GEORGIAN COLLEGE

PRE-SERVICE FIREFIGHTER EDUCATION AND TRAINING

Program Outline

Major: FIRE
Length: 1 Year
Delivery: 3 Semesters
Credential: Ontario College Certificate
Effective: 2013-2014
Location: Barrie
Start: Fall (Barrie), Winter (Barrie)

Description
The three semester program is based on the Ontario Firefighter Standards (revised 2008). It also meets and exceeds NFPA 1001, 1002 (2008 Edition.)

Upon successful completion of the Pre-Service program, the graduate will undergo provincial testing of the Office of the Fire Marshal. Upon being hired by a fire department and after a time period deemed appropriate by the chief, the firefighter may apply to the Ontario Fire College (OFC) to receive the OFC Certificate of Achievement.

Content will provide the successful graduate with knowledge and skills in the following areas: basic fire science, fire suppression principles and practise, firefighter first responder emergency patient care, fire prevention/public education, and specialty modules such as confined space and environmental hazards.

Career Opportunities
Successful graduates will find employment opportunities in the following areas: professional firefighting, fire inspection, fire prevention and public education, private fire service, Ministry of Natural Resources, and as volunteer firefighters.

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

- apply skills and knowledge associated with efficient and effective fire services; develop the necessary vocational, general education, and generic skills that promote career path eligibility and lifelong learning;
- meet the ethical, legal and safety requirements inherent in professional fireservices;
- engage safe practices and techniques when using fire department apparatus, tools and equipment;
- effectively communicate, both verbally and in writing, using common fire service terminology;
- interact effectively with other members of the critical care team within diverse communities;
- participate in community and civic learning experiences;
- apply environmentally conscious behaviour in professional and personal life.

External Recognition:

The Office of the Fire Marshal (OFM) endorses the content of this program. The curriculum for this program was developed by the OAFC, OFM and the Ontario Colleges of Applied Arts and Technology.

The Program Progression:

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Fall Intake - Barrie

Sem 1 | Sem 2  | Sem 3
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Fall  | Winter | Summer
2013  | 2014   | 2014

Winter Intake - Barrie

Sem 1  | Sem 2  | Sem 3
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Winter | Summer | Fall
2014   | 2014   | 2014
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Admission Requirements:

You must meet ONE of the following requirements to be eligible for admission to these programs:

Secondary school applicants:
- OSS Curriculum: OSSD or equivalent with grade 12 English (C) or (U) (ENG4C, ENG4U); plus any Grade 12 College Mathematics (MAP4C or MCT4C), or any Grade 12 University Mathematics; plus any Grade 11 College or Grade 11 or 12 University Biology (SB13C, SB13U or SB14U); plus Grade 12 College Chemistry, or Grade 11 or 12 University Chemistry or Grade 12 University Exercise Science (SCH4C, SCH4U, SCH3U, PSE4U).

Non-Secondary school applicants (19 years or older):
- Any credit Communication course and most credit mathematics, and biology and chemistry courses taken at Georgian College
- College preparatory programs including those taken at Georgian College: Pre-health science*
- Equivalent courses in English and mathematics, and biology, and chemistry or exercise science taken through secondary school or Independent Learning Centres (at the general, advanced, college or university level)
- Academic and Career Entrance Certificate (ACE) program with communications and mathematics, and biology and chemistry
- Mature student testing in English and mathematics, and testing/challenge exam in biology and chemistry that meets the minimum standards for admission (available through most testing services)*
- Ontario High School Equivalency Certificate (GED) plus biology and chemistry
- English, Literature or Communication and mathematics credit courses and most biology, and chemistry or exercise science credit courses from accredited colleges/universities
- If home schooled, applicants can write the mature student testing in English and mathematics, and testing/challenge exam in biology and chemistry that meets the minimum standards for admission (available through testing services)*

* available from Georgian College. For a complete listing please contact the Office of the Registrar.

Non-secondary school applicants who are 19 years of age or over by the first day of classes, and who lack the academic entrance qualifications, may be considered for entrance to an appropriate post-secondary diploma or certificate program as mature applicants. Mature applicants must meet all program specific prerequisites including all selection criteria; equivalencies are stated above. Applicants who are unsure whether they meet admission requirements should contact the Office of the Registrar. In addition, those applying as mature students and having no documentation of Grade 12 education must supply, if required, proof of age, such as a copy of an official birth certificate or driver's licence. Refer to Section 2.5 and 2.6 of the Academic Calendar for further details.

Credit transfer and course exemptions:

Applicants who have taken courses from a recognized and accredited post-secondary institution and/or have relevant life/learning experience may be eligible for credit transfer/course exemptions. Courses/experience must match at least 80% of the learning outcomes of a Georgian College course with a minimum grade of 60% or C achieved in previous coursework; some program exceptions apply (see program outline). For further information please visit the Credit Transfer Centre website: georgiancollege.ca/admissions/credit-transfer/

Selection Process:

Selection will be based on academic grades, portfolio, and testing results

- Applicants must submit a documented portfolio detailing past achievements, work experience and educational background (including all continuing education, seminars and any related activities). Volunteer work and team activities must be substantiated by hours, copies of certificates and reference letters
- Applicants may complete a Firefighter Aptitude Test consisting of mathematical reasoning, problem solving and analytical reasoning relating to firefighting

Criminal Reference Check:

Placement agencies require an up-to-date clear criminal reference check and vulnerable sector check prior to going out on placement. Students should obtain their criminal reference check approximately one month prior to placement; checks conducted earlier may not be considered current. As some jurisdictions require longer lead-time for processing, please check with the program co-ordinator to ensure you allow for sufficient turn-around time. Students are required to provide these checks prior to placement start.

NOTE: A record of criminal offences, for which a pardon has not been granted, may prevent the student from completing their placement, thereby affecting their ability to graduate.

Additional Information:

To graduate from this program, a student must attain a minimum of 70% for each theoretical Fire course and a letter grade of P(Pass) for each practical Fire course as stated on the course outline.

Applicants are expected to attend a group orientation session prior to the beginning of the September or January semester.

