

# PRE-HEALTH SCIENCES PATHWAY TO ADVANCED DIPLOMAS & DEGREES (PHS)

## About the Program

This one-year certificate program is designed to provide you with the core knowledge, skills and abilities fundamental to academic success in health sciences and other high affinity programs. You will develop knowledge and skills in communications, mathematics, human anatomy, biology and organic/inorganic chemistry. You will be well prepared to further your study in the health sciences at either the diploma, advanced diploma or baccalaureate level. The program also provides you with the opportunity to learn about potential careers in the health sciences and to identify other programs focusing on the biological or chemical sciences that will enable you to achieve your career objectives.

Part-time option is available > (<http://www.senecapolytechnic.ca/ce/community/health-care/pre-health-sciences.html>)

## Credential Awarded

Ontario College Certificate

## Duration

2 Semesters (1 Year)

## Starts

January, September

## Program and Course Delivery

This program is offered in Seneca's hybrid delivery format. Some coursework is online and some must be completed in person. Students will need to come on campus to complete in-person learning requirements.

## Your Career

Take your first steps towards a future in several health science-based programs. Once you have completed this program, you will be eligible to apply for Seneca's Bachelor of Science in Nursing (Honours) (<https://www.senecapolytechnic.ca/programs/fulltime/BSN.html>) Degree or Practical Nursing Diploma (<https://www.senecapolytechnic.ca/programs/fulltime/PND.html>) program. Entrance to these competitive programs is based on grades achieved in Pre-Health Sciences Pathway to Advanced Diplomas & Degrees (PHS).

Graduates may also consider Seneca programs such as Workplace Safety & Prevention (<https://www.senecapolytechnic.ca/programs/fulltime/WSP.html>), Fitness & Health Promotion (<https://www.senecapolytechnic.ca/programs/fulltime/FHP.html>), Veterinary Assistant (<https://www.senecapolytechnic.ca/programs/fulltime/VTA.html>), Veterinary Technician (<https://www.senecapolytechnic.ca/programs/fulltime/VTE.html>) or Honours Bachelor of Therapeutic Recreation (<https://www.senecapolytechnic.ca/programs/fulltime/DTR.html>). If you are applying to another postsecondary institution, please check that institution's admission requirements.

## Program of Study

Course Code	Course Name	Weekly Hours
<b>Semester 1</b>		
BIO105	Biology	5
CHM101	Introduction to Chemistry	5
COM101 or COM111	Communicating Across Contexts Communicating Across Contexts (Enriched)	3
MTH135	Foundations of Mathematics	4
SCI101	Pathway to Academic and Career Excellence	4
<b>Semester 2</b>		
BIO215	Human Biology	5
BIO216	Anatomy and Physiology of Wellness	5
CHM201	Organic and Biological Chemistry	5
MTH177	Mathematics of Data Management	4
plus: General Education Course (1)		3

**Note:** The general education courses taken for credit in the Pre-Health Science Certificate will be counted as general education credits in the Practical Nursing diploma program but not in the BSN degree program.

## Program Learning Outcomes

This Seneca program has been validated by the Credential Validation Service as an Ontario College Credential as required by the Ministry of Colleges and Universities.

As a graduate, you will be prepared to reliably demonstrate the ability to:

- Examine biological concepts, processes and systems of the human body, including genetics and epigenetics, as well as the structure, function and properties of the molecules of life, cells, tissues and organ systems in relation to homeostasis, physical development and health.
- Examine concepts, processes and systems of chemistry, including atomic and molecular structure; quantities in chemical reactions; solutions and solubility; acids and bases; as well as organic chemistry and biochemistry in relation to health and the human body.
- Solve numeric problems and interpret data related to health sciences and other science-related fields using mathematical concepts, including algebra and probability, along with descriptive and inferential statistics.
- Use health sciences and other science-related language and terminology appropriately to communicate clearly, concisely, and correctly in written, spoken, and visual forms.
- Prepare a personal strategy and plan for academic, career and professional development in the health sciences or other science-related fields.
- Investigate health sciences and science-related questions, problems and evidence using the scientific method.

## Admission Requirements

- Ontario Secondary School Diploma (OSSD), or equivalent, or a mature applicant (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/mature-applicants.html>)
- English: Grade 12 C or U, or equivalent course

Canadian citizens and permanent residents may satisfy the English requirements for this program through successful Seneca pre-admission testing. (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/mature-applicants.html>)

Recommended upgrading for applicants who do not meet academic subject requirements. (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/upgrading-options.html>)

## Pathways

As a leader in academic pathways, we offer a range of options that will allow you to take your credential further in another Seneca program or a program at a partner institution.

To learn more about your eligibility, visit the Academic Pathways (<https://www.senecapolytechnic.ca/pathways.html>) web page.

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