



unitar

United Nations Institute for Training and Research

Unitar Online Catalogue

CIFAL Victoria - Micro-credential program in Fire Ecology for Environmental Restoration

People

Deadline: 4 Dec 2024

Type:	Course
Location:	Victoria, Canada
Date:	1 Aug 2025 to 30 Dec 2025
Duration:	36 Hours
Programme Area:	Decentralize Cooperation Programme
Website:	https://www.uvic.ca/about-uvic/cifal/index.php
Price:	\$0.00
Event Focal Point Email:	cifalcommunications@uvic.ca
Partnership:	CIFAL Victoria, , University of Victoria

BACKGROUND

Since April 2021, a staggering 1,556 wildfires ravaged British Columbia, destroying 864,637 hectares of land. As such, wildfire management is among the most challenging and [pressing issues in British Columbia today](#). In addition to the destruction of properties, homes, and business, the desecration of wildlife, and the displacement of British Columbians, wildfires have impacted ecosystems and

natural habitats throughout the province. Fire can alter vegetation and ground conditions, leading ultimately to changes in water flow, soil erosion, or landslides.

As the prevalence and destructiveness of annual wildfires escalates across the province, this program will equip professional learners with practical skills and knowledge to understand and treat the effects of fire on natural ecosystems, prepare communities to respond to wildfire threats, and create ecosystem resilience.

EVENT OBJECTIVES

This program will prepare graduates to help mitigate the effects of both prescribed burns and wildfire damage upon the environment. A broad range of ecosystems and conditions will be studied through intensive in-class and on-site learning, partnered with practical online applications.

The program comprises a single course specifically focused on fire restoration and the use of prescribed burning. The blended learning environment will allow participants to gain necessary knowledge prior to the face-to-face field work in which techniques on the ground will be practiced by the participants. They take that combined knowledge and practice into the final project phase to produce their own fire restoration plan.

LEARNING OBJECTIVES

By completing the FEER program, learners will be able to:

- Describe, interpret, and classify natural fires and their attributes
- Define and examine fires as an ecosystem process
- Identify fire management regimes and techniques and determine when one is more applicable than another.
- Identify and Interpret the relationships between fire and climate change
- Identify and recommend where and when to use prescribed burns
- Value and understand First Nations fire management
- Assess post-wildfire landscapes, recommend restoration strategies, and create a restoration plan

CONTENT AND STRUCTURE

The micro credential consists of one course in a hybrid format taken over a 10 week period. The first 6 weeks are online learning followed by a two-day in the field experiential learning event. After that, students work online on their restoration plans.

METHODOLOGY

The Fire Ecology for Environmental Restoration program engages undergraduate and professional learners with sector experts in the field. It prepares participants to deal with pre and post fire environments, specific to the Pacific Coastal region. Participants will receive regular feedback throughout their learning, and will have multiple avenues to submit evaluative feedback formally and informally during and after their learning experience. Assessment will be hands-on and applicable to real-world use, allowing learners to easily transition their classroom experience to a professional context. This course also ladders into the Restoration of Natural Systems Diploma and Certificate programs.

TARGETED AUDIENCE

Primary target markets for this proposed program include:

- Ministry of Forests employees;
- field researchers and workers;
- practicing environmental and resource professionals - including fire ecologists, biologists, forest technicians, foresters, landscape and forest managers;
- urban planners, and agrologists;
- conservation organizations managers and coordinators; government employees (federal, provincial, and municipal);
- Indigenous land managers; policy developers and analysts;
- Sustainability coordinators; and GIS specialists and technicians.

According to Lightcast, occupational outlooks in British Columbia forestry are expected to be high (13,933 forestry industry employees in BC compared to a provincial average of 10,694) between 2023-2028. The 2022 [BC Labour Market](#)

[Outlook Report notes](#) an increase of core environmental employment in BC of 1.3 per year from 2022-2032, growing from 72,100 jobs to 81,800. One third (32%) of these jobs will be due to industry expansion. In a broader context, according to [RBC](#), an estimated 235,000 to 400,000 new jobs will be created in the next decade to support green economies.

This is true for the following occupations

This micro-credential will benefit ecological and environmental professionals working in forestry, local and provincial government, NGOs, and First Nations Communities. It will also be of interest to private land owners. The social science focus of this program, as well as the integration of ecology, climate change, policy, and science, indicates a potential for a broad audience of people working directly in governmental or municipal roles, Indigenous communities, as well as those in roles which can affect change within private sector companies and non-governmental organizations. Primary target markets for this proposed program include: Ministry of Forests employees; field researchers and workers; practicing environmental and resource professionals - including fire ecologists, biologists, forest technicians, foresters, landscape and forest managers; urban planners, and agrologists; conservation organizations managers and coordinators; government employees (federal, provincial, and municipal); Indigenous land managers; policy developers and analysts; sustainability coordinators; and GIS specialists and technicians.