ERASMUS+ PROGRAMME

KA131 – BLENDED INTENSIVE PROGRAMMES - BIP

BIP	Floods as an opportunity II. New scenarios for the territories hit by huge rainfalls around Florence
BIP CODE BM	2023-1-IT02-KA131-HED-000129521-6
Hosting Institutions	UNIVERSITY OF FLORENCE (I FIRENZE01)
Contact details	**BIP coordinator** Prof. Andrea Innocenzo Volpe **Administrative contact** School of architecture archint@architettura.unifi.it
Sending Institutions	FH MÜNSTER – UNIVERSITY OF APPLIED SCIENCES (D MUNSTER02) UNIVERSIDAD CASTILLA-LA MANCHA (E CIUDARO01) UNIVERSIDADE DE EVORA (P EVORA01) UNIVERSITA' DEGLI STUDI DI NAPOLI FEDERICO II (I NAPOLI01)
Virtual part	14/07/2025 – 18/07/2025
Physical mobility	21/07/2025 - 25/07/2025
City of Venue	Florence
Target	Students
Objectives and Description	The objective of the shared experience of this proposal of research titled "Floods as an opportunity II. New scenarios for the territories hit by huge rainfalls around Florence" is to create an academically qualified network for exchanging solutions concerning the challenges of adapting the architecture of the city and its territory to the new climate context. Through a joint online / in presence workshop, we will seek an occasion to develop together possible mitigation strategies and make a positive use of the new rainfall regimes. The BIP will try to reply and implement the positive outcomes of the previous BIP "Floods as an opportunity", hosted by the Escuela de Arquitectura at the Universidad de Castilla-La Mancha the past July, in which the same partners

	were involved in the analysis and development of design solutions for two critical areas in the City of Toledo. The results of the BIP were presented in an exhibition installed in the Salon Rico, one of the many heritage places protected and restored by the Consorcio de Toledo, https://consorciotoledo.com/ This international network of universities is editing a publication which will describe the solutions found for the Toledo's peculiar case studies, where long periods of drought alternate with brief but heavy rains causing extensive damage to the land. Seeking to give a follow up to this positive cooperation already set up and operative, the proposal of this BIP focused on Florence's territory could generate a framework space, open to future joint research focused on a responsible, sustainable and architecturally fair management of the emergencies caused by climate change.
Methods and Outcomes	Under the title "Floods as an opportunity II. New scenarios for the territories hit by huge rainfalls around Florence" the BIP program will divide the activities into two parts. Online: online training to introduce the new climate context: Climate change and changes in rainfall patterns/Climate change and sea level rise in coastal cities /Strategies for action with the minimum amount of water /Adaptation and mitigation strategies in the post-industrial city /Adaptation strategies in architecture: The encounter with the street/water and urban and natural landscape. In-situ workshop: During the workshop, the aim will be to find urban and architectural solutions that can positively receive large amounts of rainfall in a short period of time and store it for use during periods of low rainfall or extreme drought. We foresee to cooperate with one of the Municipalities recently affected by huge rainfalls among Campi Bisenzio, Prato, Quarrata, etc. to better select a series of peculiar case studies as themes for the in-situ design workshop Results: The results sought are the graphic formalization in urban and building sections of solutions to the problems

	posed along two lines: the adaptation of the existing city/the creation of new scenarios for the new climatic context blending Engineering, Architecture and Landscape Architecture solutions. As conclusions, a workshop report will be drawn up containing, in addition to all the results, the content of the training and a summary of the methodology used. For all students, the congruence of the planned activities with the educational objectives of their respective degree courses is ensured; after all, in the 8th book of "De Architectura," Virtruvius discusses methods of discovering water sources, properties of water, conducting techniques and the urban water network. Thus, there is no doubt that these topics have always belonged to the discipline of architecture. There can be no Utilitas, nor Firmitas without Venustas. Therefore, the workshop is intended as a Vitruvian exercise, where infrastructure design is finally conceived as part of our work as architects.
Virtual component description	5 online classes: OL 01 _ Climate change and modifications in rainfall regime, Monday 07/14/2025, from 6.00 pm to 7.30 pm OL 02 - Climate change and sea level rise in coastal cities, Tuesday 07/15/2025, from 6.00 pm to 7.30 pm OL 03 - Action strategies with the minimum number of resources, Wednesday 07/16/2025, from 6.00 pm to 7.30 pm OL 04-Adaptation and mitigation strategies in the postindustrial city, Thursday, 07/16/2025, from 6.00 pm to 7.30 pm OL 05- Adaptation strategies in architecture: the encounter with the street, water and the envelope. Adaptation strategies in architecture: rainwater and the building envelope, from 6.00 pm to 7.30 pm

	OL 01 - Climate change and modifications in rainfall regimes (European level) (objectives 6, 11 and 13 Agenda 2030) Climate change and modifications in rainfall regimes. (Prof. Ulrich Blum, WESTFAELISCHE WILHELMS-UNIVERSITAET MUENSTER) OL 02 - Climate change and sea level rise in coastal cities (European level) (objectives 9, 11 and 13 Climate change and sea level rise in coastal cities. (Prof. Sofia Aleixo, UNIVERSIDAD DE EVORA) OL 03 - Action strategies with the minimum number of resources (objectives 11 and 15 Agenda 2030) Action strategies with the minimum number of resources (Prof. Adelaida del Puerto, UNIVERSIDAD DE CASTILLA-LA MANCHA) OL 04-Adaptation and mitigation strategies in the postindustrial city (objectives 6,9 13,14 Agenda 2030) Adaptation and mitigation strategies in the postindustrial city (Prof. Giulio Giovannoni, UNIFI) OL 05- Adaptation strategies in architecture: the encounter with the street, water and the envelope. Adaptation strategies in architecture: rainwater and the building envelope. prior to the event focusing on introduction, teams' formation and preparations for the project week (Prof. Maria Teresa Giammetti, UNIVERSITÁ FEDERICO II)
Field of education	0713
Teaching language	English
Number of ECTS	3