Pure and Applied Science is a two-year pre-university profile of the Science program at Dawson College that prepares students for entry to university in the physical sciences and engineering. The profile introduces students to the basics of chemistry and biology while affording them the opportunity to increase their knowledge in mathematics, physics and computer application.

Pure and Applied Science students generally pursue university studies in such fields as computer science, geology, mathematics and physics and in professional programs such as engineering and architecture. However, graduates of the Pure and Applied Science profile are eligible for admission to all university science programs.

Among the skills that Pure and Applied Science students in the profile develop are:

- problem-solving in a systematic way
- logical reasoning
- applying the experimental method
- using data-processing technology and computer data acquisition systems
- using computer applications to solve problems in science and engineering
- identifying the context in which scientific ideas originate and evolve
- communicating effectively

University Studies and Career Paths

Graduates of the Pure and Applied profile in Science generally pursue university studies in a variety of fields, including:

- Architecture
- Astronomy
- Atmospheric Science and Physics
- Biology
- Biochemistry
- Biotechartectiques
- Chemistry
- Computer Science
- Dentistry
- Environmental Sciences
- Education
- Engineering
- Environmental Science
- Food Science
- Geology
- Kinesiology
- Mathematics
- Medicine
- Nursing
- Occupational Therapy
- Pharmacology
- Physics
- Physiotherapy
- Veterinary Science

Admission Requirements

Diploma of Secondary Studies (DES), including:
- Secondary V Language of Instruction
- Secondary V Second Language
- Secondary IV Science
- Secondary IV Mathematics
- Secondary IV History

or academic background judged equivalent to the DES.

Students with a DES missing any of the above subjects may be admitted, space permitting, but may be required to complete remedial courses.

Specific ministerial admission requirements *

- Sec V Mathematics - Technical & Scientific option or Science option 564-506 or 565-506
- Sec V Chemistry 551-504
- Sec V Physics 553-504

* For students graduating before June 2010 or from an Adult Education Centre, the pre-requisites are Mathematics 536, Chemistry 534, and Physics 534.

Conditional admission is based on Secondary IV final and Secondary V mid-term grades. Final admission into the Science Program is contingent on obtaining a DES which includes the pre-requisite courses with appropriate grades.

The number of students that Dawson College can accept into the Science Program is limited; therefore students with the highest grades in high school have a better chance of being admitted.

The application deadline is March 1. This program accepts applications only for the Fall semester.

For more information visit the program webpages dawsoncollege.qc.ca
Course List

YEAR 1 – TERM 1
• Calculus I
• General Chemistry
• Mechanics

English
Humanities
Physical Education
Complementary

YEAR 1 – TERM 2
• Chemistry of Solutions
• Calculus II
• Waves, Optics & Modern Physics

English
French
Humanities
Physical Education

YEAR 2 – TERM 3
• General Biology I
• Electricity & Magnetism
• Linear Algebra

English
Physical Education
Complementary

YEAR 2 – TERM 4
• Science Option
• Science Option
• Science Option

English
French
Humanities

Every student must take four English courses, two French courses, three Humanities courses, three Physical Education courses and two Complementary courses to receive a CEGEP Diploma.

Selection of Science Option Courses

Pure and Applied Science students will choose 3 option courses from this list

• General Biology II
• Probability and Statistics
• Human Anatomy and Physiology
• Calculus III

• Environmental Biology
• Astrophysics
• Organic Chemistry I
• Organic Chemistry II

• Engineering Physics
• Physical Geology
• Introduction to Computer Programming in Engineering and Science*

*Note: Students who have taken a complementary course in Computer Science cannot take this course.