Applicants must have an up-to-date immunization record. CPR Basic Rescue certificate (Level C or higher) and Standard First Aid certificate must be maintained throughout the program. Students are required to submit a copy of both prior to program start.

Physical Fitness: Students must be physically fit to participate. A waiver and informed consent indicating the ability to perform the physical fitness and physical duties is required in firefighter training. During the orientation process students will be required to confirm that they are not affected by acrophobia (fear of heights) and claustrophobia (fear of confined space). If you are unsure of your health status or phobias, you should consult your doctor prior to entering the program as these may preclude you from gaining employment in firefighting. Students must submit a York Firefighter Fitness test or CPAT certificate by the end of second semester.

Vision: Uncorrected Visual Acuity should be at least 6/12 (20/40) binocularly (both eyes). Corrected Visual Acuity should be at least 6/6 (20/20) binocularly. There are additional minimum requirements regarding refractive surgery farsightedness (hyperopia), colour vision, depth perception and peripheral vision. No marked degree of colour blindness is permitted.

Hearing: Normal unaided hearing at frequencies of 500 to 4000 Hz measured by audiometer.

Please Note: A hiring municipality or fire department may have additional special requirements for those entering a career as a firefighter. Students wishing to pursue such careers should ensure that they will be able to meet the physical and educational requirements before enrolling. Potential students with a criminal record will need to discuss their personal situation with college counsellors before enrolling in the program.

Graduation Requirements:

29 Mandatory Courses
1 Communications Course
2 General Education Courses

Graduation Eligibility:

To graduate from this program, the passing weighted average for promotion through each semester, and to graduate is 60%. Additionally, a student must attain a minimum of 50% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester unless otherwise stated on the course outline.

Mandatory Courses

FIRE1000 Introduction to Fire Service
FIRE1019 Public Education and Introduction to Fire Protection Systems
FIRE1027 Rescue and Protective Equipment

FIRE1028 Firefighter Emergency Patient Care 1 Theory
FIRE1029 Firefighter Emergency Patient Care 1 Practical
FIRE1030 Fireground Operations 1 Practical
FIRE1032 Fire Safety Inspections for Firefighters
FIRE1033 Firefighter Emergency Patient Care 2 Theory
FIRE1034 Firefighter Emergency Patient Care 2 Practical
FIRE1039 Fireground Operations 2 Practical
FIRE1040 Vehicle Rescue and Extrication Theory
FIRE1041 Vehicle Rescue and Extrication Practical
FIRE1046 Apparatus Safety and Communications
FIRE1048 Incident Management and Firefighter Survival
FIRE1049 Firefighting Techniques 1 Theory
FIRE1050 Firefighting Techniques 1 Practical
FIRE1051 Specialized Rescue Operations Theory
FIRE1052 Specialized Rescue Operations Practical
FIRE1054 Hazmat Operations and Building Construction Theory
FIRE1055 Hazmat Operations and Building Construction Practical
FIRE1056 Firefighting Techniques 2 Theory
FIRE1057 Firefighting Techniques 2 Practical
FIRE1060 Fitness 1
FIRE1061 Pre-Graduate Experience 1
FIRE1062 Career Preparation for Firefighting and Fitness 2
FIRE1063 Pre-Graduate Experience 2
FIRE1064 Pre-Graduate Experience 3
FIRE1065 Pre-Graduate Experience 4
FIRE1066 Pre-Graduate Experience 5

Communications Course
To be selected at time of registration from the College list, as determined by testing.

General Education Courses
To be selected from College list

Course Descriptions:
FIRE1000 Introduction to Fire Service 42.0 Hours
This theory course provides an overview of the Ontario fire service, the professionalization process for firefighters in Ontario, fire and emergency services organizations, and the roles and responsibilities of the employees. In particular, it focuses on the knowledge, attitudes and skills required of a professional firefighter. In addition, legislation, firefighter safety practices, and fire behavior are emphasized.

Sections
1A Professionalism Process and the Role of the Firefighter in Ontario

Content in this section focuses on the professionalization process and the role of the firefighter. Included is a provincial overview of the fire service as it has evolved historically to the present day. Legislation, ethical and legal requirements of today's professional firefighter are highlighted. The knowledge, attitudes and skills required by a professional firefighter are covered. Hiring criteria, career planning and professional development are examined. The role and responsibilities of the Office of the Fire Marshal, the Ontario Association of Fire Chiefs, other associations and unions are also highlighted.

1B Fire/Emergency Services Organization
This section provides an overview of the goals, responsibilities and accountabilities of municipalities and their fire/emergency services department in providing fire and life safety to their communities. The fire department, its organizational structure and functional divisions will be covered. Factors impacting evolution of the changes in the mandate and role of the departments and their members will be incorporated.

1C Fire Safety Practices
This section covers firefighter safety principles and practices as well as Occupational Health and Safety principles and how they apply to a comprehensive health and safety program for the fire department. The learner will complete a Workplace Hazardous Materials Information System (WHMIS) course by the end of this section.

2 Fire Behaviour and Chemistry of Combustion
This section defines fire and its behaviour from ignition to extinguishment as a result of lack of fuel or oxygen. Fire is studied from both a physical and chemical standpoint. Stages and classes of fire and recognizable events are studied as well as methods of heat/fire spread and the methods used to control and extinguish fire.
These specific knowledge, attitudes, and skills of the firefighter will provide the basis for the practical testing in FIRE1030 Firefighter Rescue Practical 1.

FIRE1019 Public Education and Introduction to Fire Protection Systems 42.0 Hours
This course will focus on the leadership and legislative roles of the firefighter as they pertain to performing public education, public relation activities, public fire and life safety activities. This course will also introduce the student to fire protection systems.

6A Public Education/Relations
This section will focus on the firefighters' role in performing public relation/education activities such as promoting public fire safety, home safety inspections, providing assistance, participating in special activities, performing demonstrations and consistently projecting a professional image on order to enhance the public's perception of the fire service.

It is understood that throughout the firefighter's training he/she will deliver public presentations to large groups as an assigned activity.

