

## PROGRAM INFORMATION

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|-------------------------|----------------------------|
| <b>Academic Year</b>    | 2024 – 2025                |
| <b>Credential</b>       | Ontario College Diploma    |
| <b>Program Delivery</b> | Full - Time                |
| <b>Duration</b>         | 2 Years                    |
| <b>Length</b>           | 4 Semesters                |
| <b>Program Code</b>     | H099 (PC) – Timmins Campus |

## DESCRIPTION

On the front lines of emergency care.

Northern's two-year Paramedic program will train you for a thrilling career on the front lines of emergency care. And you'll graduate with the skills you need to provide life-saving interventions – at the scene of an accident. The curriculum focuses on leadership and communication – along with core courses in fitness, ethics, anatomy, physiology, pathology and pharmacology.

And in a risk-free lab setting you'll practice responding to calls based on real-life scenarios. What makes Northern even more unique is that there are paramedics professionals working out of the same building as where you're learning, so you can gain first-hand experience watching them in action. In support of your gradual transition to practicing paramedics, you'll eventually join real ambulance calls as an observer. And then take on an official placement with one of over 30 emergency service partners – including hospital emergency and maternity wards, 911 dispatch, and long-term care facilities.

## CAREER OPPORTUNITIES

- Paramedic
- Employed by private ambulance services, hospitals, fire departments, and government agencies.

## VOCATIONAL LEARNING OUTCOMES

1. Communicate and interact effectively and appropriately with patients and others.
2. Assess patients using relevant theory and practices and in compliance with current legislation, regulations, standards, and best practice guidelines.
3. Establish patients' treatment and transport priorities based on assessment findings.
4. Implement preventive and therapeutic patient management strategies to maintain and promote patients well-being in compliance with current legislation, regulations, standards, and best practice guidelines.
5. Integrate and perform delegated controlled medical acts in a simulated, clinical, and field setting.
6. Evaluate in an ongoing manner, the effectiveness of patient management strategies used and adapt or change strategies to provide optimal care for patients.
7. Report and document patient information completely, accurately, and in a timely manner, in compliance with current legislation, regulations, standards, and applicable policies and procedures in a simulated, clinical, and/or field setting.
8. Ensure personal safety and contribute to the safety of partners, patients, and others.

9. Ensure the operational safety, and preparedness of an ambulance and its equipment and operate an ambulance-type vehicle in a simulated setting.
10. Collaborate with a broad range of personnel such as first responders, paramedics, emergency services personnel, health care professionals, and other allied health care workers.
11. Integrate and meet legal, ethical, and professional responsibility while providing optimal care for patients.

## PROGRAM COURSES

The following reflects the planned course sequence for full-time offerings of the program. Programs at Northern College are delivered using a variety of instruction modes. Courses may be offered in the classroom or lab, entirely online, or in a hybrid mode which combines classroom sessions with virtual learning activities.

