

Area of Interest: Public Safety and Legal Studies

Pre-Service Firefighter Education and Training

Ontario College Certificate

Program Code: 6236X01FWO

36 Weeks

Ottawa Campus

Our Program

Prepare for a dynamic career in firefighting.

The Pre-Service Firefighter Education and Training Ontario College Certificate program is a dynamic and challenging program that focuses on firefighting skills and competencies. Begin the program with an introduction to the firefighting profession and develop related skills and expertise, using theoretical and hands-on approaches.

Experience more than 400 hours of experiential learning, including the opportunity to put your skills into action and take part in both a fire simulation and a live-fire training practice.

This program focuses on the knowledge, skills, and professionalism required to prepare you for a future career in firefighting. Students who complete the required program components and meet the necessary prerequisites may qualify for testing administered by the Ontario Office of the Fire Marshal, leading to NFPA 1001 Firefighter I or Firefighter II certification.

After graduating, you may find work with municipal, regional, territorial, airport or military fire service, as a:

- firefighter
- fire dispatcher
- fire prevention officer

The field of industrial and fire safety also provide work opportunities for graduates.

SUCCESS FACTORS

This program is well-suited for students who:

- Can work effectively on their own and as part of a team.
- Want to make a difference in their community.
- Have a high level of self-discipline.
- Are physically active.
- Thrive in dynamic and challenging environments.
- Are analytical and critical thinkers.

Employment

Graduates may find employment with a municipal, regional or territorial, airport or military fire service, as a firefighter, fire dispatcher, fire prevention officer, or in the field of industrial fire and safety.

Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Conduct safe and affective fire suppression activities to mitigate fire incidents.
- Develop fire prevention education programs and initiatives for community stakeholders.
- Deliver critical emergency medical response to assist medical professionals with vital pre-hospital care.
- Perform the appropriate hazardous materials control measures to preserve life safety and the environment.
- Execute special rescue operations in a variety of emergency response contexts.
- Identify and use the personal and professional development resources/activities which promote growth, professional physical fitness and lifelong learning.
- Conduct all fire service activities according to Meet the ethical, legal and safety requirements required of professionals in the fire service.
- Apply safe practices and techniques with fire department apparatus, tools and personal protective clothing and protective equipment.
- Use appropriate fire service terminology and communications equipment in emergency and non-emergency contexts.
- Interact with stakeholders in a variety of fire fighting contexts that reflect empathy, professionalism and respect for equity, diversity and inclusion.
- Collaborate with other response agencies to provide comprehensive service during multi-agency incident response.
- Identify and apply discipline-specific practices that contribute to the local and global community through social responsibility, economic commitment and environmental stewardship.

Program of Study

Level: 01	Courses	Hours
FIR0003	Fire Theory I	42.0
FIR0005	Firefighter Skills Development I	84.0
FIR0011	First Responder	42.0
FIR1702	Professional Communication for Firefighters	42.0
FIR1744	Education and Fire Prevention in the Community - Theory	42.0
FIT4711	Physical Fitness I	28.0
Level: 02	Courses	Hours
FIR0006	Hazardous Materials Operations - Theory	56.0
FIR0007	Hazardous Materials Operations Skills Development	42.0
FIR0008	Fire Theory II	42.0
FIR0009	Firefighter Skills Development II	84.0
FIT4713	Physical Fitness II	28.0
PFP1020	Psychology	42.0

Level: 03	Courses	Hours
FIR0001	Rope Rescue	40.0
FIR0002	Emergency Medical Responder	45.0
FIR0010	Firefighter Skills Development III	112.0

Fees for the 2023/2024 Academic Year

Tuition and related ancillary fees for this program can be viewed by using the Tuition and Fees Estimator tool at <https://www.algonquincollege.com/fee-estimator> .

Further information on fees can be found by visiting the Registrar`s Office website at <https://www.algonquincollege.com/ro> .

Fees are subject to change.

