



PHYSICS AT SFU

The Physics Department at Simon Fraser University has four streams of introductory physics courses. There are three streams taught at SFU Burnaby. Choose a stream based on your interests and abilities, and on what is required for your intended program. At SFU Surrey, we offer a general introductory physics stream suitable for any program taught in a unique learning environment.

Life Sciences: PHYS 101/102/130 (credits: 8 total)

This stream of introductory physics is designed for those who wish to specialize in bioscience or kinesiology, or who ultimately desire a career in the health sciences. This stream is appropriate for you if you fit this profile.

Standard: PHYS 120/121/131(credits: 8 total)

Designed for students who want to take a general, introductory physics course. Students who know that their academic futures will require a strong background in physics even though they may be leaning towards a major in areas such as chemistry, molecular biology, earth sciences or environmental science should select this stream. This stream is also suitable for those wishing to major in physics, applied mathematics and engineering.

Advanced: PHYS 125/126/131(credits: 8 total)

Designed for those students who excel in mathematics and physics and who are comfortable with the material presented in Physics 12 and Mathematics 12, this stream will introduce students to approaches that professional physicists use to understand nature, and include an introduction to Einstein's special theory of relativity. A grade of 'A' in both Physics 12 and Mathematics 12 is a prerequisite for this stream. While all students who enjoy physics and meet the prerequisites are encouraged to choose this stream, it is recommended for students intending to major in physics or applied mathematics as well as for most students planning to pursue an engineering degree.

Studio Physics: 140/141(credits: 8 total)

Offered at the Surrey campus. A unique concept incorporating lectures and labs together. This stream provides a "hands on" approach to physics. This is a general introductory physics course suitable for all programs, including life sciences. Students who have taken this stream will have the equivalent of physics 101/102/130 or physics 120/121/131 or physics 125/126/131 (130 and 131 are the first year physics lab courses).

All streams cover mechanics, electricity and magnetism. Other topics covered in the 101/102 stream include thermal physics, fluids and optics. Other topics covered in the 120/121 and 125/126 streams include a selection of topics from modern physics.

The physics 101, 120, 125 streams have an associated lab course, P130 or P131 (usually taken in the second semester). Students may switch from one stream to another between semesters. It will also be possible to switch between streams during the first two weeks of the semester if the chosen stream is found to be inappropriate.