

# Fire Systems Engineering Technician



<b>Program Location:</b>	Peterborough
<b>Program Code:</b>	FSE
<b>Co-ordinator:</b>	Jim Fleming
<b>Credential:</b>	Ontario College Diploma
<b>Start Date:</b>	September 04, 2012
<b>Tuition Fees:</b>	\$1,864.70 per semester. Tuition and fees subject to change.

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**The two-year Fire Systems Engineering Technician program prepares graduates for jobs in the rapidly growing fire safety sector. Recent changes to provincial building and fire codes are creating a significant demand for trained people to design, modify and test fire safety systems.**

## Program Highlights

Changes in provincial Fire Codes require that all fire safety systems be inspected and tested once each year, escalating the need for trained people to fulfill these requirements. At the same time, due to the large number of retirements in the Fire Protection/Safety industry in the next three to ten years, there will be a significant demand for program graduates. This program is one of only two such college programs available in Ontario.

- Students will learn how to design, market and maintain security and safety systems for residential and commercial environments that require fire detection, fire suppression, and fire prevention system maintenance, testing and inspection.
- The Ontario Association of Certified Engineering Technicians and Technologists (OACETT) conditionally recognizes this program as meeting all the academic requirements for certification in the Certified Technician (Ctech) category.
- The program also covers all of the curriculum requirements of the Canadian Fire Alarm Association (CFAA) and the Canadian Automatic Sprinkler Association (CASA).

## Success Stories

*"Here's an opportunity to save lives every day through fire prevention and protection. You can learn to eliminate fires before they begin, creating a safe environment for people to live, work and play."* Eric Chant  
Fire Prevention Captain, Peterborough Fire Service

## Why Choose Fleming

Our program is one of only two such college programs available in Ontario. You'll be in demand as one of the few graduates in this field in the province. You'll acquire generalist skills in a wide range of technology, while developing specialist skills as a fire systems engineering technician. A broader base of knowledge means you are versatile in the workplace.

Students will learn in the college's state-of-the-art technology facility. In this spectacular environment, they will have open access to the engineering commons, providing increased time to work in the labs on assignments and

projects. Upon entrance to the program, students will take common courses that develop the fundamental skills required of a technician. As they proceed through their program, they will encounter more specific fire safety related course work.

## Is this You?

You will need these skills and traits to succeed:

- enjoyment of hands-on learning
- a desire to build, design and repair systems
- attention to detail
- excellent listening skills (for diagnosing problems) and strong personal skills

## Career Opportunities

With a large number of retirements in the field in the next decade, as well as increased demand for specialists in the fire systems management field, employment opportunities are diverse and plentiful. Employment opportunities are diverse and include working for fire alarm inspection and fire suppression system companies, as well as fire alarm or sprinkler system manufacturers. An electrical apprenticeship is another possible career opportunity. Job titles include:

- fire alarm technician
- fire safety system installer
- fire safety system verification and testing technician
- municipal fire safety inspector
- municipal building inspector
- insurance industry fire safety inspector
- fire safety officer (for large manufacturing companies, hospitals, universities, and apartment complexes).

The demand for entry level positions is strong, with starting salaries in the \$40,000 per year range, increasing to the \$60,000 range with experience.

## Minimum Admission Requirements

OSSD with the majority of credits at the College (C) and Open (O) level, including:

- 2 College (C) English courses (Grade 11 or Grade 12)
- 1 College (C) Math course (Grade 11 or Grade 12)

When (C) is the minimum course level for admission, (U) or (U/C) courses are also accepted.

### Recommended:

- Grade 12 Math for Technology
- Grade 12 College (C) Chemistry

## Mature Students

If you are 19 years of age or older before classes start, and you do not possess an OSSD, you can write the Canadian Adult Achievement Test to assess your eligibility for admission. Additional testing or academic upgrading may be necessary to meet specific course requirements for this program.

## Transfer Agreements

We are committed to providing students and graduates with flexible options to get maximum recognition of their college studies. Through joint programs and transfer agreements with the following universities, you can apply the learning you acquire at Fleming College to earn a related degree in less time, and at less cost.

- University of New Brunswick
- University of Ontario Institute of Technology

## Curriculum for Fire Systems Engineering Technician

### Semester 1

Code	Course Name	Hours
ELCT 90	Drafting Applications and AutoCAD	45
ELCT 84	Electricity	60
LAWS 255	Introduction to Fire Code and Suppression	60
COMP 345	Introductory Computing	45
MATH 122	Mathematics I	45
COMM 32	Technical Communications	37
ORGB 2	Career Essentials	45

### Semester 2

Code	Course Name	Hours
ELCT 87	Alternating Current Theory	60
SCIE 140	Chemistry for Technology	60
ELCT 82	Electronics	60
ELCT 101	Instrumentation I	60
MATH 123	Mathematics II	30
ELCT 116	Measurements	45
ORGB 13	Developing Effective Teams	45

## Semester 3

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
LAWS 107	Building Construction and Plans	45
ELCT 85	Fire Alarm Installation and Maintenance	45
LAWS 106	Fire Codes and ULC Standards	45
SCIE 82	Hazardous Materials	45
MATH 124	Mathematics III	30
ELCT 93	Motors and Controls	45
SCIE 141	Physics for Instrumentation	45
COMP 460	Technical Programming	45

## Semester 4

<b>Code</b>	<b>Course Name</b>	<b>Hours</b>
ELCT 44	Advanced Alarm Systems	45
LAWS 108	Building Codes & Specifications	45
ELCT 20	Managing Technical Projects	45
ELCT 83	Security and Surveillance Systems	45
MECH 186	Sprinkler Systems	45
GENED	General Education Elective	

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