SUMMER SCHOOL

on societal transformation

PRESENTED BY

INTERDISCIPLINARY RESEARCH CENTRE FOR THE OPERATIONALIZATION OF SUSTAINABLE DEVELOPMENT

NEXT GENERATION CITIES INSTITUTE

OUTLINE CONTENTS

ABOUT US

CIRODD

CIRODD is a research, development and reference interdisciplinary centre for the operationalization of sustainable development. Its mission is to accelerate the transformation of society in order to support the socio-environmental transition through sustainable innovation and transdisciplinarity. It works to catalyze, enlighten, advise, mobilize and support decision-makers and society stakeholders in making decisions based on the best scientific knowledge and practices, with the goal of making Quebec society significantly more sustainable by 2026.

NGCI

The Next-Generation Cities Institute harnesses the full spectrum of next-generation cities' research and uses a holistic approach to transform cities into sustainable, resilient and inclusive communities. It aims to create lasting and meaningful change in urban communities around the world.

Lauched at Concordia University, it's founding co-directors, Carmela Cucuzzella and Ursula Eicker are the Summer School academic leads.

PARTNERS

The Summer School is co-developed and has benefited expertise from its partners École de Technologie Supérieure, Concordia University, the EDS Institute of Laval University, Acadia University, the Sustainable Development Solutions Network (SDSN) Canada, the University of Montreal, the University of Quebec at Chicoutimi, and the Maison de l'Innovation Sociale (MIS) of Montreal.

ACADEMIC TEAM

CHLOÉ BARRETTE-BENNINGTON

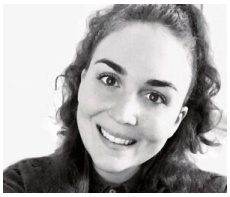
Summer school manager, CIRODD

CARMELA CUCUZZELLA

Professor, Design and Computation Arts, Chair IDEAS-BE ; Founding Co-Director NGCI , Concordia University

URSULA EICKER

Professor, Building, Civil, and Environmental Engineering, Chair Smart Cities ; Founding Co-Director NGCI ,



JULIE DESJARDINS

course design ; program development

ALIREZA ADLI

encs data modelling

MOH ABDOLREZA

systems modelling

MARIE PROVILLE

course design ; case study development

AHAD FARNOOD

encs data modelling

FATIMA MEHRZAD

systems modelling

A HYBRID AND BILINGUAL COURSE THAT BRINGS TOGETHER STUDENTS FROM VARIOUS DISCIPLINES FOR A PERIOD OF 135 HOURS OF TRAINING GIVEN BY EXPERTS AND PROFESSORS FROM DIFFERENT UNIVERSITIES, SECTORS AND DISCIPLINES TO LEARN HOW TO TRANSFORM OUR SOCIETIES. THAT'S OUR APPROACH

ABOUT THE COURSE

KEY DATES

REGISTRATION*

For Concordia students, register before:

May 3rd 2023

For other Quebec university students, register before:

April 26th 2023

*Concordia students can register directly through the institutional course registration platform.

These courses codes can be used to register:
ENCS691
(Engineering dept.)
DART632
(Design dept.)
HENV 665
(Geography, Planning & Environment dept.)

All other students who wish to have this course credited in their respective institutions must have the approval of their program director and contact Chloé to initiate the BCI-AEHE program process.

REGISTER NOW

CLASSES

The Summer School classes run from:

May 10th to June 9th

Classes are held on:
Mondays-Wednesdays-Fridays

from :
10a.m. to noon and 1p.m. to 3p.m.

Course is **hybrid, with in-person classes held at Concordia University in Montre-**

EVALUATIONS

	Date	ENCS-691	DART-632
Systems map critique	17th May	Formative	Formative
Team final presentation	9th June	20%	30%
Team case study report	16th June	50%	60%
Individual participation	16th June	10%	10%
ENCS data model	16th June	20%	-

ABOUT THE COURSE

FORMAT

COURSE FORMAT

The course will focus on acquiring an understanding and application of multi-stakeholder collaboration and strategic planning for the transition as well as developing data and system models to solve real-world problems of chosen case studies.

Through measuring SDG targets, analyzing indicators, benchmarking and building data models, students will understand complex sustainability problems and provide an integrated analysis of its environmental, social and economic aspects.

Engineering and modelling tools will be used to quantify and track sustainability scenario evolution and variables.
Each case study involves thinking the project through the UN SDGs and clearly assess how alignment will take place with a set of UN SDG targets and indicators.

The result of each case study analysis will be the development and implementation of a data and system model as well as an analysis and solutions group report.

