

BIP- Blended Intensive Programme

Green and Carbon Neutral Cities

Mitigation and adaptation to climate change in urban areas

Florence, School of Engineering UNIFI, 4-8 September, 2023



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Green and Carbon Neutral Cities

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To deepen the European Union Mission on Climate-Neutral and Smart Cities (EU Cities Mission) the **EUniWell Arena 3 - Environment, Urbanity and Well-being** has designed a **Blended Intensive Programme – BIP Green and Carbon Neutral cities**.

The **EU Mission on Climate-Neutral and Smart Cities** (EU Cities Mission) aims to deliver 100 climate-neutral and smart European cities by 2030, while paving the way for remaining European cities to become climate-neutral by 2050.

The course will be a Blended Intensive Programme - BIP and will give participants detailed tools on the different aspects involved, instruments of analysis and design tools to develop ideas and make plans for mitigation and adaptation to climate change in urban areas.

Within the BIP framework, two different and complementary education methods are organised: **on-line events** (in July 2023) completed through a **in-presence programme** in Florence, at the School of Engineering, University of Florence, from 4 to 8 September 2023. The BIP is open to Master's and PhD students.

As part of the BIP, students will develop a **Project Work** in working groups, at least one from each of the institutions involved in **EUniWell Arena 3** and the **BIP**. In particular, the participants to the BIP will be asked to adopt a city, among those already selected for the EU Cities Mission. Each group will collect all available data and background information on initiatives in the selected/adopted city and propose their own initiatives or the integration of the existing ones into their Project Work. The proposal may focus on specific topics, limited areas, localised actions etc.

The preliminary results of the **Project Work** will be returned in a **Poster** produced and presented by each group at the start of the activities in the in-presence week. During the in-presence activities, the Project Work will be further developed, in particular within the organized workshops and as a result of the comments/discussions on the poster and, above all, the attended lectures.

The final version of the **Project Work** should take the form of a **newspaper/blog article** in which the city's 2030 strategy is summarised in a comprehensible way for the general public .



WEEK IN-PRESENCE, 4-8 September 2023
Department of Civil and Environmental
Engineering – DICEA and School of Engineering
Via S. Marta 3, FIRENZE

DAY 1 – 04/09/2023

Venue: Aula Caminetto, School of Engineering

Morning Session 9:30- 13:00

Welcome coffee and Registration

- **Presentation of the challenge**
- **Presentation through posters of the students' activities**
(15 min each group)

13:00 Welcome lunch

Afternoon Session 14:30-18:30

Future urban environments: Drivers and Impacts

- **Urban climate and pollution in a climate change perspective**
Juan Pedro Montávez, University of Murcia (in presence)
- **Multi-hazard flooding in the context of climate change and urbanisation**
Shasha Han, University of Birmingham (online)

16:30 Coffee Break

- **Heat and pollution vulnerability assessment in urban areas**
Beniamino Gioli, Istituto per la BioEconomia - IBE, CNR - Firenze (in presence)



DAY 2 – 05/09/2023

Venue: Aula Caminetto, School of Engineering
Via S. Marta 3, Florence

Morning Session 9:30-13:00

Urban adaptation

- **Technological innovations for the urban environments in the 21st century**
Rosa Romano and **Antonia Sore**, *University of Florence DIDA (in presence)*
- **Small-scale (bottom-up) adaptation to climate and environmental change in urban areas**
Lisa M. Niesters, *University of Cologne (online)*

11:00 Coffee Break

- **Forecasting activities in metropolises: from the golden age of planning to the carbon neutral horizon**
Laurent Devisme, *University of Nantes (online)*
- **Green infrastructures and construction technologies in urban areas: mitigation of the heat island effect**
Cecilia Ciacci, *University of Florence DICEA (in presence)*

13:00 Lunch Break (not included - free time)

Afternoon Session 14:30-18:30

Nature - Based Solutions in urban planning

- **Urban Agriculture and Building-integrated Agriculture strategies in future spatial planning**
Michele d'Ostuni, *University of Bologna (in presence)*
- **Nature-based technological solutions for industrial buildings' sustainable redevelopment.**
Neri Banti, *University of Florence DICEA (in presence)*

16:30 Coffee Break

- **NBS against Flood**
Marco Lompi and **Tommaso Pacetti**, *University of Florence DICEA (in presence)*



DAY 3 – 06/09/2023

Venue: Aula Magna, School of Agriculture
Piazzale delle Cascine 18, Florence

Morning Session 9:30-12:30

Policy making & Public Governance

- **The Green, Just and Productive city: multilevel governance for a common good-oriented design**

Valeria Lingua and **Elisa Caruso**, *University of Florence DIDA (in presence)*

11:00 Coffee Break

- **From traditional economics to ecological economics**

Tiziano Distefano, *University of Florence DISEI (in presence)*

12:30 Lunch Break

Afternoon Sessions

14:00-16:00

- **Workshop on the project work**

16:00-19:30

- **Urban Trekking**

Some Milestones: *Parco delle Cascine; Parco dell'Argingrosso Park; Boschetto San Bartolo a Cintoia - Airfresh Project; Parco Villa Vogel; Manifattura Tabacchi.*

The parcourse will end @Manifattura Tabacchi for an "apericena" i.e. aperitif - dinner at the new shop of Shake Cafè (<https://www.shakecafe.bio> - on IG [shakecafe_firenze](#)) offered by the organisation.



DAY 4 – 07/09/2023

Venue: Aula Caminetto, School of Engineering
Via S. Marta 3, Florence

Morning Session 9:30 - 13:00

Pathways to change

- **Why is it taking so long to change?**
Krushna Mahapatra, *University of Linnaeus (online)*
- **Urban heat island hazard mitigation through shading vegetation and implications on geotechnical hazards mitigation**
Marco Uzielli, *University of Florence DICEA (in presence)*

11:30 Coffee Break

- **Preliminary comments on the BIP challenge**

13:00 Lunch Break (not included - free time)

14:30-18:30

- **Workshop on the project work**

16:30 Coffee Break



DAY 5 – 08/09/2023

Venue: Aula Caminetto, School of Engineering
Via S. Marta 3, Florence

Morning Session 9:30-13:00

- Presentations by the participants of the Project Work outcomes

11:30 Coffee Break

Meeting of the Judging Committee and award delivery.

Winners have the opportunity to attend for free the conference “**Sustainable Built Environment and Urban Transition (SBEUT)**” at Linnaeus University on October 12th and 13th, 2023.

<https://www.euniwell.eu/news-events/events/detail/sustainable-built-environment-and-urban-transition-sbeut-conference>

13:00 Farewell lunch