| <b>Semester 1</b>          |                                                  | <b>Hours</b> |
|----------------------------|--------------------------------------------------|--------------|
| BI1023                     | Anatomy and Physiology I                         | 42           |
| EM1003                     | Crisis Communications and Information Management | 42           |
| GN1443                     | Indigenous Culture and Awareness                 | 42           |
| PN1022                     | Pharmacology I                                   | 42           |
| PR1006                     | Patient Care and Assessment Theory I             | 98           |
| PR1016                     | Patient Care and Assessment Lab I                | 84           |
| PR1030                     | Fitness and Wellness I                           | 42           |
| PR1063                     | The Prehospital Environment                      | 42           |
| <b>Semester 2</b>          |                                                  |              |
| AA2041                     | Community Service Learning                       | 14           |
| BI2023                     | Anatomy and Physiology II                        | 42           |
| PR1034                     | Hospital Clinical                                | 56           |
| PR1053                     | Mental Health and Crisis Intervention in EMS     | 42           |
| PR1073                     | Professional Development and Leadership          | 42           |
| PR2036                     | Fitness and Wellness II                          | 42           |
| PR2046                     | Patient Care and Assessment Theory II            | 98           |
| PR2056                     | Patient Care and Assessment Lab II               | 84           |
| <b>Semester 3</b>          |                                                  |              |
| General Education Elective |                                                  | 42           |
| PR2017                     | Paramedic Practicum                              | 98           |
| PR3008                     | Patient Care and Assessment Theory III           | 98           |
| PR3018                     | Patient Care and Assessment Lab III              | 112          |
| PR3053                     | Fitness Maintenance                              | 42           |
| PR3063                     | Pathophysiology for Pre-Hospital Caregivers      | 42           |
| <b>Semester 4</b>          |                                                  |              |
| General Education Elective |                                                  | 42           |
| PR4001                     | Online AEMCA Review                              | 16           |
| PR4013                     | Ambulance Field Analysis & Case Studies          | 28           |
| PR4022                     | Ambulance Field Consolidation                    | 448          |

## PROGRAM PROGRESSION

The following reflects the planned progression for full-time offerings of the program.

### Fall Intake

Sem 1: Fall 2024

Sem 2: Winter 2025

## WORK INTEGRATED LEARNING OPPORTUNITIES

### Clinical Requirements

Students will be required to present proof of full vaccination for COVID-19 in order to participate in clinical learning/preceptorship courses required for graduation

To be eligible for participation in clinical training, students must not have been convicted of any criminal offence for which that person has not been pardoned (as outlined in the Ambulance Act of Ontario). An unpardoned criminal record will result in inability to participate in clinical placements and field internship courses and will prevent the student from graduating.

Student paramedics will be required to perform heavy lifting in varying conditions throughout the program. To develop and maintain adequate physical fitness, students have free access to the school gym. Practice labs provide the opportunity for students to demonstrate care in simulated medical and trauma emergencies. The labs are interactive and all students are required to participate in all components of the lab sessions.

A minimum lift requirement is in place for success in the patient care lab component of the program. Students must be able to lift an 95 kg patient along with all appropriate equipment. Please consult with the program coordinator for details regarding the lift requirement. Upon completion of this program, graduates must be successful in theoretical examinations set by the Ministry of Health, Emergency Health Services Branch, Ontario in order to be certified as a Paramedic and thus to be eligible to work in an ambulance service in Ontario. The cost for the examination process is the responsibility of the student.

### Field Placement

To be assigned a field placement, an essential component of the program, you must have been immunized against Hepatitis B, poliomyelitis, tetanus, diphtheria, and influenza. Students who do not comply with the immunization requirements will not be allowed into the practice settings and as such may not be able to complete the practicum required to graduate from the program. You must possess a valid CPR, Basic Rescuer and Standard First Aid Certificate, and all theoretical and lab course work must be successfully completed prior to field placement.

## ARTICULATION/TRANSFER AGREEMENTS

A number of articulation agreements have been negotiated with universities and other institutions across Canada, North America and internationally. These agreements are assessed, revised and updated on a

regular basis. Please contact the program coordinator for specific details if you are interested in pursuing such an option. Additional information can be found at [Articulation Agreements](#).

## ADDITIONAL INFORMATION

### Equipment

Students will be required to purchase their uniforms and crests, which can be ordered through the college, prior to the practicum experience and should budget accordingly for boots, books and supplies (approximately \$1500.00). Placement kits need to be purchased by the student through Sands at a cost of \$210.00 (subject to change). Please see your Coordinator for contact information.

## PROGRAM SPECIFIC REQUIREMENTS

### Paramedic Requirements

## ADMISSION REQUIREMENTS

This program is oversubscribed and receives more than enough qualified applicants to fill the seats available. Applicants accepted into oversubscribed programs confirm their offer and pay their fees early to reserve a place in the program.

