

# S-589 Specialized Fire Behaviour Theory & Applications – CFFIC National Course

## Overview/Description

As part of the national fire behaviour specialist training series of courses, S-589 focuses on the theory and application of extended knowledge of complex wildland fire interactive processes and uses a mix of synchronous and asynchronous learning tools. It teaches skills associated to the Fire Behaviour Analyst (FBAN) incident management team role.

Students will be able to analyze and forecast the impact of fuel, weather and topographic characteristics and correctly apply the Canadian Forest Fire Danger Rating System (CFFDRS) to determine and predict complex fire behaviour, the impacts on firefighter and public safety and assist in developing operational strategies and tactics.

Students will also be able to:

- Describe complex interactions in the fire environment
- Interpret and adjust Canadian Fire Weather Index (FWI) codes and values to assess fire danger and expected fire behaviour
- Describe how each Canadian Forest Fire Behaviour Prediction (FBP) fuel type model impacts fire behaviour prediction
- Calculate predicted fire behaviour for a wildfire incident
- Describe conditions for and characteristics of extreme fire behaviour
- Describe how atmospheric features, including upper air features, can affect safety of personnel working in the field
- Understand the meteorological forecasting process in order to describe the confidence, alternative outcomes and limitations of associated data
- Describe how to create a fire weather climatology for a location or region

## Target Audience

Personnel desiring to be qualified as an FBAN in wildfire management operations and:

- Planning Section Chief, Situation Unit Leader, Incident Commander, supervisory roles in the Operations section, Ignition Specialist;

- Those responsible for coordinating wildfire response at a provincial or area level;
- Academic students interested in studying wildfire behaviour and its impacts on fire operations;
- and modelling specialists or other computer data analysts.

## Prerequisites

Candidates must have attended and passed the S-490 Advanced Wildland Fire Behaviour course within the past 5 years. A challenge exam is available to those individuals who successfully completed the Advanced Wildland Fire Behaviour course more than 5 years ago. Eligible candidates must complete a pre-course assignment by preparing a fire case study based on recent personal experience.

This course is not available to the general public. Preference is given to wildfire agency staff.

## Registration

Forestry Division employees register through your local training contact.

Individuals outside of Forestry Division, please contact your local or provincial training contact.

Non-wildfire agency staff need sponsorship or referral from a wildfire agency and would register through the appropriate provincial training contact.