Additional program related expenses include:

- Books, uniforms, personal protective clothing and supplies cost approximately \$1,600 for the program duration.

Admission Requirements for the 2024/2025 Academic Year

College Eligibility

- Ontario Secondary School Diploma (OSSD) or equivalent. Applicants with an OSSD showing senior English and/or Mathematics courses at the Basic Level, or with Workplace or Open courses, will be tested to determine their eligibility for admission; OR
- Academic and Career Entrance (ACE) certificate; OR
- General Educational Development (GED) certificate; OR
- Mature Student status (19 years of age or older and without a high school diploma at the start of the program). Eligibility may be determined by academic achievement testing for which a fee of \$50 (subject to change) will be charged.

Program Eligibility

- English, Grade 12 (ENG4C or equivalent).
- Mathematics, Grade 12 (MAP4C or equivalent).
- Biology, Grade 11 or 12 **OR**
- Chemistry, Grade 11 or 12.
- Applicants with international transcripts must provide proof of the subject-specific requirements noted above and may be required to provide proof of language proficiency. Domestic applicants with international transcripts must be evaluated through the International Credential Assessment Service of Canada (ICAS) or World Education Services (WES).
- IELTS-International English Language Testing Service (Academic) Overall band of 6.0 with a minimum of 5.5 in each band; OR TOEFL-Internet-based (iBT) Overall 80, with the minimum of 20 in each component: Reading 20; Listening 20; Speaking 20; Writing 20; OR Duolingo English Test (DET) Overall 110, minimum of 110 in Literacy and no score below 95.
- Not sure if you meet all of the requirements? Academic Upgrading may be able to help with that: <https://www.algonquincollege.com/access/> .

Should the number of qualified applicants exceed the number of available places, applicants will be selected on the basis of their proficiency in English, Mathematics and Biology.

Students are required to provide proof of the following prior to July 1:

- Current CPR (Basic Rescuer, Level C) and Defib, from a recognized provider (i.e. Red Cross, St. John Ambulance, or Ottawa Paramedic Service).
- Valid Standard First Aid certificate, issued by a recognized provider.

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- Mature Student status (19 years of age or older and without a high school diploma at the start of the program). Eligibility may be determined by academic achievement testing for which a fee of \$50 (subject to change) will be charged.

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- IELTS-International English Language Testing Service (Academic) Overall band of 6.0 with a minimum of 5.5 in each band; OR TOEFL-Internet-based (iBT) Overall 80, with the minimum of 20 in each component: Reading 20; Listening 20; Speaking 20; Writing 20.

Not sure if you meet all of the requirements? Academic Upgrading may be able to help with that: <https://www.algonquincollege.com/access/> .

Should the number of qualified applicants exceed the number of available places, applicants will be selected on the basis of their proficiency in English, Mathematics and Biology.

Application Information

PRE-SERVICE FIREFIGHTER EDUCATION AND TRAINING Program Code 6236X01FWO

Applications to full-time day programs must be submitted with official transcripts showing completion of the academic admission requirements through:

ontariocolleges.ca
60 Corporate Court
Guelph, Ontario N1G 5J3
1-888-892-2228

Students currently enrolled in an Ontario secondary school should notify their Guidance Office prior to their online application at <http://www.ontariocolleges.ca/> .

Applications for Fall Term and Winter Term admission received by February 1 will be given equal consideration. Applications received after February 1 will be processed on a first-come, first-served basis as long as places are available.

International applicants please visit this link for application process information:
<https://algonquincollege.force.com/myACint/> .

For further information on the admissions process, contact:

Registrar's Office
Algonquin College
1385 Woodroffe Ave
Ottawa, ON K2G 1V8
Telephone: 613-727-0002
Toll-free: 1-800-565-4723
TTY: 613-727-7766
Fax: 613-727-7632
Contact: <https://www.algonquincollege.com/ro>

Additional Information

Theory courses are delivered at the College; lab/skills courses are either at the College or at locations off campus, such as area fire department stations/training facilities. Students average approximately 26 hours of classes per week, Monday to Friday. The class consists of about 60 students in lectures and is sub-divided into three or four groups for labs/skills teaching. The College provides bunker gear and self-contained breathing apparatus for all students. Students must buy a helmet, gloves, boots, and flash hood to wear (the College arranges for the purchase and proper sizing during the first week).