- Ontario Secondary School Diploma (OSSD)
- Grade 11 or 12 Math (C, M, U)
- Grade 11 or 12 Biology (C, U)
- Grade 11 or 12 Chemistry (C, U)
- Grade 12 English (C, U)
- A minimum GPA of 70% in C level, or a minimum GPA of 60% in U level.
- Or equivalent

Successful completion of Northern's two semester pre-health program (with a minimum GPA of 2.8) will serve to meet the admission requirements for the Paramedic program. Academic prerequisites for this program may be obtained free of charge through [Academic Upgrading](#).

Applicants who do not have a high school diploma or equivalent and will have reached the age of 19 years on or before the start of the program must undergo academic testing and may be required to complete [Prior Learning Assessment & Recognition \(PLAR\)](#) process to demonstrate equivalency of admission requirements prior to admission into a program. For more details, please contact the Admissions Office at 705-235-7222 or [admissions@northern.on.ca](mailto:admissions@northern.on.ca).

### Admission Requirements for International Students

In addition to the general and program admission requirements, international students must have proof of English Proficiency and meet the requirements below.

1. Proof of Senior High School Diploma/Certificate with 70% in each equivalents for Mathematics, Chemistry and Biology.
2. English Proficiency (we will require one of the following):
  - IELTS Academic (International English Language Testing System – minimum overall score of 6.5 must be achieved, with no individual band score under 6.0.
  - TOEFL (Test of English as a Foreign Language) – Internet Based Test (iBT) overall minimum score of 88+
  - PTE (Pearson Test of English) Academic 60+

If your country of citizenship has English as its official language, we may accept alternate proof of English Proficiency. All educational documents must be submitted in English and will be dependent on the country of citizenship. For more information, please contact [admissions@northern.on.ca](mailto:admissions@northern.on.ca).

### **Applicant Selection Criteria**

Where the number of eligible applicants exceeds the available spaces in the program, the Applicant Selection Criteria will be:

- a) Preference for Permanent Residents of Ontario.
- b) Receipt of Application by February 1st.
- c) Achievement in the Required Academic Preparation\*

Grade and course requirements are used in the selection process. If applicants are enrolled in Grade 12 required subjects (as indicated above), in the second semester (February to June), Grade 11 marks will be used to assess admission eligibility.

### **Required Documentation**

- Current Basic Cardiac Life Support Certificate (C.P.R. – HCP content) and Standard First Aid Certificate (or equivalent)
- Physician's medical report as per guide supplied by the College and immunization record including Hepatitis B; 2-step Mantoux (with follow-up chest x-ray if the T.B. test is positive). \*
- A recent criminal/vulnerable sector reference check – (within 3 months) is required prior to the start of the second semester.

CPR re-certification, criminal reference checks and immunization updates are required annually. Any costs for these tests/certifications will be the responsibility of the student.

\* Northern College has partnered with Paramed/Placement Pass for submission of clinical documentation required for clinical rotations/placements. An Orientation session at the start of the semester will inform students of the process. Placement Pass will provide a portal to upload, verify and store all documents, which will be verified by Placement Pass' nurses and professionals, ensuring accuracy and compliance. Year 1 students can preview the Placement Pass portal prior to the start of the academic year by visiting [Placement Pass – Paramed](#).

## Employment Eligibility

Applicants should also be aware of the following qualifications for employment (as outlined by the Ambulance Act of Ontario):

- a) For a period of one year before the date he/she commences employment, must not have had six or more demerit points on his/her records by the Registrar of Motor Vehicles under the Highway Traffic Act.
- b) For a period of two years immediately prior to the date he/she commences employment, must not have had his/her driver's license suspended under the Highway Traffic Act.
- c) For a period of three years immediately prior to the date he/she commences employment, must not have been prohibited under the Criminal Code of Canada, from driving a motor vehicle in Canada.
- d) Must be the holder of an Ontario Secondary School Diploma or equivalent as set out by the Ministry of Education.
- e) Must have a valid Class F Driver's License and be 18 years old.

