



Develop, justify and present an innovative solution to a real-world challenge within the context of a Design Challenge Event

Credits: 0.5 ECTS

Period: to be discussed with local institution

1 Microcredential:

1.1 General objectives

1. To apply Design Thinking and the ATOM model to analyse and address complex sustainability challenges.
2. To develop, justify and present an innovative solution to a real-world challenge within the context of a Design Challenge Event (DCE).

More specifically, at the end of this microcredential, we expect that the participant:

1. Investigates a sustainability challenge from multiple perspectives and gathers relevant information;
2. Analyses collected information and defines the core problem underlying a challenge
3. Generates and selects creative and innovative solution ideas;
4. Translates a concept into a prototype or concrete solution proposal
5. Develops and justifies a feasible implementation approach;
6. Uses feedback to evaluate and improve proposed solutions;
7. Collaborates effectively within a team and presents a solution to external stakeholders or a jury

2 Practical Organization:

2.1 Overview

This microcredential consists of two complementary components:

1. Completion of the GlobeSTEAMSS Online Learning Module.
2. Participation in a Design Challenge Event (DCE).

Format:

1. Online self-paced learning.
2. Participation in a Design Challenge Event.



UCLL
HOGESCHOOL



2.2 Certification

Participants who successfully complete the programme upon evaluation will receive an official certificate.

When attending an individual module out of interest, without an evaluation assignment, you receive a certificate of attendance.

2.3 Location and Dates

To be discussed with local institution.

2.4 Target Group

Students participating in a GlobeSTEAMSS Design Challenge Event.

2.5 Language

English or local language, depending on local institution

2.6 Tuition fee and grants

Cost for the full programme: €0



3 Teaching and Learning:

3.1 Content

The following content is covered in this microcredential:

Component 1: Online Learning Module

- Introduction to Design Thinking
- Design Thinking principles
- The ATOM model
 - Explore
 - Analyse
 - Ideate
 - Prototype
 - Realise
 - Evaluate
- Sustainability-oriented innovation
- Challenge-based learning
- Stakeholder engagement
- Team collaboration
- Reflection and evaluation of solutions

Component 2: Design Challenge Event

Participants apply the Design Thinking and ATOM methodology to a real-world challenge by:

- developing an innovative solution;
- demonstrating the feasibility and sustainability of the proposed solution;
- presenting the solution to a jury;
- receiving and responding to feedback.

3.2 Study Materials

GlobeSTEAMSS Online Learning Module : https://globecop.upb.ro/online_learning_module

Documents shared during the design challenge events.



3.3 Teaching Methods

This microcredential combines self-directed online learning with an event

The teaching format includes:

- theoretical frameworks and background knowledge;
- guided learning activities;
- challenge-based learning;
- collaborative teamwork;
- idea generation and prototyping activities;
- development of a solution proposal;
- presentation and feedback activities during the Design Challenge Event;

Expectations of the participant

Participants are expected to:

- complete all components of the online learning module;
- actively contribute to team activities;
- participate in the Design Challenge Event;
- present and justify their proposed solution.
- upload their solution materials to the platform

4 Evaluation

4.1 Description of the Evaluation

Assessment is based on:

1. Completion of the Online Learning Module;
2. participation in the Design Challenge Event;
3. presentation of a proposed solution during the Design Challenge Event

Assessment Criteria

Completion of the Online Learning Module.

The proposed solution of the DCE is evaluated on:

- creativity and innovation;
- relevance to the challenge;
- feasibility and justification;
- sustainability;
- quality of the presentation;
- teamwork.

Grading

Pass / Fail.

4.2 Form of Evaluation

Other: completion of the Online Learning Module and Evaluation of the proposed solution during the Design Challenge Event

4.3 Second Examination Opportunity

Not applicable
