PHYSICS MAJOR CONCENTRATION (B.A. & SC.) (36 CREDITS)

Offered by: Physics (Faculty of Science)
Degree: Bachelor of Arts and Science
Program credit weight: 36

Program Description

The Major Concentration Physics, which is restricted to students in the B.A. & Sc. or B.Sc./B.Ed., is a planned sequence of courses designed to permit a degree of specialization in this discipline. This program is insufficient to prepare a student for professional or graduate work in physics; students interested in pursuing a career in physics are advised to take the appropriate B.Sc. program in physics.

Degree Requirements — B.A. & Sc. students

This program is offered as part of a Bachelor of Arts & Science (B.A. & Sc.) degree.

To graduate, students must satisfy both their program requirements and their degree requirements.

- The program requirements (i.e., the specific courses that make up this program) are listed under the Course Tab (above).
- The degree requirements—including the mandatory Foundation program, appropriate degree structure, and any additional components—are outlined on the Degree Requirements page.

Students are responsible for ensuring that this program fits within the overall structure of their degree and that all degree requirements are met. Consult the Degree Planning Guide on the SOUSA website for additional guidance.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Required Courses [1] (30 credits)

Expand allContract all

Course	Title	Credits
MATH 222	Calculus 3.	3
MATH 223	Linear Algebra.	3
MATH 314	Advanced Calculus.	3
MATH 315	Ordinary Differential Equations.	3
PHYS 230	Dynamics of Simple Systems.	3
PHYS 232	Heat and Waves.	3
PHYS 257	Experimental Methods 1.	3
PHYS 333	Thermal and Statistical Physics.	3
PHYS 340	Majors Electricity and Magnetism.	3
PHYS 346	Majors Quantum Physics.	3

[1] Required courses taken at CEGEP or elsewhere that are not credited toward the B.A. & Sc. or B.Sc./B.Ed. must be replaced by courses from the Complementary Course List.

Complementary Courses (6 credits)

6 credits selected from:

Expand allContract all

Course	Title	Credits
PHYS 224	Physics of Music.	3
PHYS 228	Energy and the Environment.	3
PHYS 241	Signal Processing.	3
PHYS 258	Experimental Methods 2.	3
PHYS 260	Modern Physics and Relativity.	3
PHYS 320	Introductory Astrophysics.	3
PHYS 534	Nanoscience and Nanotechnology.	3

or any 300- or 400-level course approved by an adviser.