

# URBAN ENVIRONMENTAL ACUPUNCTURE SPECIALISTS

## E-LEARNING COURSE





## INTRODUCTION

The e-learning course has been elaborated within the Salute4CE project. The SALUTE4CE project has been implemented under the INTERREG Central Europe Programme. The main goal of the course is to introduce the professionals and general public to the concept, goals, opportunities and procedures of the urban environmental acupuncture (UEA) approach. The UEA application is part of cities' adaptation strategies as a response to the negative effects of climate change. UEA can also address problems, such as air pollution, lack of biodiversity, and inconvenient social situation.

The e-learning course is designed to give participants a quality overview of a full range of issues on UEA. Meanwhile, thanks to the inclusion of an additional list of references, every participant has the opportunity to improve their knowledge on specific issues. For further self-study, the Salute4CE handbook has also been compiled, thus offering solutions to individual problem areas in greater detail, and expanding the basic portfolio of knowledge.

### Who can participate?

The course is open to all who are interested in sustainable urban development. It is primarily intended for urban planners, architects, students, citizens, local and regional authorities, etc.

### Why attend the course?

Thanks to the chosen form, the participant has the opportunity to gain an intensive insight of the entire UEA issue. Due to the self-evaluation system, the participant is able to find out if he/she has understood the given issue correctly.

### How is the e-learning course structured?

The course is divided into two parts (educational part and certificated part).

The educational part is accessible to everyone without the need to register. This part includes all educational modules, including the possibility of self-evaluation.

The certificated part is intended for those e-learning participants who want to obtain a certificate URBAN ENVIRONMENTAL ACUPUNCTURE SPECIALISTS, awarded by the Salute4CE project.

### How to proceed in the e-learning course to get a certificate?

In the beginning, you want to study the material in the educational part. After you feel that you are familiar with UEA, then it is necessary to register. After completing the [registration](#), project representatives will open a special on-line test. Before you start with registration, please read [Private Policy - GDPR information](#). By registering, you agree to the terms of the GDPR.



## How to use this manual?

The e-learning manual is divided into 7 separate chapters with an added special section (Module 4) describing each Nature Based Solution (NBS).

For a better overview, the chapters are divided into modules. Each chapter must be opened separately. For those interested, a self-evaluation test is prepared for each chapter.

### *Module 1 - Introduction*

The module introduces the participant to the UEA issue and the selection of suitable green spots for its implementation.

### *Module 2 - Challenges that need to be overcome*

The module is divided into 4 separate chapters, which address the individual challenges that cities face in relation to climate change, problems with air pollution, earth stress, soil sealing, and rainwater.

### *Module 3 - Connecting UEA with urban planning*

The module includes a chapter focused on selection of **suitable, sustainable, and native plants**. **Also, this module includes a chapter introducing Action planning for UEA**. Both chapters are important for the communication of our UEA idea. Good communication is necessary in order to be acceptable both for the city for which they are intended and for the city dwellers who will be users of the UEA.

### *Module 4 - Special section - Nature Based Solutions - examples for shaping UEA green space.*

This module describes key information about each of the Nature Based Solutions. Descriptions contain pictures, main ecosystem services, short description, typical/possible locations, and list of references.

## MODULE 1 - Introduction

### Chapter 1 What is Urban Environmental Acupuncture? Short Description of Selection Methods of Green Acupuncture Spots

Authors: Jiří Kupka, Adéla Brázdová, IURS - Institute for Sustainable Development of Settlements, Ostrava

#### Self-evaluation test



## MODULE 2 - Challenges that need to be overcome

### Chapter 2 Soil Sealing and Soil Degradation Reduction by application of Urban Environmental Acupuncture solution

Authors: Anna Starzewska- Sikorska, Justyna Gorgoń, IETU - The Institute for Ecology of Industrial Areas, Katowice

[Self-evaluation test](#)

### Chapter 3 Urban Environmental Acupuncture as One of the Solutions for Reduction of Heat Stress in Urban Space

Authors: Juliane Mathey, Jessica Hemingway, Leibniz Institute of Ecological Urban and Regional Development (IOER), Dresden

[Self-evaluation test](#)

### Chapter 4 Possibilities of application of Urban Environmental Acupuncture in Reducing Problems with Rainwater in the Urban Space

Authors: Barbara Vojvodikova, Božena Schejbalova, IURS - Institute for Sustainable Development of Settlements, Ostrava

[Self-evaluation test](#)

### Chapter 5 Urban Environmental Acupuncture for Increasing Air Quality

Authors: Matteo Tabasso, Elena Masala, LINKS Foundation, Torino

[Self-evaluation test](#)



## MODULE 3 - Connecting UEA with urban planning

### Chapter 6 Selection of suitable, sustainable, native, and country-specific native plants

Authors: Leszek Trząski, Katarzyna Galej-Ciwiś, Silesian Botanical Garden, Mikolow






Self-evaluation test

### Chapter 7 Action planning for urban environmental acupuncture (small green space)

Authors: Jessica Hemingway, Juliane Mathey and Peter Wirth, Leibniz Institute of Ecological Urban and Regional Development (IOER), Dresden

Self-evaluation test

## MODULE 4 - Nature-based solutions - examples for shaping UEA green space

 <p>Positive effect on soil sealing</p>	 <p>Positive effect on rainwater accumulation</p>	 <p>Positive effect on heat stress reduction</p>	 <p>Positive effect on social situation</p>	 <p>Positive effect on air quality</p>
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1.	<a href="#">Urban meadows</a>	16.	<a href="#">Herb spiral</a>
2.	<a href="#">Verges / flower beds with native perennials</a>	17.	<a href="#">Urban wilderness / succession area</a>
3.	<a href="#">Ground cover plants</a>	18.	<a href="#">Ground crops of vegetables / herbs</a>
4.	<a href="#">Lawn</a>	19.	<a href="#">Vegetated reinforced soil slopes with green fences</a>
5.	<a href="#">Green pavements</a>	20.	<a href="#">Green pergolas/ green arbors</a>
6.	<a href="#">Street trees</a>	21.	<a href="#">Green facades with climbing plants</a>
7.	<a href="#">Park trees</a>	22.	<a href="#">Wall-mounted living walls</a>
8.	<a href="#">Fruit trees/ shrubs/</a>	23.	<a href="#">Hydroponic mobile living walls / vertical gardens</a>
9.	<a href="#">Large shrubs</a>	24.	<a href="#">Vertical vegetable / herb gardens</a>
10.	<a href="#">Rain gardens (under-drained)</a>	25.	<a href="#">Hanging wall planters (as green street furniture)</a>
11.	<a href="#">Road-side swales for retention and infiltration</a>	26.	<a href="#">Compacted pollinators' module</a>
12.	<a href="#">Linear wetlands for stormwater filtration</a>	27.	<a href="#">Rain gardens in planter (=self-contained)</a>
13.	<a href="#">Natural pollinators' modules</a>	28.	<a href="#">Street planters (as green street furniture)</a>
14.	<a href="#">Hedge/hedgerow</a>	29.	<a href="#">Green covering shelters</a>
15.	<a href="#">Rockery</a>	30.	<a href="#">Green roof /roof terrace</a>

