Faculty of Science

PHYSICS

Bachelor of Science (BSc)

Physics studies the laws that govern the behaviour and interaction of energy and matter. Physicists believe everything can be explained in terms of a set of fundamental physical laws, and attempt to discover these laws and understand the world at its most basic level. Much of your learning will occur while actively working on problems in class, during tutorials, and in the laboratory. This degree will provide you with a strong foundation in applied mathematics, chemistry, physics, advanced physics and applied physics.

Did You Know?

Through the Science Mentorship Program, you’ll have the opportunity to be paired with an upper year student to attend program events, discuss academics, and participate in social activities.

Awards

BOB GRAINGER ENTRANCE BURSARY - UP TO $9,000
CHANCELLOR’S CLUB SCHOLARSHIP - UP TO $10,000 (RENEWABLE)

Job Titles

LAB TECHNICIAN
INDUSTRY CONSULTANT
PHYSICIST

Student Clubs

PHYSICS & ASTRONOMY STUDENTS’ ASSOCIATION
WOMEN IN SCIENCE AND ENGINEERING

Drew F.
BSc’03

Drew earned a degree in physics, works as an environmental analyst, and ranks among the top soccer referees in the world. During his bachelor’s degree he delved into quantum systems and developed valuable skills in numerical modelling. This knowledge led to his current role as an environmental analyst.

View Program Requirements

1. Visit ucalgary.ca/future-students/undergraduate/explore-programs
2. Select your program
3. Select your type of admission (high school or transfer)
4. Choose the location of your high school

Sample First-Year Courses

FALL

Classical Physics (PHYS 277)
Linear Methods I (MATH 211) or Honours Linear Algebra (MATH 213)
Calculus for Engineers and Scientists (MATH 275)
General Chemistry: Structure and Bonding (CHEM 201)

WINTER

Electromagnetic Theory I (PHYS 255)
Introduction to Computer Science (CPSC 217)
Multivariable Calculus for Engineers and Scientists (MATH 277)
General Chemistry: Change and Equilibrium (CHEM 203) or Energy Flow in Biological Systems (BIOL 241) or DNA, Inheritance and Evolution (BIOL 243)

Non-science option

The mathematics and physics and astronomy departments are conducting world-class research, with valuable international research opportunities. I initially chose UCalgary because it was close to home, but with all the cool research being conducted on quantum information, geometry and space, the drum circles, and being right beside the Rockies too — I had to!

Alex C., physics student

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