

## 3-Day Short Course

# Case Studies of Fire Safety Designs and Forensic Investigations

May 13 – 15, 2020

The Department of Civil and Environmental Engineering of Carleton University is pleased to announce a 3-day Short Course on Case Studies of Fire Safety Designs and Forensic Investigations. The short course will be held at Carleton University May 13-15, 2020.

### Course description

The Short Course focusses on real case studies of fire safety designs and forensic investigations. It begins by addressing topics in fire science necessary to conduct fire investigations, such as fire ignition, flame spread, fire modelling and then continues with case studies. The fire safety design case studies deal with evacuation, smoke management and risk analysis as well tall wood buildings, while the forensic case studies present a variety of real fire investigations including fire in a building under construction and fire in a condominium. The case studies used common tools such as computer modelling and analytical approaches as well as testing to gain insight on how fires ignited and propagated.

### Who should attend

The course is intended for fire investigators, and fire safety practitioners interested in gaining or reinforcing their knowledge of fire safety principles and their application to fire investigations. In addition, the course will be of great benefit to building officials, fire safety officers, building science practitioners, fire prevention officers and students in fire safety programs.

### Registration

To register, please complete the registration form shown on the last page, or go to <http://carleton.ca/cee/workshops-and-courses> and select **Case Studies of Fire Safety Design and Forensic Investigations**.

### Cancellations

To cover our administration costs a fee of \$50 will be charged for cancellations made before April 1<sup>st</sup> 2020. Cancellations made after April 1<sup>st</sup> 2020 cannot be refunded but substitutions (confirmed in writing) can be made at any time without charge.

## 3-Day Short Course

# Case Studies of Fire Safety Designs and Forensic Investigations

May 13 – 15, 2020

Time	Wednesday May 13, 2020
8:30	Registrations
9:00	Welcome and Introductions
9:30	Ignition, George Hadjisophocleous, Carleton University
<b>10:15</b>	<b>Break</b>
10:45	Flame spread, Jim Mehaffey, CHM Fire Consultants
11:30	Fire modelling, George Hadjisophocleous, Carleton University
<b>12:15</b>	<b>Lunch</b>
1:30	Performance-based Fire Safety Design of FRP Reinforced Concrete, Hamzeh Hajiloo, Carleton University
2:15	Unique Big Box Mercantile Stores – Application of Internal Fire Safety Standards and Performance-based Design, Sean Bartlett, RJ Bartlett Engineering Ltd.
<b>3:00</b>	<b>Break</b>
3:30	Smoke management in new arena type building: design considerations (NFPA 101 and 92), Frederic Levesque, Technorm
4:15	Tall Mass Timber Buildings, Xiao Li, Vortex Fire Consulting Inc.
<b>5:00</b>	<b>Adjournment</b>

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<b>Thursday May 14, 2020</b>	
9:00	Forensic investigation of Human behaviour in Historic Fire Cases, Max Kinateder, National Research Council of Canada
9:50	Fire Protection of Large Automated Warehouse (ASRS), Paul Lhotsky, CIVELEC Consultants
<b>10:40</b>	<b>Break</b>
11:20	Cannabis Facilities – Looking Beyond the Haze, Dominic Esposito, Jensen Hughes
<b>12:20</b>	<b>Lunch</b>
1:45	Fire Investigation: Erlton Condominium Fire (Calgary), Jim Mehaffey, CHM Fire Consultants
2:30	Forensic Investigation of a Fire and its Abnormal Propagation, Hugo Messier and Christian Bernier, Technorm
<b>3:15</b>	<b>Break</b>
3:45	Investigation of a Fire in a Commercial / Condominium Building Under Construction., Steve Bodzay, Bodzay and Associates and George Hadjisophocleous Carleton University
<b>5:00</b>	<b>Adjournment</b>

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	<b>Friday May 15, 2020</b>
9:00	Fire Protection Advancements in the Nuclear Industry Post Fukushima, Amer Al Merabi, Ontario Power Generation
9:45	Fire Investigation: Water's Edge Condominium Fire (Kelowna), Jim Mehaffey, CHM Fire Consultants
<b>10:30</b>	<b>Break</b>
11:00	Investigations of Marine Fires, Steve Bodzay, Bodzay and Associates
11:45	The Engineer as an Expert Witness, Paul Lhotsky, CIVELEC Consultants
<b>12:30</b>	<b>Lunch</b>
1:30	Discussion
<b>3:00</b>	<b>Adjournment</b>

**A Short Course – Case Studies of Fire Safety Designs and Fire Investigations**  
**Carleton University, May 13 - 15, 2020**  
**Course Registration Form**

Name: \_\_\_\_\_ Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Province/State \_\_\_\_\_ Postal code: \_\_\_\_\_

Phone number: (\_\_\_\_) \_\_\_\_\_ Fax number: (\_\_\_\_) \_\_\_\_\_

Email: \_\_\_\_\_

Regular registration fee (before April 10, 2020): \$530.97 + HST (\$69.03)	Total: \$600.00
Late registration fee (after April 10, 2020): \$619.46 + HST (\$80.54)	Total: \$700.00
Full-time student registration fee: \$132.74 + HST (\$17.26)	Total: \$150.00
Course Dinner, May 14, 2020 (Optional):	\$80.00
3-day parking permits (Optional): 3 days x \$10.00/day	\$30.00

**Total payment:** \$ \_\_\_\_\_

Fee covers three days of instruction, course notes, break refreshments and lunches.

### Registration

For online registration please go to <http://carleton.ca/cee/workshops-and-courses> and select **Case Studies of Fire Safety Designs and Fire Investigations**

To pay by cheque, please fill out this form and mail it to the address below along with your cheque or bank draft payable to **Carleton University**

Fire Safety Engineering Short Course  
Department of Civil and Environmental Engineering  
Room 3432 ME, Carleton University  
1125 Colonel By Drive, Ottawa, Ontario, K1S 5B6

**Tel:** (613) 520-2600 (1228)

**Fax:** (613) 520-3951

**Email:** Firesafetycourse@carleton.ca

**Accommodation:** Participants are responsible for making their own arrangements. For a list of hotels in the Ottawa area please go to [www.ottawahotels.com](http://www.ottawahotels.com).

**Directions:** For directions on how to get to Carleton University please go to: <http://carleton.ca/campus/directions/>. and for a campus map please go to <http://carleton.ca/campus/map/>