

SCIENCE DEPARTMENT

# PURE & APPLIED SCIENCE

2 YEARS - PRE-UNIVERSITY



## ABOUT THE PROGRAM

Pure and Applied Science is a two-year pre-university DEC program that prepares students to pursue university studies in the physical, computer, or engineering sciences.

We ensure that students are well-equipped for university studies by training them in the fundamentals of the physical and engineering sciences by using methods such as:

- Differential equations
- Advanced calculus
- Statistics
- Problem-solving in engineering physics using MATLAB

## UNIVERSITY STUDY OPTIONS

- Mechanical Engineering
- Electrical Engineering
- Aerospace Engineering
- Bioengineering
- Urban Development
- Architecture
- Bio-architecture
- Software Engineering
- Bio-physics
- Much more!

## ADMISSION REQUIREMENTS

International students entering our DEC (Diploma of College Studies) programs must have completed schooling that is considered equivalent to a high school diploma issued by the Quebec Ministry of Education (MEES).

## WHAT WILL YOU LEARN?

Necessary foundations in mathematics and physics to give you as many options for university studies as possible.

Fundamentals of the physical sciences and engineering.

## SEMESTER 1

- 603-101-MQ INTRODUCTION TO COLLEGE ENGLISH
- 345-101-MQ KNOWLEDGE
- 602-100-MQ BASIC FRENCH
- 201-NYA-05 CALCULUS I
- 202-NYA-05 GENERAL CHEMISTRY
- 203-NYA-05 MECHANICS

## SEMESTER 2

- 603-102-MQ LITERARY GENRES
- 602-TVA-TV FRENCH FOR SPECIFIC PROGRAMS
- 109-101-MQ PHYSICAL ACTIVITY AND HEALTH
- 101-NYA-05 GENERAL BIOLOGY I
- 201-NYB-05 CALCULUS II
- 202-NYB-05 CHEMISTRY OF SOLUTIONS

## SEMESTER 3

- 603-103-MQ LITERARY THEMES
- 345-102-MQ WORLD VIEWS
- 109-102-MQ PHYSICAL ACTIVITY AND EFFECTIVENESS
- 420-PRA-TV INTRODUCTION TO PROGRAMMING
- 201-NYC-05 LINEAR ALGEBRA
- 203-NYB-05 ELECTRICITY AND MAGNETISM

## SEMESTER 4

- 603-TVE-TV ENGLISH ADAPTED TO PROGRAM
- 109-103-MQ PHYSICAL ACTIVITY AND AUTONOMY
- 345-TVH-TV CRITICAL THOUGHT APPLIED TO WORLD ISSUES
- 203-NYC-05 WAVES, OPTICS, AND MODERN PHYSICS
- 203-EPH-TV PROBLEM-SOLVING IN ENGINEERING PHYSICS
- 360-200-TV INTEGRATION PROJECT

### LEGEND:

 GENERAL EDUCATION COURSES

 PROGRAM-SPECIFIC COURSES

### BILINGUAL STUDIES OPTION

We offer students the option of completing their general education courses in French while completing their program-specific courses in English.

For more details: [tav.ca/bilingual-study-option/](http://tav.ca/bilingual-study-option/)