Candidates must be aware that some components of the program require students to wear a breathing apparatus and climb high ladders; therefore, claustrophobia or acrophobia may prevent candidates from completing their studies.

Pre-Requirements for FIR0011:

Firefighter Emergency Medical Response, current Standard First Aid and Targeted Responder Level C CPR are requirements of the course.

Note: Candidates should be aware that 70% is a passing grade in this program.

FIRE SERVICE EMPLOYMENT CRITERIA:

For employment, fire departments require a Police Records Check, good vision and hearing, and physical fitness. Although a class DZ Ontario drivers licence is not required for the Pre-Service Firefighter Education and Training program, it is required for employment with an Ontario Fire Service. Candidates can contact the Ontario Ministry of Transport for further information on obtaining the licence.

Students who successfully complete the required program components and meet the necessary prerequisites may qualify for testing administered by the (Ontario) Office of the Fire Marshal and Emergency Management, leading to NFPA 1001 Firefighter I or Firefighter II certification and NFPA 1072 HAZMAT Awareness and Operations Certification.

Contact Information

Program Coordinator(s)

- Ken Walton, <mailto:waltonk@algonquincollege.com> , 613-727-4723, ext. 6043

Course Descriptions

FIR0001 Rope Rescue

Understanding rope and its use is an important consideration for accomplishing firefighting and technical rescue operations. Students are introduced to ropes and webbing, knots, rescue site operations, maintenance, and rigging principles and practices. Students are assessed through practical exercises and simulations.

Prerequisite(s): FIR0011
Corerequisite(s): none

FIR0002 Emergency Medical Responder

The challenge and complexities of emergency medical response demand a corresponding level of knowledge and skill for successful patient intervention. Students build on the foundation of

emergency medical response theory and practice. Students develop greater understanding of illness and injury, enhance their patient assessment skills, and broaden their intervention techniques and scope of practice through a combination of theoretical and practical scenarios.

Prerequisite(s): FIR0011
Corerequisite(s):none

FIR0003 Fire Theory I

Knowledge of concepts and principles of modern fire service organizations and their operations is essential to the fire service team. Students are exposed to fire service history, organizational culture, and health and safety practices, principles of fire behaviour and control, and building construction. Students develop competencies necessary for safe and effective fire ground practices.

Prerequisite(s): none
Corerequisite(s):FIR0005

FIR0005 Firefighter Skills Development I

The ability to safely use firefighting tools and techniques is crucial to resolving incidents effectively and efficiently. Through practical application of techniques, students learn to inspect, store, and safely use personal protective equipment and clothing, fire hose, nozzles and ground ladders.

Prerequisite(s): none
Corerequisite(s):FIR0003

FIR0006 Hazardous Materials Operations - Theory

Firefighters are called to respond to a wide range of emergencies, and it is conceivable that any given emergency might involve a hazardous material. The ability to identify and recognize the presence of hazardous materials, and then take appropriate action can have a direct impact on life safety, property preservation and environmental conservation. Students acquire knowledge about the properties and effects of hazardous materials, as well as the various means of recognizing and identifying them. Personal Protective Equipment and responder safety, decontamination, planning and implementing response to hazardous materials emergencies also form the basis of this course. Students acquire the foundational knowledge critical to hazardous materials response.

Prerequisite(s): FIR0003
Corerequisite(s):FIR0007

FIR0007 Hazardous Materials Operations Skills Development

The ability to practically assess, monitor, and mitigate the effects of hazardous materials (HAZMAT) is crucial to incident mitigation. In demonstrating skills, principles, and practices pertaining to Personal Protective Clothing and equipment, product control techniques, monitoring, and decontamination procedures, students use a range of tools and equipment required as part of a hazardous materials operational level response.

