NATURE-BASED URBAN REGENERATION

Interested in learning about using nature to improve life in our cities? You want to learn how to co-create nature-based solutions with local communities, how to make environmental, economic, social and health benefits of NBS measurable and translate these into sustainable business models? This course will equip you with the knowledge to set up your own nature-based regeneration strategy!

proGIreg

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GO GREEN ROUTES

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ABOUT

COURSE CONTENT

Cities around the world are seeking new, greener ways to transform former industrial districts. These areas suffer from social and economic inequalities, lack of green spaces and are significantly more vulnerable to climate change effects and natural hazards. Nature-based solutions (NBS) can contribute to improving environmental quality, social life and local economies in urban areas.

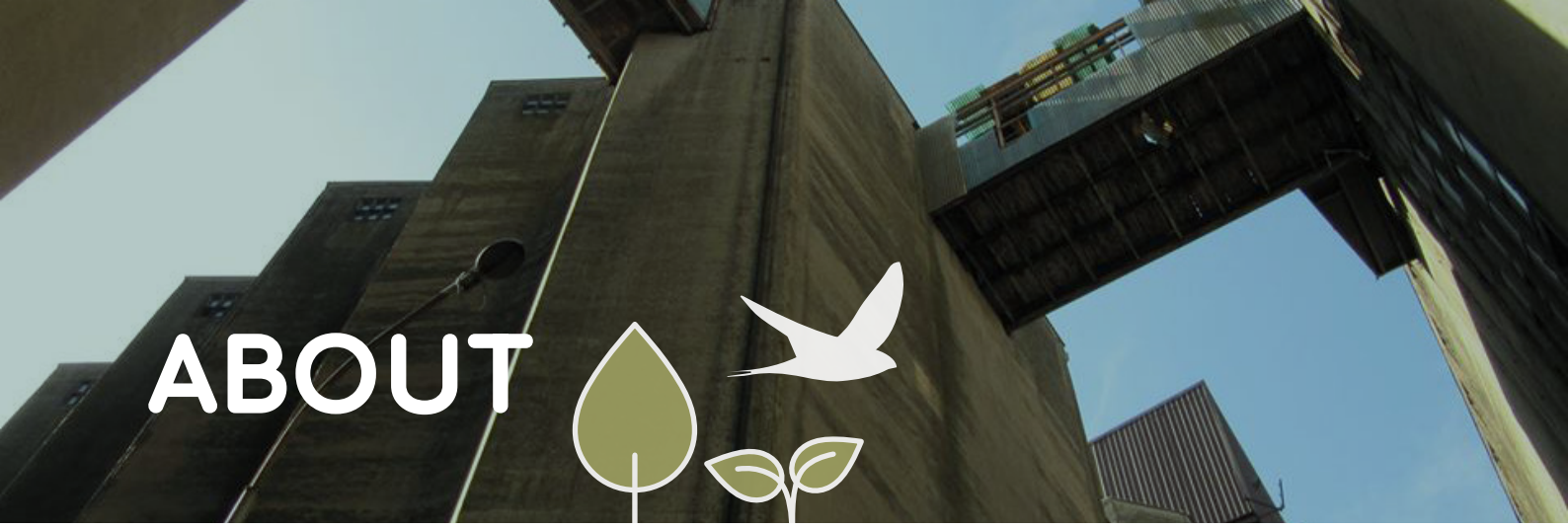
This course will show you how co-creating NBS can transform post-industrial deprived, neglected and abandoned areas into liveable and productive green urban environments, with empowered local communities and thriving local economies.

You will learn about different types of NBS and how they can be implemented in varied local contexts. The course delves into citizen engagement, alongside municipalities, private sector companies, NGOs and academia, as this supports long-term sustainability of NBS. Engagement strategies place emphasis on the inclusion of marginalised and vulnerable groups. The NBS explored in the course showcase the co-benefits to circular economy, urban food production and climate change adaption. You will learn how to measure the effects of NBS on environmental quality, human health and well-being, socio-cultural inclusiveness, local economy and labour market, and how to apply scientific methods to monitor and assess them. Having measurable NBS benefits helps developing successful business models for NBS implementation and management, and supports sound decision- and policy making.

The course draws on research results from Living Labs in European cities where innovative nature-based solutions have been developed and tested under the umbrella of the EU Horizon 2020 funded project proGIreg (productive Green Infrastructure for post-industrial urban regeneration) and GoGreenRoutes.

The course will guide you in setting up a nature-based regeneration project suited to your local context. The methods you will learn entail NBS co-design, co-implementation, benefit assessment and sustainable business models.

Join us as you start on your journey towards inclusive urban regeneration by using nature for renewal!