6B Fire Safety Inspections
This section provides an overview of fire prevention activities engaged in by the firefighters. Principles, practices and procedures involved in fire prevention inspection will be outlined. Legislation, regulations, standards and fire prevention resources agencies will covered.
C- FIRE1000 Introduction to Fire Service

FIRE1027 Rescue and Protective Equipment 42.0 Hours
This theory course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus on fire ground operations such as: firefighter protective equipment and clothing, self-contained breathing apparatus (SCBA), common tools and equipment (raising and lowering firefighting equipment - ropes and knots), ladders, illumination and related operations (search and rescue techniques). The knowledge and skills of the firefighter will provide the basis for the practical skills and performance testing in FIRE1030 Fireground Operations Practical 1.

Module 3: Fire Ground Operations
Section C:
Firefighter Protective Equipment and Clothing

3Ci Protective Clothing (8 hrs)
This section covers the purpose, types, uses and limitations of protective clothing. The learner practices donning personal protective clothing and equipment including maintaining, storing, cleaning and inspecting.

3Cii Self-Contained Breathing Apparatus (8 hrs)
This section covers types and configurations of breathing apparatus and its component parts. Respiratory hazards, limitations of breathing apparatus and emergency procedures are covered. The importance to the firefighter of the inspection, proper donning, operation, maintenance, cleaning and safety checks is emphasized.

3Di Raising and Lowering Firefighting Equipment - Ropes &Knots (7 hrs)
This section covers common ropes and knots used to raise and lower firefighter equipment in emergency and non-emergency situations. Types, sizes and uses of ropes are highlighted. Practical experience focuses on tying common knots and raising and lowering firefighting equipment.

3Dii Ladders (7 hrs)
This section covers types and sizes of ladders used in the fire service and different methods used in carrying, raising, climbing and working on ground ladders.

3Diii Illumination (2 hrs)
This section covers lighting equipment and it's operation in order to provide illumination of the scene and to ensure that all equipment is operated within manufacturer's listed safety precautions.

3Eiii Search and Rescue (10 hrs)
This section provides an overview of search and rescue operations. The importance of information gathering is highlighted including the use of pre-plans to determine likely victim location. Search patterns, victim stabilization and removal, safety, hazard recognition and inter-agency co-operation are stressed.

C- FIRE1000 Introduction to Fire Service, Co-FIRE1030 Fireground Operations 1 Practical

FIRE1028 Firefighter Emergency Patient Care 1 Theory 28.0 Hours
This theory course provides an overview of the firefighter as a member of the emergency patient care team. The role of the firefighter in performing basic emergency patient care is highlighted including emergency pre-hospital patient care system, patient assessment, common medical/trauma emergencies and patient care, scene stabilization, patient survey and patient care management for common medical and trauma emergencies during various fire service emergency responses. The knowledge and skills acquired in this course will provide the basis for practical skills and performance testing in FIRE1029 Firefighter Emergency Patient Care 1 Practical.

4A Emergency Pre-Hospital Patient Care System
This section will provide an in depth review of the Ontario emergency medical system and the role of EMS personnel across the province in pre-hospital care. Content will focus on the application of relevant legislation, regulations, policies, procedures and protocols along with the role; responsibilities and preparation of the firefighter emergency patient care responder.

4B Patient Assessment
This section will focus on the assessment of patients in a pre-hospital care setting and the role of the firefighter emergency patient care responder. Scene stabilization and assessment skills will be practiced and demonstrated in patient care scenarios.

4C Common Medical/Trauma Emergencies and Patient Care Management
4Ci Common Respiratory Emergencies – Medical/Trauma
This section covers common respiratory conditions and emergencies encountered by the firefighter emergency patient care responders. Patient care management and skills will be demonstrated in patient care scenarios.

4Cii Common Cardiac Emergencies – Medical/Trauma

This section covers common cardiovascular conditions and emergencies, including shock. Patient care management and skills will be demonstrated in patient care scenarios.

4Civ Common Musculoskeletal Emergencies – Medical/Trauma

This section covers common musculoskeletal conditions and emergencies encountered by the firefighter emergency patient care responders. Content will include the basic path physiology associated with common musculoskeletal conditions and emergencies. Patient Care Management and skills will be demonstrated in patient care scenarios.

C- FIRE1000 Introduction to Fire Service and P- AID6 First Aid - FIRE Program and P- CPR1 Level C CPR - FIRE, Co-FIRE1029 Firefighter Emergency Patient Care 1 Practical

FIRE1029 Firefighter Emergency Patient Care 1 Practical 14.0 Hours

This practical course provides an overview of the firefighter as a member of the emergency patient care team. The role of the firefighter in performing basic emergency patient care is highlighted including emergency pre-hospital patient care system, patient assessment, common medical/trauma emergencies and patient care, scene stabilization, patient survey and patient care management for common medical and trauma emergencies during various fire service emergency responses.

4B Patient Assessment

This section will focus on the assessment of patients in a pre-hospital care setting and the role of the firefighter emergency patient care responder. Scene stabilization and assessment skills will be practised and demonstrated in patient care scenarios.

4C Common Medical/Trauma Emergencies and Patient Care Management

4Ci Common Respiratory Emergencies – Medical/Trauma

This section covers common respiratory conditions and emergencies encountered by the firefighter emergency patient care responders.

Patient care management and skills will be demonstrated in patient care scenarios.

4Cii Common Cardiac Emergencies – Medical/Trauma

This section covers common cardiovascular conditions and emergencies, including shock. Patient care management and skills will be demonstrated in patient care scenarios.

4Civ Common Musculoskeletal Emergencies – Medical/Trauma

This section covers common musculoskeletal conditions and emergencies encountered by the firefighter emergency patient care responders. Content will include the basic path physiology associated with common musculoskeletal conditions and emergencies. Patient Care Management and skills will be demonstrated in patient care scenarios.

C- FIRE1000 Introduction to Fire Service and P- AID6 First Aid - FIRE Program and P- CPR1 Level C CPR - FIRE, Co-FIRE1028 Firefighter Emergency Patient Care 1 Theory

FIRE1030 Fireground Operations 1 Practical 42.0 Hours

This practical course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus on fire ground operations such as fire ground communications, protective clothing, self - contained breathing apparatus, raising and lowering firefighting equipment, ladders and illumination, covers related operations including search and rescue.