## GRADUATION REQUIREMENTS

- 22 Program Courses
  - 1 Communications Course
  - 3 General Education Courses

## GRADUATION ELIGIBILITY

To graduate from this program, a student must attain a minimum of 60% or a letter grade of CR (Credit) in each course in each semester unless otherwise stated on the course outline. Students should consult departmental policies and manuals for additional detail and exceptions.

## GRADUATION WINDOW

Students unable to adhere to the program duration of two years (as stated above) may take a maximum of four years to complete their credential. After this time, students must be re-admitted into the program, and follow the curriculum in place at the time of re-admission.

## CONTACT INFORMATION

For questions about being admitted into the program, please contact Northern College Admissions at [admissions@northern.on.ca](mailto:admissions@northern.on.ca) or by phone at 705-235-3211 ext. 7222. For questions about the content of the program, contact the Program Coordinator.

Terry Price, Program Coordinator  
Tel: 705-235-3211 ext. 2282  
Email: [pricet@northern.on.ca](mailto:pricet@northern.on.ca)

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## COURSE DESCRIPTIONS

### Semester 1

#### **BI1023 Anatomy and Physiology I**

This course introduces learners to the normal development, structures and functions of the human body. Learners will examine the physiological components of the human body in order to obtain understanding of how the structures and functions of the body are related.

#### **EM1003 Crisis Communications and Information Management**

This course examines and explores communication needs associated with contexts of heightened concern (e.g., crisis, conflict, disasters) that support individuals, organizations and communities making effective risk/benefit decisions, managing fear and uncertainty, and responding to crisis.

#### **GN1443 Indigenous Culture and Awareness**

This general education course will provide students with an introduction to Canadian Indigenous Nations' history, sovereignty, land titles, cultural history and current critical issues. Topics addressed include the content of Indigenous rights, economic and social development, community and political processes, and business law and policies, justice & social services. Canadian Indigenous History and Relations is a general education course that has been incorporated into all programs at Northern College.

#### **PN1022 Pharmacology I**

This course will provide the foundational knowledge for the safe administration of medication. The learner will be introduced to the concepts of pharmacology as selected drug classifications are studied. Inherent in this is the responsibility of the paramedic to understand the effects of drugs on the client and the monitoring parameters required. The lab component will provide the foundational knowledge for the safe administration of medication.

#### **PR1006 Patient Care and Assessment Theory I**

This course emphasizes the introduction of assessment skills and the utilization of them to manage and transport patients in a variety of situations. Students will be introduced to the assessment, pathophysiological processes and management of various medical and traumatic problems that may afflict pre-hospital patients

#### **PR1016 Patient Care and Assessment Lab I**

The emphasis in this course is placed on hands on learning, using demonstration, performance and practice to hone the student's assessment and stabilization skills. It will follow the same outline as the theory course to help reinforce what has been learned in theory through practical application.

#### **PR1030 Fitness and Wellness I**

This course is designed to provide the students with important knowledge on a number of health related issues while focusing on the fitness component of the health spectrum. Emphasis will be placed on practical applications and essential exercise prescriptions that will improve and maintain the students' personal and occupational fitness levels.

**PR1063 The Prehospital Environment**

This course emphasizes techniques necessary to ensure driver and vehicle readiness for emergency service. Utilizing both classroom and in-vehicle situations students will acquire the skills required to: maintain emergency vehicles, prepare and safely operate an emergency vehicle, drive defensively avoiding hazards and controlling skids. In addition to these skills, students will also develop the ability to extricate victims from scenes, interact with Emergency Response aircraft and respond to hazardous material and multi-casualty situations. The techniques and skills required to work effectively with other emergency response personnel will be emphasized throughout the course.