ABOUT

THIS COURSE PROVIDES

1. **Knowledge** for designing NBS in post-industrial urban regeneration and NBS benefit assessment and monitoring methodology in four domains.
2. **Journeys to 'Living Labs'** – proGIreg test sites in cities across Europe - to explore the dynamics of co-creation of NBS in action!
3. **Applications** of how to assess and overcome technological and non-technological barriers in integrating NBS, how to develop and upscale self-sustained business models on a city level to achieve sustainable and productive green infrastructure.

We have developed an attractive and challenging course for you. We hope by the time you finish the course you will be inspired to embrace an inter- and transdisciplinary nature-based urban regeneration approach to achieve liveable and productive spaces for empowered citizens. NBS have great potential to transform existing green infrastructure to productive and co-owned public places, delivering economic benefits and services to strengthen local communities.

WHAT YOU'LL LEARN

Theory and practice of nature-based urban regeneration:

→ defining the potential of nature-based solutions for urban regeneration

→ leading co-creation processes for developing multi-dimensional and multi-scale context-specific productive GI with citizens and other local stakeholders

→ applying methods to monitor and assess NBS benefits and explore well

→ identifying technical and non-technical barriers to NBS implementation and learning how to over-come them

→ developing sustainable business models for NBS in urban regeneration

→ building your own nature-based urban regeneration project

COURSE OUTLINE

WEEK 1: The challenges of urban regeneration and the potential of NBS
Scheduled: October 3rd, 2022

The first module introduces you to the challenges of urban regeneration and the potential of NBS in transforming post-industrial cities, including the integration of NBS into wider re-generation approaches

→ Assignment 1 (Due date: 23 October 2022)

WEEK 2: The City as a Living Lab for co-creating NBS
Scheduled: October 10th, 2022

Module 2 provides methods and examples of context-specific analysis and locally adaptable trans-disciplinary innovation formats to engage local communities in developing liveable urban environments

→ Assignment 2 (Due date: 23 October 2022)

WEEK 3: Productive solutions using nature for renewal
Scheduled: October 17th, 2022

This module presents applications of different types of productive nature-based solutions in detail incl. NBS urban agriculture, aquaponics and green roofs and walls

→ Assignment 3 (Due date: 23 October 2022)

WEEK 4: NBS benefits and how to assess them
Scheduled: October 24th, 2022

The fourth module introduces you to methods of monitoring and assessing a range of NBS benefits for society, economy and the environment

→ Assignment 4 (Due date: 13 November 2022)

WEEK 5: Sustaining NBS: overcoming barriers, creating business models and upscaling NBS
Scheduled: October 31st, 2022

This module shows how to overcome barriers in NBS implementation and to create business models for productive green infrastructure to allow NBS upscaling to city level.

→ Assignment 5 (Due date: 13 November 2022)

PRACTICAL MATTERS

WEEK 6: Health and well-being impact of NBS

Scheduled: November 7th, 2022

Module 6 shows in-depth how NBS impact urban health by using different assessment, risk + modelling methods and approaches to strengthen human-nature relationships.

Final Assignment (Due date: 27 November 2022)

Deadline to upgrade to the verified track: 23 October 2022.

TIME COMMITMENT

This course runs over 6 weeks. You will spend approximately 5-6 hours per week incl.:

→ watching lecture videos

→ exploring literature and website recommendations, toolboxes etc.

→ completing recap questions (quiz)

→ completing assignments

→ participating in the discussion forum

Please keep all deadlines for the verified track in mind towards the end of the course so you hand in everything on time to receive your certificate.

GET READY FOR THE QUIZ AND ASSIGNMENTS

Quiz questions

After watching each unit's lecture video, please answer a series of questions revising what you've learned.

Assignments

Learners who want to receive a certificate for this edX course have to complete recap questions, the last four module assignments and a final assignment. Each module concludes with an assignment, the final assignment starts at the end of module 6.

Final assignment

Your assignments over the course of six modules provide the building blocks and bringing them together for writing your project proposal of a nature-based urban regeneration strategy.

PRACTICAL MATTERS

GRADING

Your assignments will be graded by peer reviews.

The final grade is calculated as follows:
10% Recap Questions, 40% Assignments and 50% Final Assignment

To receive a certificate, participants need to obtain at least 60% of the total points.

DISCUSSION FORUM - WELCOME TO THE COMMUNITY

As a learner of the course **Nature-based Urban Regeneration** you are part of a diverse and interdisciplinary learning community. The discussion forum is an essential part of this online course. You can post questions, start discussions etc. The instructors will monitor the forum regularly. An active and healthy learning community starts with some basic rules. Please take a moment to read the Discussion Guidelines in the hand-out section.

ACADEMIC HONOUR CODE

By participating in this course, you pledge to follow the edX honour code (https://www.edx.org/edx-terms-service). Explicitly, we expect you to be a diligent student and contribute to the course.

We believe it is not too hard to achieve a good grade when participating regularly and you will learn a lot about the topic at hand. We put a lot of effort in creating a great course for you and highly appreciate your feedback and suggestions!