THEORETICAL FRAMEWORKS

WIEK ET AL.'S 5 KEY COMPETENCIES (KC)

In the summer school students acquire knowledge and skills in the 5 KCs: normative, interpersonal, systemic, strategic and anticipatory. The KCs and integrative activities allow students to effectively plan, conduct, and engage in sustainability research and problem solving in a transdisciplinary and systemic way.

UNITED NATION'S SDGS

The Sustainable Development Goals (SDGs) are a set of 17 global goals adopted by the United Nations in 2015. The goals are intended to act as a blueprint for achieving greater social, economic, and environmental sustainability by 2030.

PROGRAM

Legend		Wednesday	Thursday	Friday
		10	11	12
Class	10:00-11:00	Introduction		Systems Thinking Carmela Cucuzzella
	BREAK			
Workshop	11:00-12:00	Frameworks overview		Systems Thinking Carmela Cucuzzella
	LUNCH			
Evaluation	13:00-14:00	Case studies presentation		Systems Thinking Carmela Cucuzzella
	BREAK			
ENCS Class	14:00-15:00	Case studies presentation		Systems Thinking Carmela Cucuzzella

MAY

	Monday	Tuesday	Wednesday	Thursday	Friday
	15	16	17	18	19
10:00-11:00	Systems Thinking Carmela Cucuzzella		Systems Map Critique Carmela Cucuzzella		Design Thinking to SD Modelling Ahad Farnood
BREAK					
11:00-12:00	Systems Thinking Carmela Cucuzzella		Systems Map Critique Carmela Cucuzzella		Design Thinking to SD Modelling Ahad Farnood
LUNCH					
13:00-14:00	Systems Thinking Carmela Cucuzzella		Systems Map Critique Carmela Cucuzzella		Python 101 Alireza Adli
BREAK					
14:00-15:00	Systems Thinking Carmela Cucuzzella		Systems Map Critique Carmela Cucuzzella		Python 101 Alireza Adli

	Monday	Tuesday	Wednesday	Thursday	Friday
	22	23	24	25	26
10:00-11:00	Strategic Planning Glyn Bissix		Strategic Planning Glyn Bissix		Future Thinking Albéric Maillet
BREAK					
11:00-12:00	Strategic Planning Glyn Bissix		Strategic Planning Glyn Bissix		Future Thinking Albéric Maillet
LUNCH					
13:00-14:00	Localizing SDGs Ursula Eicker		Strategic Planning Glyn Bissix		Python Modelling Alireza Adli
BREAK					
14:00-15:00	Localizing SDGs Ursula Eicker		Strategic Planning Glyn Bissix		Python Modelling Alireza Adli

PROGRAM

MAY

	Monday 29	Tuesday 30	Wednesday 31	Thursday 01	Friday 02
10:00-11:00	Panel - Inclusive transitions		Systemic Intervention James Lapalme		Future Thinking Albéric Maillet
BREAK					
11:00-12:00	Panel - Inclusive transitions		Systemic Intervention James Lapalme		Future Thinking Albéric Maillet
LUNCH					
13:00-14:00	Change Leadership Claudia Vezeau		Inclusive Systems James Lapalme		Python Modelling Alireza Adli
BREAK					
14:00-15:00	Change Leadership Claudia Vezeau		Inclusive Systems James Lapalme		Python Modelling Alireza Adli

JUNE

	Monday 05	Tuesday 06	Wednesday 07	Thursday 08	Friday 09
10:00-11:00					Case studies presentation
BREAK					
11:00-12:00					Case studies presentation
LUNCH					
13:00-14:00					Case studies presentation
BREAK					
14:00-15:00					Case studies presentation

Evaluations

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POLICIES & RESOURCES

TOOLS

The Summer School is a hybrid course to allow the participation of a diversity of students.

We will be using 3 learning platforms:
- MIRO: Collaborative platform used to host group activities, brainstorms, workshop sessions, etc.
- ZOOM: Classes will be simultaneously held online and in class on the zoom platform
- GOOGLE DRIVE: All course material hosted in the Summer School drive

Further information on each platform will be given to you at the start of the school. Each work team will need to decide which account(s) they wish to use for their teamwork throughout the course. You may also choose to use other applications and software available for group work.

VALUES AND CONDUCT

The Summer School promotes the following values
- Respect
- Cooperation and participatory governance
- Interdisciplinarity

Students are responsible for ensuring that their behaviour in the classroom and virtual sessions or workshops is conducive to an inclusive learning environment.
The accredited courses in the CIRODD Summer School on Societal Transformation are hosted at Concordia University, and respect **Concordia University's Academic Integrity Policy**.

SUMMER SCHOOL

REGISTER TODAY

SUMMER SCHOOL

on societal transformation

CIRODD.ORG/SUMMERSCHOOL