During this course the learner will demonstrate, as a team member, common fire ground evolutions.

3B Fire Ground Communications
This section gives an overview of the communication and dispatch system in the fire department. The purpose, procedures and operations of communication equipment will be covered along with the role of the dispatcher and the firefighter

3Ci Protective Clothing
This section covers the purpose, types, uses and limitations of protective clothing. The learner practices donning personal protective clothing and equipment including maintaining, storing, cleaning and inspecting.

3Cii Self-Contained Breathing Apparatus (SCBA)
This section covers types and configurations of breathing apparatus and its component parts. Respiratory hazards, limitations of breathing apparatus and emergency procedures are covered. The importance to the firefighter of the inspection, proper donning, operation, maintenance, cleaning and safety checks is emphasized.

3Di Raising and Lowering Firefighting Equipment (Ropes & Knots)
This section covers common ropes and knots used to raise and lower firefighter equipment in emergency and non-emergency situations. Types, sizes and uses of ropes are highlighted. Practical experience focuses on tying common knots and raising and lowering firefighting equipment.

3Dii Ladders
This section covers types and sizes of ladders used in the fire service and different methods used in carrying, raising, climbing and working on ground ladders.

3Diii Illumination
This section covers lighting equipment and it's operation in order to provide illumination of the scene and to ensure that all equipment is operated within manufacturer's listed safety precautions.

3Eiii. Search and Rescue
This section provides an overview of search and rescue operations. The importance of information gathering is highlighted including the use of pre-plans to determine likely

victim location. Search patterns, victim stabilization and removal, safety, hazard recognition and inter-agency co-operation are stressed.
C- FIRE1000 Introduction to Fire Service, Co-FIRE1027 Rescue and Protective Equipment

FIRE1032 Fire Safety Inspections for Firefighters 42.0 Hours
This theory course will focus on the leadership and legislative roles of the firefighter as they pertain to performing public education, public relation activities, public fire and life safety activities. This course builds on the knowledge gained in Fire 1019 - Public Education and Fire Protection Systems.

6B Fire Safety Inspections
This section provides an overview of fire prevention activities engaged in by firefighters. Principles, practices and procedures involved in fire prevention inspection will be outlined. Legislation, regulations, standards and fire prevention resource agencies will be covered.
P- FIRE1000 Introduction to Fire Service and P- FIRE1019 Public Education and Introduction to Fire Protection Systems

FIRE1033 Firefighter Emergency Patient Care 2 Theory 28.0 Hours
This theory course provides an overview of the firefighter as a member of the emergency patient care team. The role of the firefighter in performing basic emergency patient care is highlighted including common neurological emergencies, other common emergencies, common emergencies involving childbirth, and environmental incidents during various fire service emergency responses. The knowledge and skills acquired in this course will provide the basis for practical exercises and performance testing in FIRE1034 Firefighter Emergency Patient Care II Practical.

4C iii Common Neurological Emergencies-Medical/Trauma
This section covers common musculoskeletal conditions and emergencies encountered by the firefighter emergency patient care responders. Content will include the basic physiology associated with common musculoskeletal conditions and emergencies. Patient care management and skills will be demonstrated in patient care scenarios.

4Cv Other Common Emergencies-Medical/Trauma
This section covers other common conditions and emergencies encountered by the firefighter emergency patient care responder. Content will include hypoglycaemia, hyperglycemias, hypothermia, hyperthermia, anaphylactic shock and poisoning. Patient care management and skills will be demonstrated in patient care scenarios.

4Cvi Common Emergencies Involving Childbirth
This section covers common conditions and emergencies involving childbirth encountered by the firefighter emergency patient care responder. Content will include the basic path physiology associated with common childbirth conditions and

emergencies. Patient care management and skills will be demonstrated in patient care scenarios.

4Cvii Environmental Incidents – Thermal, Chemical & Electrical Burns
This section covers burns caused by thermal, electrical or chemical sources. Patient care management and skills required will be demonstrated in patient care scenarios.

The importance of first responder co-ordination and teamwork necessary for effective patient care management will be highlighted.
P- FIRE1000 Introduction to Fire Service and P- FIRE1028 Firefighter Emergency Patient Care 1 Theory and P- FIRE1029 Firefighter Emergency Patient Care 1 Practical and P- AID6 First Aid - FIRE Program and P- CPR1 Level C CPR - FIRE, Co-FIRE1034 Firefighter Emergency Patient Care 2 Practical

FIRE1034 Firefighter Emergency Patient Care 2 Practical 14.0 Hours
This practical course provides an overview of the firefighter as a member of the emergency patient care team. The role of the firefighter in performing basic emergency patient care is highlighted including common neurological emergencies, other common emergencies, common emergencies involving childbirth, and environmental incidents during various fire service emergency responses. The knowledge and skills learned in FIRE1033 will provide the basis for practical exercises and performance testing in this course.

Sections
4C iii Common Neurological Emergencies-Medical/Trauma
This section covers common musculoskeletal conditions and emergencies encountered by the firefighter emergency patient care responders. Content will include the basic physiology associated with common musculoskeletal conditions and emergencies. Patient care management and skills will be demonstrated in patient care scenarios.

4Cvi Common Emergencies Involving Childbirth
This section covers common conditions and emergencies involving childbirth encountered by the firefighter emergency patient care responder. Content will include the basic path physiology associated with common childbirth conditions and emergencies. Patient care management and skills will be demonstrated in patient care scenarios.

4Cvii Environmental Incidents – Thermal, Chemical & Electrical Burns
This section covers burns caused by thermal, electrical or chemical sources. Patient care management and skills required will be demonstrated in patient care scenarios.

The importance of first responder co-ordination and teamwork necessary for effective patient care management will be highlighted.