Prerequisite(s): FIR0003 and FIR0005
Corerequisite(s):FIR0006

FIR0008 Fire Theory II

An expansion of critical knowledge of fireground tactics is fundamental to successful incident management in the fire service. Students further expand knowledge of emergency communications, incident management, fire origins and cause determination, loss control, fire fighter survival, and technical rescue. Students develop increased competencies necessary for safe and effective fire ground practices and tactics for fire suppression.

Prerequisite(s): FIR0003 and FIR0005
Corerequisite(s):FIR0009

FIR0009 Firefighter Skills Development II

The development of skills required to respond safely and efficiently to all types of incidents that fire fighters could respond to is fundamental to firefighter and public safety. Students will learn and practice emergency communications, working in an incident management system, fireground search and rescue, fire fighter survival and technical rescue techniques through practical demonstrations, drills and scenarios.

Prerequisite(s): FIR0003 and FIR0005

Corerequisite(s):FIR0008

FIR0010 Firefighter Skills Development III

The ability for a firefighter to integrate requisite knowledge and skills and apply them under emergency conditions is fundamental to successful incident resolution. Students apply what they have learned to date through intensive simulations, including a live fire environment.

Prerequisite(s): FIR0005 and FIR0008 and FIR0009

Corerequisite(s):none

FIR0011 First Responder

Due to the wide range of emergencies to which the fire service responds, firefighters can be expected to provide pre-hospital care. Through a combined approach of theory and applied skills, students learn medical and traumatic conditions, patient assessment and treatment techniques, medical scene management and how to function as an effective team during medical response. Pre-Requirements: Standard First Aid, Defib, Level C CPR as identified in the program entrance requirements.

Prerequisite(s): none

Corerequisite(s):none

FIR1702 Professional Communication for Firefighters

Students develop the written and oral communication skills required in the field of firefighting. They write fire service incident reports, memoranda and letters. Students are instructed on the procedures for representing the fire service as public information officers at media briefings. As well, students develop the skills necessary to excel at fire service job interviews.

Prerequisite(s): none

Corerequisite(s):none

FIR1744 Education and Fire Prevention in the Community - Theory

Fire prevention programs are fundamental to the reduction of fires and is a key component of firefighter competencies. Focus is placed on the fire and life safety initiatives, fire origin and cause determination, as well as the fire protection systems aspects and considerations for firefighters. Through lectures, discussion, interactive learning, and work integrated learning (WIL), students develop an understanding of fire and life safety education, private dwelling safety surveys, pre-incident surveys, fire origin and cause determination and fire protection systems.

Prerequisite(s): none

Corerequisite(s):none

FIT4711 Physical Fitness I

Students learn about healthy lifestyle and fitness guidelines to prepare for job-specific fitness and overall wellness. Students engage in hands-on fitness labs to attain and maintain an appropriate level of physical fitness for the physically active workplace.

Prerequisite(s): none

Corerequisite(s):none

FIT4713 Physical Fitness II

Maintaining a high level of physical fitness, tailored to the job performance requirements that are specific to firefighters will help to reduce the risk of occupational injuries, and foster longer and healthier careers in the fire service. Students are provided with the opportunity to enhance their individual level of fitness so that they may best meet the physical demands expected of a firefighter. Students are assessed using physical activities based on occupationally specific fitness requirements for the firefighting profession, including preparing students for the physical demands of the Candidate Physical Ability Testing (CPAT).

Prerequisite(s): FIT4711

Corerequisite(s):none

PFP1020 Psychology

A key component to community relations is possessing foundational knowledge around psychology. Students apply basic psychological concepts, including scientific methods, biological bases of behaviour, perception, states of consciousness, learning, motivation and theories of personality in relation to specific situations. Emphasis is on the causes and consequences of human behaviour, both normal and abnormal behaviour.

Prerequisite(s): none

Corerequisite(s):none