Acoustics and seismology
- › Astronomy and Astrophysics
- › Nano and Materials Physics
- › Climate, atmospheric and ocean physics
- › Lasers and optics
- › Nuclear Physics
- › Quantum Physics



Find out more about how your degree will be structured and what courses you need to take at

auckland.ac.nz/science/ug-physics

Applications close on 8 December.



"The fundamental laws that govern our universe have interested me since I was young. I enjoy seeing how we can take a small number of essential principles and use them to understand a multitude of diverse phenomena."

Caleb Todd

BSc in Physics and Mathematics, BSc (Hons) in Physics

Kuhua ki tō mātou hāpori, ā, Kimihia tōu Pūtaiao.
Join our community and find your Science.



Disclaimer: The information in this document is a general guide only for students and subject to alteration. All students enrolling at the University of Auckland must consult its official Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies. [2025]

Have any questions?
Contact the Student Hub

auckland.ac.nz/student-hubs