P- FIRE1000 Introduction to Fire Service and P- FIRE1028 Firefighter Emergency Patient Care 1 Theory and P- FIRE1029 Firefighter Emergency Patient Care 1 Practical and P- AID6 First Aid - FIRE Program and P- CPR1 Level C CPR - FIRE, Co-FIRE1033 Firefighter Emergency Patient Care 2 Theory

FIRE1039 Fireground Operations 2 Practical 42.0 Hours
This practical course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus on fire ground operations such as incident management, ventilation, forcible entry, search and rescue, salvage and scene assessment, overhaul, water supply and hydraulics and hoses and appliances. Common techniques, tools, equipment and use are incorporated.

This course provides for practical exercises and performance testing in the Fire Ground Operations sections.

3A Incident Management
This section provides an overview of the Incident Management System. The content will address the observational, assessment, problem solving and decision making skills required by firefighters. The learner is introduced to the role of the firefighter on route to the fire scene and at the fire scene. Fire cause determination, fire scene security and post incident analysis and review are covered.

3Ei Ventilation
Ventilate structures as directed using natural or mechanical means so that a controlled release of heat, smoke, and gases is achieved in a safe manner with team members, and according to performance demonstration criteria.

3Eii Forcible Entry
This section defines forcible entry, covers the reasons for forcible entry, tools and techniques required, and discusses the various points of entry to buildings.

3Eiii Search and Rescue
This section provides an overview of search and rescue operations. The importance of information gathering is highlighted using the use of pre-plans to determine likely victim location. Search patterns, victim stabilization and removal, safety, hazard recognition and inter-agency co-operation are stressed.

3Eiv Salvage and Scene Assessment
This section describes the purpose and benefits of salvage and scene assessment as well as the tools and equipment used and procedures to follow during salvage operations.

3Ev Overhaul

This section defines overhaul and describes the reasons for, as well as procedures and precautions to be observed when performing overhaul operations. The duties and responsibility of a fire watch are also covered.

3Fi Water Supply and Hydraulics
This section provides an overview of the design and components of municipal water supply systems and rural water supplies, as well as the types and operation of hydrants and methods of determining flow.

3Fii Hoses and Appliances
This section describes hoses and associated appliances used in water delivery and fire attack lines. Causes and prevention of damage and the methods of inspection, maintenance and handling are also covered.

3G Firefighter Survival
This section introduces the elements of firefighter survival from a self-rescue and firefighter rescue perspective. Fire ground self-rescue techniques and procedures will be the focu of the information covered. Topics include Mayday procedures, advanced SCBA techniques/procedures, rescue and escape procedures, wall breaches, entanglement prevention and emergency exit procedures all at the awareness level.
P- FIRE1000 Introduction to Fire Service and P- FIRE1027 Rescue and Protective Equipment and P- FIRE1030 Fireground Operations 1 Practical and C- FIRE1049 Firefighting Techniques 1 Theory and C- FIRE1050 Firefighting Techniques 1 Practical

FIRE1040 Vehicle Rescue and Extrication Theory 28.0 Hours
This theory course provides an overview of environmental hazards and rescue operations. General vehicle extrication is covered. The role and responsibilities of the firefighting team and co-operating agencies are highlighted, along with safety practices and risk assessment. Also emphasized are the importance of environmental protection and the impact of hazardous incidents on the community and the health and safety of firefighters. The knowledge and skills acquired in this course will provide the basis for the practical testing in FIRE1041 Vehicle Rescue and Extrication-Practical.

5Di General Vehicle Extrication
This section will focus on the generic and rescue skills and basic vehicle extrication skills necessary for a firefighter/rescuer to safely and effectively extricate a victim(s) from a vehicle. Content will include the principles, techniques and practices, reflecting leading edge vehicle technology. The use of special equipment and resources such as manual, hydraulic and pneumatic tools and ancillary equipment will be covered. Other topics include scene assessment incident management systems and safety of victim(s) and rescuers.
P- FIRE1000 Introduction to Fire Service and P- FIRE1033 Firefighter Emergency Patient Care 2 Theory and P- FIRE1034 Firefighter Emergency Patient Care 2 Practical, Co-FIRE1041 Vehicle Rescue and Extrication Practical

FIRE1041 Vehicle Rescue and Extrication Practical 14.0 Hours
This practical course provides an overview of environmental hazards and rescue operations. General vehicle extrication is covered. The role and responsibilities of the firefighting team and co-operating agencies are highlighted, along with safety practices and risk assessment. Also emphasized are the importance of environmental protection and the impact of hazardous incidents on the community and the health and safety of firefighters.

5Di General Vehicle Extrication
This practical section will focus on the generic and rescue skills and basic vehicle extrication skills necessary for a firefighter/rescuer to safely and effectively extricate a victim(s) from a vehicle. Content will include the principles, techniques and practices, reflecting leading edge vehicle technology. The use of special equipment and resources such as manual, hydraulic and pneumatic tools and ancillary equipment will be covered. Other topics include scene assessment incident management systems and safety of victim(s) and rescuers.
P- FIRE1000 Introduction to Fire Service and P- FIRE1033 Firefighter Emergency Patient Care 2 Theory and P- FIRE1034 Firefighter Emergency Patient Care 2 Practical, Co-FIRE1040 Vehicle Rescue and Extrication Theory

FIRE1046 Apparatus Safety and Communications 28.0 Hours
This course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus on fire ground operations such as operating emergency vehicles, pre and post inspections and fire ground communications. Health and safety guidelines will be covered in this course.

3B Fire Ground Communication
This section also gives an overview of the communication and dispatch system in the fire department. The purpose, procedures, and operations of communication equipment will be covered along with the role of the dispatcher and the firefighter.

3Hi Operate Emergency Vehicles (15 hrs)
3Hii Pre and Post Incident Inspection
This section introduces the rules, procedures and regulations that apply to the driving and operation of fire apparatus. The different types and purposes of fire apparatus and equipment, including tankers, pumpers, aerials and lighting equipment are covered. Pre and post equipment inspection is also covered.
C- FIRE1000 Introduction to Fire Service

FIRE1048 Incident Management and Firefighter Survival 42.0 Hours
This theory course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus

on fire ground operations such as fire ground operations such as incident management and firefighter survival.

The learner at the end of this course will demonstrate, as a team member, common fire ground evolutions.