**Semester 2****AA2041 Community Service Learning**

Volunteer hours in the Community Services programs are designed to help students develop a sense of community identity. As professionals in training, it is vitally important that students have an awareness of community strengths and needs. These volunteer hours will provide students with the opportunity to positively engage with community while having fun.

**PR1073 Professional Development and Leadership**

This course is designed to develop the students' critical thinking ability in identifying issues related to professionalism, the development of technology, medical ethics, labour relations, shift work, and continuing education to name a few. This will encompass the development and use of strategies to be able to locate, select, and discriminate pertinent information, to support decisions and assist in the growth of their personal and professional role as a Paramedic. The student will be introduced to the importance of an integrated emergency response system and related professions such as fire, police, air ambulance, emergency room staff and legal services. Ultimately, the students will appreciate their responsibility as leaders and/or agents of change in the future of pre-hospital care.

**BI2023 Anatomy and Physiology II**

A continuation of Anatomy and Physiology I, this course continues with the study of the major body systems, from the nervous system to the reproductive systems. The unifying themes of the interrelationships of body organ system, homeostasis, and the complementary nature of structure and function will provide the basis for understanding the workings of the human body.

**PR1034 Hospital Clinical**

The emphasis of this course is placed on gaining practical experience related to the skills and theory taught in the program. Students will be introduced to the roles of allied agencies involved in the care and continued care of pre-hospital patients. Students will also practice communication skills required when dealing allied agencies, peers, patients and their families.

**PR1053 Mental Health and Crisis Intervention in EMS**

The first part of this course examines various perspectives of abnormal psychology. We seek to understand the nature and causes of abnormal behaviour. The patterns of abnormal (maladaptive) behaviour to be examined are: behaviour and emotional disorders of childhood and adolescence, eating disorders, substance-related disorders, anxiety disorders, dissociative and somatoform disorders, mood disorders, and schizophrenia. Stress and the psychological connection to mental illness and health will be investigated.

Students will also study mental health law in Canada. The second part of this course examines the fundamental crisis theory that will serve as a basis for assessing, intervening and evaluating resolution of a crisis event. A six-step model of intervention is also presented along with specific helping objectives in order to guide the crisis interventionist.

Recognizing that suicide risk often accompanies a crisis, students will recognize suicide lethality, and acquire specific techniques involved in interrupting a suicide attempt. Prevention and postvention measures will also be examined. Other crises to be discussed are crises related to loss, substance abuse, posttraumatic stress disorder, child abuse, intimate partner abuse and sexual assault. Finally this course will deal with the topic of death notification.

**PR2036 Fitness and Wellness II**

This course is designed to continue to provide the students with important knowledge on a number of health related issues while focusing on the fitness component of the health spectrum. Emphasis will be placed on practical applications and essential exercise prescriptions that will improve and maintain the students' personal and occupational fitness levels.

**PR2046 Patient Care and Assessment Theory II**

This course emphasizes the introduction of assessment skills and the utilization of them to manage and transport patients in a variety of situations. Students will be introduced to the assessment, pathophysiological processes and management of various medical and traumatic problems that may afflict pre-hospital patients.

**PR2056 Patient Care and Assessment Lab II**

The emphasis in this course is placed on hands on learning, using demonstration, performance and practice to hone the student's assessment and stabilization skills. It will follow the same outline as the theory course to help reinforce what has been learned in theory through practical application.

**General Education Elective**

General Education Courses are selected online each semester by the student from a list provided and exposes students to a related area of study outside of their immediate academic discipline. Certain programs have predetermined electives.

**Semester 3****PR2017 Paramedic Practicum**

Students will become familiar with the various departments and services in a hospital setting. Observations may include emergency room, maternity, dialysis and; Long term care. Students will also participate and learn about community-based health care supports and their role in providing overall care to patients with different needs. Clinical will occur in local schools and home health care programs.

