



EULiST



NATIONAL
TECHNICAL
UNIVERSITY
OF ATHENS



ERASMUS+ Blended Intensive Program

“Carbon Footprint Reduction Initiatives in EULiST Universities”

4 June – 30 June 2025 | online and onsite in Athens, NTUA

Agenda for online and onsite courses

Within the framework of the Alliance [EULiST](#) “European Universities Linking Society and Technology”, the National Technical University of Athens (NTUA), organizes in cooperation with Lappeenranta-Lahti University of Technology (LUT), TU Wien (TUW), Brno University of Technology (BUT), Jönköping University (JU), Leibniz University Hannover (LUH), Institut Mines-Télécom (IMT), Slovak University of Technology in Bratislava (STU), University L’Aquila (UnivAQ), a **Blended Intensive Program** (BIP) with the title “**Carbon Footprint Reduction Initiatives in EULiST Universities**”.

TOPICS ADDRESSED

Participating academics and teaching staff members will share, as lecturers and mentors, best practices with students for monitoring the carbon footprint, towards sustainable EULiST campuses. Moreover, during the program, thematic areas to be discussed include the promotion of research on carbon emissions reduction technology, aligned with SDG 7 to ensure access to affordable, reliable, sustainable energy for all, as well as the European Green Deal and the European Education Area’s Focus Topic “Green Education”.

STRUCTURE

- Action 1 | Online lectures
Wednesdays @14:00-17:00 CEST, June 4th - June 11th- June 18th, 2025
- Action 2 | Onsite Workshops | Athens NTUA
Saturday June 21st until Monday June 30th, 2025

CONTENT – LEARNING OUTCOMES Language: English (min. B1)

- **Action 1**

Online lectures by academics and teaching staff from the co-organizing universities on green and sustainable campuses, best practices, on monitoring carbon footprint in EULiST campuses.

- **Action 2**

Onsite visits and presentation of challenges in two NTUA campuses [Historic Patission campus in the Centre of Athens & main Zografou campus] on carbon reduction technologies, including renewable energy sources, life cycle analysis, monitoring of energy uses, and the NTUA virtual campus. It also includes challenge selection, assignment, and initial preparation on group projects. Group project presentations of the onsite workshop will be presented on Monday June 30th in NTUA, Athens. Participation in the International Event “World Refrigeration Day 2025” held in NTUA Patission Complex has also been scheduled.

Students will work with experts in the field of carbon emissions, smart and sustainable energy design, using challenge-based learning, hands-on approach and design thinking. Participants will acquire new skills on carbon emissions management, learn to use new methodologies and tools for monitoring and estimating emissions from a life cycle perspective, and develop a new mindset that will contribute to the achievement of SDGs.

NATIONAL TECHNICAL UNIVERSITY OF ATHENS CAMPUSES



AGENDA • Action 2 | Onsite Workshops | Athens NTUA

Transdisciplinarity in education is strongly connected to international exposure and intercultural sensitivity. EULiST aims to strengthen the European identity by supporting diversified experience in intercultural environments.

ERASMUS+ Blended Intensive Program on Carbon Footprint Reduction Initiatives in EULiST Universities		SATURDAY 21.06.2025 10.30-14.30 Stavros Niarchos Foundation Cultural Center
09.30	Pick-up at Syntagma Square (transfer by coach)	
10.30-12.30	Welcome & Tour to Stavros Niarchos Foundation Cultural Center	Andreas Syggros Avenue 364, Kallithea, Greece
12.30-14.00	Light Lunch	
14.30	Pick-up at SNFCC (transfer by coach)	

ERASMUS+ Blended Intensive Program on Carbon Footprint Reduction Initiatives in EULiST Universities		SUNDAY 22.06.2025 11.00-15.00 Monastiraki Square at the Historical Centre of Athens
11.00-14.00	Treasure hunt in the historical centre of Athens	(meeting in front of the Church of the Virgin Mary)
14.00-15.00	Lunch	

ERASMUS+ Blended Intensive Program on Carbon Footprint Reduction Initiatives in EULiST Universities		MONDAY 23.06.2025 09.00-17.00 Library at NTUA Zografou Campus
09.00-09.15	Welcome	
09.15-09.45	Prof. A. Zisis, Vice Rector of Academic Affairs and Lifelong Education Prof. Ioannis Antoniadis , Dean of School of Mechanical Engineering Assist. Prof. K. Mpraimakis Dr. Mechanical Engineer	
09.45-11.15	Introduction to NTUA Eco-Friendly Sustainable Campus Monitoring of the Smart Prototype Building (Living Lab) Building decarbonisation solutions in term of insulations, energy systems and control strategies Open discussion, Interaction	Prof. Sotirios Karellas , Dr. Mechanical Engineer Dr. Antonios Charalampidis , Dr. Mechanical Engineer
11.15-11.30	Coffee Break	

11.30-12.30	On site tour to Living Lab, Laboratory of Thermal Processes – School of Mechanical Engineering Carbon emission friendly technologies related to buildings	Dr. Antonios Charalampidis
12.30-13.00	Lunch Break	
13.00-14.30	Introduction to Circular Economy Aspects Related to Carbon Footprint Calculations Using Software Tools for Carbon Footprint Calculations and LCS Studies	Dr. Tryfon Roumpedakis, Dr. Mechanical Engineer Dimitrios Chanouzas, Research Associate
14.30-15.00	Coffee Break	
15.00-17.00	Interactive Educational Session – Delivery of Carbon Footprint Reduction Project (Part A)	Dr. Tryfon Roumpedakis