3Ai Intro to the Incident Management System
3Aii Introduction to Size-up
3Aiii Introduction to decision Making
3Aiv Introduction to Post Incident Analysis and Review
3Av Pre-Incident Planning

These sections provide an overview of the Incident Management System. The learner is introduced to the role of the firefighter on route to the fire scene and at the fire scene. Fire cause determination, fire scene security and post incident analysis and review as well as pre-planning are covered.

3G Firefighter` Survival
This section also introduces the elements of firefighter survival from a self-rescue and firefighter rescue perspective
P- FIRE1000 Introduction to Fire Service and C- FIRE1039 Fireground Operations 2 Practical

FIRE1049 Firefighting Techniques 1 Theory 28.0 Hours
This theory course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus on fire ground operations such as ventilation, forcible entry, water supply and hydraulics, salvage and scene assessment and overhaul. The knowledge and skills acquired in this course will provide the practical exercises and performance testing in FIRE1050 Firefighter Techniques 1 Practical.

3Ei Ventilation
This section defines ventilation as it applies to the fire service and describes the concepts, types, procedures, precautions, and equipment associated with ventilation operations.

3Eii Forcible Entry
This section defines forcible entry, covers the reasons for forcible entry, tools and techniques required, and discusses the various points of entry to buildings.

3Eiv Salvage and Scene Assessment
This section describes the purpose and benefits of salvage and scene assessment as well as the tools and equipment used and procedures to follow during salvage operations.

3Ev Overhaul
This section defines overhaul and describes the reasons for, as well as procedures and precautions to be observed when performing overhaul operations. The duties and responsibility of a fire watch are also covered.

3Fi Water Supply and Hydraulics
This section provides an overview of the design and components of municipal water supply systems and rural water supplies, as well as the types and operation of hydrants and methods of determining flow.

3Fii Hoses and Appliances
This section describes hoses and associated appliances used in water delivery and fire attack lines. Causes and prevention of damage and the methods of inspection, maintenance and handling are also covered.
P- FIRE1000 Introduction to Fire Service and P- FIRE1027 Rescue and Protective Equipment and P- FIRE1030 Fireground Operations 1 Practical and C- FIRE1039 Fireground Operations 2 Practical, Co-FIRE1050 Firefighting Techniques 1 Practical

FIRE1050 Firefighting Techniques 1 Practical 14.0 Hours
This practical course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus on fire ground operations such as ventilation, forcible entry, water supply and hydraulics, salvage and scene assessment and overhaul. The knowledge and skills learned in FIRE1049 will provide the basis for practical exercises and performance testing in this course.

3Ei Ventilation
This section defines ventilation as it applies to the fire service and describes the concepts, types, procedures, precautions, and equipment associated with ventilation operations.

3Eii Forcible Entry
This section defines forcible entry, covers the reasons for forcible entry, tools and techniques required, and discusses the various points of entry to buildings.

3Eiv Salvage and Scene Assessment
This section describes the purpose and benefits of salvage and scene assessment as well as the tools and equipment used and procedures to follow during salvage operations.

3Ev Overhaul
This section defines overhaul and describes the reasons for, as well as procedures and precautions to be observed when performing overhaul operations. The duties and responsibility of a fire watch are also covered.

3Fi Water Supply and Hydraulics
This section provides an overview of the design and components of municipal water supply systems and rural water supplies, as well as the types and operation of hydrants and methods of determining flow.

3Fii Hoses and Appliances
This section describes hoses and associated appliances used in water delivery and fire attack lines. Causes and prevention of damage and the methods of inspection, maintenance and handling are also covered.
P- FIRE1000 Introduction to Fire Service and P- FIRE1027 Rescue and Protective Equipment and P- FIRE1030 Fireground Operations 1 Practical and C- FIRE1039 Fireground Operations 2 Practical, Co-FIRE1049 Firefighting Techniques 1 Theory

FIRE1051 Specialized Rescue Operations Theory 42.0 Hours
This theory course provides an overview of environmental hazards and rescue operations including general rescue, electrical hazards, rescue operations at the awareness level and trench rescue. The role and responsibilities of the firefighting team and co-operating agencies are highlighted, along with safety practices and risk management. Also emphasized are the importance of environmental protection and the impact of hazardous incidents on the community and the health and safety of firefighters. The knowledge and skills acquired in this course will provide the basis for practical skills and performance testing in FIRE1052 Specialized Rescue Operations Practical.

5A General Rescue: Principles and Practices
This section provides the learner with generic rescue principles and practices along with an understanding of the rescue process as conducted by firefighters. Key factors, conditions affecting common rescue, the roles and responsibilities of emergency rescue responders, safety and teamwork will be covered.

Specifics will include rescue terminology, tools, equipment and available resources for rescue.

5B Electrical Hazards
This section provides an overview of electrical hazards firefighters encounter when responding to electrical emergencies occurring during fire suppression and rescue operations. Included in this will be safety precautions and actions a firefighter should take when dealing with possibly charged electrical equipment.

5D Rescue Operations – Awareness
5Dii Confined Space
This section provides an overview of the principles and practices associated with a non-entry confined space rescue. Content will focus on non-entry confined space rescue and the role of the firefighter at an awareness level. Learners will have an opportunity to

practice size-up, assessment and stabilization skills in non-entry rescue. Procedures to identify confined spaces, hazards and communication with victim(s) will also be covered.

5Diii Land/based Water/Ice rescue
This section focuses on the roles and responsibilities of the firefighter/rescuer in land based/water /ice rescue. Content will include the principals, techniques and practices for land based/water/ice rescue operations. Practical experience will include the generic and specialized skills required in land based rescue.

5E Trench Rescue – Awareness
This section provides an overview of the principles and practices associated with trench rescues. Content will focus on trench rescues and the role of the firefighter at an awareness level. Firefighters will have an opportunity to practice size-up, assessment and stabilization skills. Procedures to identify hazards and communication with patient(s) will also be covered.
P- FIRE1000 Introduction to Fire Service and P- FIRE1028 Firefighter Emergency Patient Care 1 Theory and P- FIRE1029 Firefighter Emergency Patient Care 1 Practical and C- FIRE1052 Specialized Rescue Operations Practical

FIRE1052 Specialized Rescue Operations Practical 14.0 Hours
This practical course provides an overview of environmental hazards and rescue operations including general rescue, electrical hazards, rescue operations-awareness and trench rescue. The role and responsibilities of the firefighting team and co-operating agencies are highlighted, along with safety practices and risk management. Also emphasized are the importance of environmental protection and the impact of hazardous incidents on the community and the health and safety of firefighters. The knowledge learned in FIRE1051 will provide the basis for practical exercises and performance testing in this course.

