



## International Forest & Environmental Development

- Forest Resources Management
- Remote Sensing and GIS
- Environment
- Climate Change Mitigation
- Training and capacity building

### **IFED ONLINE TRAINING - DECEMBER 2021**

In partnership with Queen's University (Ontario, Canada), IFED is launching three online courses on Project design, Geographic information systems (GIS) and remote sensing, and Emission factors. Please find below a brief description of these courses and how to register.

#### **MFE 304 : Designing REDD++ and natural resource management projects**

**Context :** Project development, whether for REDD++, natural resource management or other sectors of activity, has many challenges in the technical and financial development process that are not always well known to most NGO leaders, experts in public or private organizations.

**Objective :** The aim of this training is to enable participants to reinforce their technical and financial capacities in the process of designing projects for REDD++, natural resource management or other types, in order to enable them to more easily access the increasingly limited funding.

#### **Articulations :**

##### **Technical development**

- ❖ Analysis phase
- ❖ Preparatory analysis
- ❖ Stakeholder analysis
- ❖ Problem and strategy analysis
- ❖ Planning phase
- ❖ Logical Framework
- ❖ Indicators and sources of verification
- ❖ Resources needed
- ❖ Preparation of a schedule of activities
- ❖ Drafting of the project (elements to consider for a high impact project)
- ❖ Submission phase and search for project funding
- ❖ Setting up a mechanism for monitoring available funding
- ❖ Knowledge of the donor's requirements
- ❖ Setting up a submission schedule
- ❖ Monitoring and evaluation phase

##### **Financial set-up**

- ❖ Knowledge of the partners and their requirements
- ❖ Analysis of project inputs
- ❖ Preparation of the provisional budget (expenses and revenues)
- ❖ Establishment of a monitoring and evaluation system
- ❖ Drafting of the financial proposal

Date : **December 8 to 10, 2021**

Registration deadline : **November 29, 2021**

We invite you to use the link below to register:

<http://ifed-inc.ca/2020/02/10/mfe-304-project-set-up-and-financing/>

### **MST 101: Geographic Information System (GIS) and Remote Sensing**

**Context :** Geographic Information Systems (GIS) and remote sensing are now essential tools in forest management and natural resource management. However, managers and researchers face new challenges related to scale, dynamic changes in landscape structure, data accuracy integration, efficiency analysis, and new applications such as monitoring biodiversity status.

**Objective :** This course will enable participants to master the basic concepts of GIS, as well as the methods of acquiring, preparing and editing geospatial data. It will also allow participants to become familiar with geospatial data mining and analysis techniques, as well as the use of the QGIS/ArcGIS geographic information system. This training will also allow the acquisition of advanced notions in the fields of remote sensing, image processing and analysis, from visualization and classification operations to the analysis of results.

#### **Articulations**

##### **Geographic Information System (GIS)**

- ❖ GIS vocabulary
- ❖ GIS in forest management, environment, urban and natural resources management
- ❖ Concept of projection system
- ❖ Presentation of cartographic data
- ❖ Cartographic design
- ❖ Fundamentals of geo-referenced cartography
- ❖ Use of QGIS/ArcGIS.

##### **Remote sensing**

- ❖ Image acquisition techniques
- ❖ Presentation of basic general techniques of digital image processing and automatic information extraction
- ❖ Basics of Radar/LIDAR.
- ❖ Image geometry, geo-referencing (direct location, inverse location)
- ❖ Characteristics of available spatial radar images and application areas.
- ❖ Temporal management of data in the same space

Date : **December 13 to 15, 2021**

Registration deadline : **December 05, 2021**

We invite you to use the link below to register:

<http://ifed-inc.ca/2020/02/13/mst-101-geographic-information-system-gis-and-cartography/>

### **MFE 211 : Estimation of emission factors related to changes in vegetation cover**

**Context :** Land use for various reasons has led to severe degradation in both heavily populated forest environments and sparsely vegetated areas. To account for canopy change in the measurement, reporting and verification (MRV) system for REDD++ as required by the UNFCCC, the estimation of emission factors is the recommended method to enable the establishment of a canopy change monitoring system.

**Objective:** This training will allow participants to strengthen their capacities on procedures and methods for estimating emission factors related to land use changes and setting up a monitoring system.

**Articulations :**

- ❖ Changes in carbon stocks due to deforestation and forest degradation by different anthropogenic activities
- ❖ IPCC levels for estimating emission factors (EFs)
- ❖ Development and application of allometric equations
  - Definition of allometric equations ;
  - Determination of allometric equations;
  - Uses of allometric equations.
- ❖ Establishment of reference levels (FREL/FRL)
- ❖ Estimation of emission factors - stock difference method and gain-loss method
- ❖ Estimation of emission factors related to deforestation
  - Stratification of vegetation cover types
  - Carbon reservoirs
  - Field measurements, carbon stock estimation and EF determination
  - Sources of Error and Quality Assurance/Control
- ❖ Estimation of emission factors related to forest degradation by different anthropogenic activities
  - Strategies
  - Data collection to estimate EFs: field measurements
  - Estimating EFs and total emissions
  - How to estimate gains from regrowth in anthropogenic areas.

Date : **December 16 to 18, 2021**

Registration deadline : **December 05, 2021**

We invite you to use the link below to register:

<http://ifed-inc.ca/2020/02/06/mfe-211-estimation-of-emission-factors-related-to-changes-in-forest-cover-deforestation-and-forest-degradation/>

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These trainings will be facilitated by high-level trainers and professionals with many years of experience in training, project design, GIS and remote sensing, and in the fields of MRV and emission factor determination. The course notes and possibly videos will be made available to participants who for various reasons cannot attend certain training sessions.

Finally, an environmental certificate will be awarded to municipalities and private or public institutions that send 5 or more people to this training that will allow them to adopt profound changes in the management of their living environment.

Participation fees : **\$250 USD for professionals**

**\$50 USD for students (upon presentation of receipts)**

For more information, please refer to : [regis20.ifed@gmail.com](mailto:regis20.ifed@gmail.com)