**PR3008 Patient Care and Assessment Theory III**

This course is a continuation of Patient Care Theory II. The major emphasis in this course focuses on the responsibilities of the student in assessing, applying the pathophysiological processes, managing and transporting patients in stabilized conditions, emergency situations and situations that may become emergencies. Students will demonstrate the knowledge of assessing and managing various medical and traumatic conditions that may afflict pre-hospital patients. In addition, this course provides students a working knowledge enabling them to deliver the Ministry of Health EHSB protocols for Symptom Relief (administration of medication), Semi-Automatic External Defibrillation and Intravenous Therapy (starting and monitoring an IV).

**PR3018 Patient Care and Assessment Lab III**

This course is a continuation of Patient Care and Assessment Lab II. The major emphasis in this course focuses on the responsibilities of the student in assessing, applying the pathophysiological processes, managing and transporting patients in stabilized conditions, emergency situations and situations that may become emergencies. Students will demonstrate the knowledge of assessing and managing various medical and traumatic conditions that may afflict pre-hospital patients. In addition, this course provides students a working knowledge enabling them to deliver the Ministry of Health EHSB protocols for Symptom Relief (administration of medication), Semi-Automatic External Defibrillation and Intravenous Therapy (starting and monitoring an IV).

**PR3063 Pathophysiology for Pre-Hospital Caregivers**

This course builds upon the knowledge base of normal structure and function of the human body obtained in Anatomy and Physiology I & II. The intent of this course is to further examine the physiological changes to the body that result from disease processes. The examination of the causes and manifestations of pathological change will begin at the cellular level and progress towards a discussion of major systems with a focus on common pathologies encountered in the pre-hospital environment. This course is tailored to ensure coverage of relevant material as described in the Ontario Ministry of Health and Long-Term Care Pre-Hospital Emergency Care Syllabus

**PR3053 Fitness Maintenance**

This course is designed to continue to provide students with important knowledge on a number of health related issues while focusing on the muscular strength, power and endurance. Emphasis will be placed on practical applications and essential exercise prescriptions that will improve and maintain the students' targeted occupational fitness components. The students will receive instructions on how to maintain fitness levels and continue progression towards maintaining and evolving components of physical well-being. Additional elements may include body composition, weight management and the possibility of some basic self defense. The training methods will vary and will incorporate the use of plyometrics; core body strength, resistance techniques (weights and machines), specific lifting tasks with relevant equipment and other specific types of exercises aimed at helping students achieve the level of physical fitness required of a paramedic. With the help of the professor, students will prepare and learn to effectively monitor their individual fitness programs and progressions by improving abilities to log exercise data and alter it to continue attain set goals. The final grade for the course will include some of the following: professionalism and attendance, log book completion and successful completion of a technical lift evaluation. Students will be encouraged to continue the maintenance program during their entire career.

**Semester 4****General Education Elective**

General Education Courses are selected online each semester by the student from a list provided and exposes students to a related area of study outside of their immediate academic discipline. Certain programs have predetermined electives.

**PR4001 Online AEMCA Review**

Students will have the opportunity to participate in an intensive online program review. This self-directed review should be completed at the conclusion of the program and is designed to assist students in the review and preparation for the Provincial Advanced Emergency Medical Care Assistant exams.

**PR4013 Ambulance Field Analysis & Case Studies**

As the concluding component of the program, students enrolled in this comprehensive course will consolidate key concepts of pre-hospital care. Utilizing a student-centred approach, course participants will relate and integrate theoretical concepts previously learned in clinical situations. Challenges to the student-to-paramedic's transition will be thoroughly discussed. Students will receive individualized feedback following a comprehensive evaluation of their theoretical and practical skills.

**PR4022 Ambulance Field Consolidation**

This course provides students with a concentrated period of field experience to further develop the ability to assess and meet the needs of the patient. Under the direct supervision of a paramedic crew, students will review, participate in, and analyze emergency situations, which will form a basis for professional practice in the future.