5A General Rescue: Principles and Practices
This section provides the learner with generic rescue principles and practices along with an understanding of the rescue process as conducted by firefighters. Key factors, conditions affecting common rescue, the roles and responsibilities of emergency rescue responders, safety and teamwork will be covered.

Specifics will include rescue terminology, tools, equipment and available resources for rescue.

5B Electrical Hazards
This section provides an overview of electrical hazards firefighters encounter when responding to electrical emergencies occurring during fire suppression and rescue

operations. Included in this will be safety precautions and actions a firefighter should take when dealing with possibly charged electrical equipment.

5D Rescue Operations – Awareness
5Dii Confined Space
This section provides an overview of the principles and practices associated with a non-entry confined space rescue. Content will focus on non-entry confined space rescue and the role of the firefighter at an awareness level. Learners will have an opportunity to practice size-up, assessment and stabilization skills in non-entry rescue. Procedures to identify confined spaces, hazards and communication with victim(s) will also be covered.

5Diii Land/based Water/Ice Rescue
This section focuses on the roles and responsibilities of the firefighter/rescuer in land based/water /ice rescue. Content will include the principals, techniques and practices for land based/water/ice rescue operations. Practical experience will include the generic and specialized skills required in land based rescue.

5E Trench Rescue – Awareness
This section provides an overview of the principles and practices associated with trench rescues. Content will focus on trench rescues and the role of the firefighter at an awareness level. Firefighters will have an opportunity to practice size-up, assessment and stabilization skills. Procedures to identify hazards and communication with patient(s) will also be covered.

These specific knowledge, attitudes, and skills of the firefighter will provide the basis for the practical exercises and performance testing in FIRE1057 Firefighter Rescue Practical 2.
P- FIRE1000 Introduction to Fire Service and P- FIRE1028 Firefighter Emergency Patient Care 1 Theory and P- FIRE1029 Firefighter Emergency Patient Care 1 Practical and C- FIRE1051 Specialized Rescue Operations Theory

FIRE1054 Hazmat Operations and Building Construction Theory 28.0 Hours
This theory course provides an overview of environmental hazards and rescue operations. Hazardous material awareness and operations as well as building construction and structural collapse are covered. The role and responsibilities of the firefighting team and co-operating agencies are highlighted, along with safety practices and risk management. Also emphasized are the importance of environmental protection and the impact of hazardous incidents on the community and the health and safety of firefighters. The knowledge and skills acquired in this course will provide the basis for practical exercises and performance testing in FIRE1055 Hazmat Operations and Building Construction.

5C Hazardous Material – Awareness

This section sets the stage for the following sections on rescue operations. There is potential in any fire ground/rescue operation for environmental damage and an overall negative impact on the community and to the health and safety of firefighters and rescue teams.

Content will focus on the role, responsibilities and actions taken by firefighters as firefighter emergency responder at an awareness level during a hazardous materials incident. There will be a focus on recognition, firefighter protection, interagency coordination, securing the area and accessing of information from additional resources

5F Building Construction and Structural Collapse
This section assists firefighters in analyzing, planning and strategizing for effective responses to emergency incidents. It also provides the firefighter with the knowledge to identify safety concerns that affect emergency responder safety at emergency situations, and a general understanding of building construction types and how each performs under exposure to fire.

Another essential element to building construction is how buildings and structures react under stress conditions that may result in structural collapse. Having a better understanding of building construction will assist firefighters in size up and scene stabilization for all types of incidents involving a collapse.

5G Hazardous Materials - Operations
Content will focus on the role, responsibilities and actions taken by firefighters as firefighter emergency responder at an operations level during a hazardous materials incident. It will include knowledge on analyzing the incident, planning the response, implementing the planned response and evaluating progress. Additionally, emergency decontamination will be demonstrated.

P- FIRE1000 Introduction to Fire Service and P- FIRE1033 Firefighter Emergency Patient Care 2 Theory and P- FIRE1034 Firefighter Emergency Patient Care 2 Practical and P- FIRE1039 Fireground Operations 2 Practical, Co-FIRE1055 Hazmat Operations and Building Construction Practical

FIRE1055 Hazmat Operations and Building Construction Practical 14.0 Hours
This practical course provides an overview of environmental hazards and rescue operations. Hazmat Awareness and Operations as well as Building Construction are covered. The role and responsibilities of the firefighting team and co-operating agencies are highlighted, along with safety practices and risk management. Also emphasized are the importance of environmental protection and the impact of hazardous incidents on the community and the health and safety of firefighters.

5C Hazardous Material – Awareness

This section sets the stage for the following sections on rescue operations. There is potential in any fire ground/rescue operation for environmental damage and an overall negative impact on the community and to the health and safety of firefighters and rescue teams.

Content will focus on the role, responsibilities and actions taken by firefighters as firefighter emergency responder at an awareness level during a hazardous materials incident. There will be a focus on recognition, firefighter protection, interagency coordination, securing the area and accessing of information from additional resources

5F Building Construction and Structural Collapse
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5G Hazardous materials - Operations
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P- FIRE1000 Introduction to Fire Service and P- FIRE1033 Firefighter Emergency Patient Care 2 Theory and P- FIRE1034 Firefighter Emergency Patient Care 2 Practical and P- FIRE1039 Fireground Operations 2 Practical, Co-FIRE1054 Hazmat Operations and Building Construction Theory

FIRE1056 Firefighting Techniques 2 Theory 42.0 Hours
This theory course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus on fire ground operations such as fire streams and foam, portable extinguishers and fire suppression techniques. These specific knowledge and skills will provide the basis for practical exercises and performance testing Fire 1057 Firefighter 2 Techniques.

