



Laurentian University  
Université Laurentienne

**GOODMAN** School of Mines  
École des mines



Canada's Mining University

## Environmental Remediation

Industrial challenges can be effectively addressed with the help of academic, government, community and private sector partners. Local industries do not need to work in isolation in developing and implementing remediation measures. Sudbury, Ontario, Canada is a model for the value of having a very high degree of community buy-in and participation.

*All participants completing courses will receive a Goodman School of Mines Professional Certificate indicating the number of PD hours completed.*

**This course can be online or in-person and can be offered at Laurentian University or in your host-country.**

*Available in English, French and Spanish!*

### **COURSE DESCRIPTION:**

Industrial challenges can be effectively addressed with the help of academic, government, community and private sector partners. Local industries do not need to work in isolation in developing and implementing remediation measures. Sudbury, Ontario, Canada is a model for the value of having a very high degree of community buy-in and community participation.

The Environmental Remediation courses and workshops are multidisciplinary, integrating environmental and social sciences to guide participants through an overview of the history of damage and environmental recovery of the mining impacted landscape around Sudbury. The application of established and more innovative techniques in remediation, soil rehabilitation, pollutant neutralization and sequestration, bio-mining, and the creation of novel ecosystems is reviewed and critically examined. The workshop features current and ongoing research initiatives and outlines ongoing challenges while making the science and methods transferable to other damaged sites globally.

## LEARNING OUTCOMES:

- Learn through a multidisciplinary investigation of Sudbury historical environmental degradation and decades of innovation how we have restored terrestrial and aquatic ecosystems and use remediation strategies in managing mining impacted environments.
- Understand the importance of Sudbury's restoration and scientific innovation within Canada's mining sector and globally.
- Integrate understanding of ecosystem connectivity and multiple stressors.
- Understand mining impacts and environmental remediation practices.

## COURSE MODULES:

- Module 1: Sudbury History: Mining and Environmental Damage
- Module 2: Environmental and Soil Contamination
- Module 3: Revegetation and Ecological Restoration
- Module 4: Terrestrial and Aquatic Linkages to Ecosystem Recovery
- Module 5: Mine Waste Management: Legacy Challenges and Current Approaches
- Module 6: Transfer of Sudbury Remediation Science to Global Sites

## COURSE DELIVERY OPTIONS:

Please review the table on the following page.



## QUESTIONS?

Email us at: [goodmanschoolofmines@laurentian.ca](mailto:goodmanschoolofmines@laurentian.ca)

## Environmental Remediation Course Delivery Options:

Course	Online	In-Person - Sudbury, Ontario				International
		2-days	5-days	10-days	Field Trip 5 days	Delivered in host country 5 days
Content	All modules	Modules 1 & 6	Modules 1 & 6, plus one of Modules 2, 3, 4, or 5	All modules	Private Field Course*	Modules 1 & 6, plus two of Modules 2, 3, 4, or 5
Languages	English/Spanish/French					
Delivery	Self-directed with some instructor interactions	In class. Includes lunch, snacks, Interpreta- tion	In-class and 2 field trips. Includes lunch, snacks, Interpretation*	In-class and 4 field trips. Includes lunch, snacks, Interpretation*	In-field. Includes lunch, snacks, transport and Interpretation*	In-class. Includes lunch, snacks, Interpretation. Course offering depends on faculty availability. (Price includes faculty's stipend, flight, meals and accommodations).
Cost/person	\$2,400 CAD + 13% HST	\$1,599 CAD + 13% HST	\$2,899 CAD + 13% HST	\$5,999 CAD + 13% HST	\$2,999 CAD + 13% HST	\$3,499 CAD + 13% HST
Participants	unlimited	Minimum of 10				
Offering	Public – 2/year*	Private –On demand				
Available	2021	Spring 2022	2022	May-June-July 2022		
Notes*	<i>Can be offered privately to a co- hort with minimum participants</i>		<i>Monday-Friday only</i>	<i>Monday-Friday only (weekend free – time)</i>	<i>Only available for those who completed the online course or an in host-country course</i>	<i>Host must provide an on-site contact to coordinate facility (projector, sound system), 2 snacks (plus coffee) and lunch for participants.</i>