ERASMUS+ Blended Intensive Program on Carbon Footprint Reduction Initiatives in EULIST Universities		TUESDAY 24.06.2025 09.30-17.00 School of Architecture at NTUA Patisision Complex
09.00-09.15	Light snack at Patisision Complex Stournari Gate	
09.15-09.30	Welcome to the School of Architecture at NTUA Patisision Complex (Stournari Gate)	
09.30-10.30	Tour at the Historical Buildings of the Complex	Prof. Alexandrou Eleni Assist. Prof. Bougiatioti Flora
10.30-11.00	Brief Introduction to BIP “Carbon Footprint Reduction Initiatives in EULIST Universities” (Amphitheatre 008)	Prof. Alexandrou Eleni
11.15-13.00	Meeting with undergraduate students of the School of Architecture involved in Energy efficiency units and self-presentations	Prof. Alexandrou Eleni Assist. Prof. Bougiatioti Flora
13.00-14.00	Lunch Break	
14.00-15.15	On site measurement demonstration	Athanassios Kotsenos, Phd Candidate Theodora Papadopoulou, Dipl. Arch. Eng, Phd Candidate
15.15-15.30	Coffee Break	
15.30-17.00	“Energy Efficiency and Sustainability in Campus Buildings”	Epameinondia Angelou, Civil Engineer, PhD Candidate Panagiotis Rigopoulos, Electrical Engineer

ERASMUS+ Blended Intensive Program on Carbon Footprint Reduction Initiatives in EULIST Universities		WEDNESDAY 25.06.2025 09.00-17.00 School of Mechanical Engineering at NTUA Zografou Campus
09.00-09.45	Environmentally Friendly Heat Pumps Green and Sustainable Buildings of the Future	Prof. Irene Koronaki, Dr Mechanical Engineer

		Dr. Rosie Christodoulaki, Research Associate
09.45-10.20	Energy Building Simulations	George Orfanos, Research Associate
10.20-10.40	Coffee Break	
10.40-11.30	Introduction to NTUA Eco-Friendly Sustainable Campus: Monitoring of campus electrical consumption per school, Energy forecasting of campus buildings - Open discussion, Interaction	Prof. Irene Koronaki
11.30-13.00	On site tour to ThermoLab NTUA & 3D Thermal Energy Hub Tour – School of Mechanical Engineering Carbon emission friendly technologies related to air conditioning, refrigeration, and heating systems	Dr. George Antonakos, Laboratory Teaching Associate
13.00-13.30	Lunch Break	
13.30-15.00	UNESCO Chair of circular economy Institute of Circular Economy & Sustainability Envinow students' activities about green skills	Prof. Konstantinos Aravossis, Dr. Mechanical Engineer Envinow students
15.00-15.30	Coffee Break	
15.30-17.00	Interactive Educational Session – Work on Carbon Footprint Reduction Project (Part B)	Dr. Tryfon Roumpedakis George Orfanos Dimitrios Chanouzas

ERASMUS+ Blended Intensive Program on Carbon Footprint Reduction Initiatives in EULIST Universities	THURSDAY 26.06.2025 09.00-17.00 Ceremony Hall at NTUA Patisision Complex
WORLD REFRIGERATION DAY 2025 @ NTUA	

ERASMUS+ Blended Intensive Program on Carbon Footprint Reduction Initiatives in EULiST Universities		FRIDAY 27.06.2025 09.00-17.00 Library at NTUA Zografou Campus
09.00-10.30	Regulations and Policies on Carbon Footprint for EU Campuses	Prof. Peter Morgenstein, Ing. arch., PhD Prof. Irene Koronaki Dr. Tryfon Roumpedakis
10.30-11.00	Coffee Break	
11.00-12.00	Decarbonization in Industry	Dr. Panagiotis Tsekouras, Industry expert
12.00-13.00	Pathways to Zero Emission Buildings	Mr Petros Dalavouras,

		ASHRAE Hellenic Chapter – Chair of Refrigeration Committee
13.00-13.30	Lunch Break	
13.30-15.00	Drafting your Project	Prof. Irene Koronaki Prof. Peter Morgenstein Dr. Tryfon Roumpedakis
15.00-15.30	Coffee Break	
15.30-17.00	Interactive Project Preparation	Prof. Irene Koronaki Prof. Peter Morgenstein Dr. Tryfon Roumpedakis

ERASMUS+ Blended Intensive Program on Carbon Footprint Reduction Initiatives in EULIST Universities		MONDAY 30.06.2025 09.00-17.00 Library at NTUA Zografou Campus
09.00-10.30	Interactive Project Preparation & Mentoring	Prof. Irene Koronaki Prof. Peter Morgenstein Dr. Tryfon Roumpedakis George Orfanos Dimitrios Chanouzas
10.30-11.00	Coffee Break	
11.00-12.30	Interactive Project Preparation & Mentoring	Prof. Irene Koronaki Prof. Peter Morgenstein Dr. Tryfon Roumpedakis George Orfanos Dimitrios Chanouzas
12.30-13.00	Lunch Break	
13.00-15.00	Group Project Presentations Discussion & Interaction	Prof. Irene Koronaki Prof. Peter Morgenstein Dr. Tryfon Roumpedakis George Orfanos Dimitrios Chanouzas
15.00-15.30	Coffee Break	
15.30-17.00	Group Project Presentations Discussion & Feedback	Prof. Irene Koronaki Prof. Peter Morgenstein Dr. Tryfon Roumpedakis George Orfanos Dimitrios Chanouzas