3Fiii Fire Streams and Foams name foam or foams?
This section provides an overview of the design and components of municipal water supply systems and rural water supplies, as well as the types and operation of hydrants and methods of determining flow.

3Fiv Portable Extinguishers
This section describes hoses and associated appliances used in water delivery and fire attack lines. Causes and prevention of damage and the methods of inspection, maintenance and handling are also covered.

3Fv Fire Suppression Techniques
This section provides an overview of the water extinguishment theory and the application of water streams at the fire scene. In particular, the development of skills associated with the selection and safe operation of solid, fog and master streams is covered. The types, purpose and construction of nozzles used to produce fire streams are also covered.
P- FIRE1000 Introduction to Fire Service and P- FIRE1039 Fireground Operations 2 Practical and P- FIRE1049 Firefighting Techniques 1 Theory and P- FIRE1050 Firefighting Techniques 1 Practical, Co-FIRE1057 Firefighting Techniques 2 Practical

FIRE1057 Firefighting Techniques 2 Practical 14.0 Hours
This practical course provides an overview of the basic components of fire ground operations within the structure of an incident management system. Content will focus on fire ground operations such as fire streams and foam, portable extinguishers and fire suppression techniques.

3Fiii Fire Streams and Foams
This section provides an overview of the design and components of municipal water supply systems and rural water supplies, as well as the types and operation of hydrants and methods of determining flow.

3Fiv Portable Extinguishers
This section describes hoses and associated appliances used in water delivery and fire attack lines. Causes and prevention of damage and the methods of inspection, maintenance and handling are also covered.

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P- FIRE1000 Introduction to Fire Service and P- FIRE1039 Fireground Operations 2 Practical and P- FIRE1049 Firefighting Techniques 1 Theory and P- FIRE1050 Firefighting Techniques 1 Practical, Co-FIRE1056 Firefighting Techniques 2 Theory

FIRE1060 Fitness 1 28.0 Hours

This practical course provides an overview of the physical training required to be successful in firefighting. Integrating different training regiments, fitness testing and integrating components of specific Bona Fide Occupational requirements into simulated job-related assessments, students will be exposed to techniques to assist them in developing physical skills to be successful in firefighter entrance testing requirements.
C- FIRE1000 Introduction to Fire Service

FIRE1061 Pre-Graduate Experience 1 14.0 Hours
The purpose of the Pre-Graduate Experience is to afford students an opportunity to integrate knowledge and skills learned to apply them during intensive practice of basic firefighting skills in a simulated environment, including live fire. Students will also gain better insight into the role of the firefighter, the operation of the fire service and other related emergency services.

Each student, based on defined learning outcomes will participate in a minimum of 172 hours prior to graduation from the course.
C- FIRE1000 Introduction to Fire Service

FIRE1062 Career Preparation for Firefighting and Fitness 2 42.0 Hours
The career preparation part of this course provides an overview of the current fire service hiring practices, interviewing procedures and testing. Students learn how to effectively manage their time by identifying goals, creating semester plans, recognizing obstacles and how to prepare an effective plan for their career path.

The fitness training part of this course builds on the knowledge and skills learned in FIRE1047 Fitness 1. Students are exposed to different techniques to assist them in developing physical skills to be successful in firefighter entrance testing requirements.
C- FIRE1000 Introduction to Fire Service and C- FIRE1060 Fitness 1

FIRE1063 Pre-Graduate Experience 2 14.0 Hours
The purpose of the Pre-Graduate Experience is to afford students an opportunity to integrate knowledge and skills learned to apply them during intensive practice of basic firefighting skills in a simulated environment, including live fire. Students will also gain better insight into the role of the firefighter, the operation of the fire service and other related emergency services.

Each student, based on defined learning outcomes will participate in a minimum of 172 hours prior to graduation from the course.
P- FIRE1000 Introduction to Fire Service

FIRE1064 Pre-Graduate Experience 3 42.0 Hours
The purpose of the Pre-Graduate Experience is to afford students an opportunity to integrate knowledge and skills learned to apply them during intensive practice of basic firefighting skills in a simulated environment, including live fire. Students will also gain

better insight into the role of the firefighter, the operation of the fire service and other related emergency services.

Each student, based on defined learning outcomes will participate in a minimum of 172 hours prior to graduation from the course. Activities will spread out over 3 semesters.
C- FIRE1065 Pre-Graduate Experience 4 and C- FIRE1066 Pre-Graduate Experience 5C- , FIRE1065 Pre-Graduate Experience 4

FIRE1065 Pre-Graduate Experience 4 42.0 Hours
The purpose of the Pre-Graduate Experience is to afford students an opportunity to integrate knowledge and skills learned to apply them during intensive practice of basic firefighting skills in a simulated environment, including live fire. Students will also gain better insight into the role of the firefighter, the operation of the fire service and other related emergency services.

Each student, based on defined learning outcomes will participate in a minimum of 172 hours prior to graduation from the course. Activities will be spread out over 3 semesters.
C- FIRE1064 Pre-Graduate Experience 3 and C- FIRE1066 Pre-Graduate Experience 5

FIRE1066 Pre-Graduate Experience 5 70.0 Hours
The purpose of the Pre-Graduate Experience is to afford students an opportunity to integrate knowledge and skills learned to apply them during intensive practice of basic firefighting skills in a simulated environment, including live fire. Students will also gain better insight into the role of the firefighter, the operation of the fire service and other related emergency services.

Each student, based on defined learning outcomes will participate in a minimum of 172 hours prior to graduation from the course. Activities will spread out over 3 semesters.
C- FIRE1064 Pre-Graduate Experience 3 and C- FIRE1065 Pre-Graduate Experience 4

Course Description Legend
P = Prerequisite; C = Concurrent prerequisite; CO= Corequisite

Information contained in College documents respecting programs is correct at the time of publication. Academic content of programs and courses is revised on an ongoing basis to ensure relevance to changing educational objectives and employment market needs. The college reserves the right to add or delete programs, options, courses, timetables or campus locations subject to sufficient enrolment, and the availability of courses.