Online Capacity Training Curriculum

"Digital skills for circular economy and waste management"

Lead by OsloMet

Introduction

This curriculum is designed for scholars and researchers for widening countries who are interested in enhancing digital skills for circular economy research and waste management projects.

Learning outcomes

By the end of this both capacity trainings, participants are able to:

- Distinguish between the different methods and digital tools applied to a spatial analytical and modelling approach for circular economy including biodiversity and waste management projects.
- Apply digital tools for data analysis, management, and visualization in the circular economy and waste management context.
- Analyze and interpret data to support decision-making
- Create data visualizations that communicated insights to stakeholders effectively.
- Demonstrate critical thinking and problem-solving skills in a learner-centred environment that encourages collaboration and practical application.

Both online capacity training curricula combine digital skill-building with practical application in the field of circular economy and waste management, fostering a robust foundation in both technical and project-based competencies.

Pedagogical approaches

The trainings apply the following three approaches:

(1) Learner-centred pedagogy where learners are actively involved and interact with both peers and faculty; the learning is flexible and adaptive to learners`needs, learners take responsibility of their own learning to develop their skills, and formative forms of self- and peer assessments.
(2) Active learning techniques, incorporating think-pair-share and peer instruction via personal response devices (e.g. Mentimeter, Poll Everywhere).

(3) The assessment method of online Quizzing for testing student knowledge and verifying achievements of learning outcomes. Quizzing belongs to the classic method of multiple-choice testing.

Online capacity training 1 "Circular Economy" was held in December 2024.

Online capacity training 2 "Waste Management"

Are you working on waste management, urban planning, or environmental policy in your community? Join us for to learn how to choose the best locations for recycling facilities using digital mapping tools.

What You'll Learn

- Understand waste management principles – reduce, reuse, recycle strategies that work in real communities
- Track waste flows – see where waste comes from and where it goes in your region
- Find the right locations – learn simple methods to identify the best spots for recycling bins and collection points
- Use free mapping tools – live demo and hands-on practice with GIS software (no prior experience needed)
- Apply it to your city – work with real data and discuss how to use these methods in your own context

What we will cover

- Waste management hierarchy and challenges for projects (reduce, reuse, recycle, energy recovery, disposal)
- Location choice analysis in GIS: Recycling centres in regions, waste segregation bins in cities, solar cadaster for recycling centres (regional and urban scale),
- Application to case study
- Quiz for self-assessment

Technical requirements

It is advised to have access to a laptop, PC, or tablet with stable internet and access to following programs:

- ArcGIS
- QGIS
- Text processing software
- PDF editor and reader
- Online document management and sharing system: OneDrive, GoogleDrive or similar

Funded by the European Union

CROSS REIS

Online capacity training 2 “Waste management projects”

Training with Prof. Wendy Tan

When: Tuesday, 9th December 2025

Zoom link:
https://hvl.zoom.us/j/68554643436?pwd=4BJNs61izKpFcfWbQr26VublYF9Ihj.1

9:30-10:00	Welcome and short introduction
10:00-12:00	- Lecture: Introduction to waste management – reduce, reuse and recycle (45 mins) - Q&A (5 min) and short break (5-10 min) - Practical lab 1: Material flow analysis workflow demo and brainstorming session on Miro – location choice of waste management sites in Serbia
12:00-13:00	Lunch break
13:00-15:00	- Practical Lab 2: Location choice analysis in GIS – waste segregation bins in cities (urban scale) - Q&A and discussions (20 mins)
15:00-15:30	Provision of quiz for self-assessment, closing and outlook

List of participants for Online training 2 “Waste management”

Partner institutions	Participants
FEUN	
UOM	
EFRI	
Co-PLAN	
DSA	
UL	
POLIEDRA&POLIMI	
OSLOMET	
EMEA	