

Erasmus+ Blended Intensive Program
“Advances in Sustainable Building Energy
Technologies and Smart Decarbonisation”
28 September – 24 October 2026 | online and onsite in
Athens, NTUA

Call for applications | deadline 24th July, 2026

Within the framework of the Erasmus+, 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), Rey Juan Carlos University (URJC) and Technical University Munich (TUM), a Blended Intensive Program (BIP) with the title “Advances in Sustainable Building Energy Technologies and Smart Decarbonisation”.

TOPICS ADDRESSED

Participating academics and teaching staff members will share their expertise as lecturers and mentors on sustainable building energy technologies, advanced heating and cooling systems, building energy simulation, smart digital methods and decarbonization strategies. The programme will address the role of buildings and HVAC systems in energy consumption and emissions, energy performance indicators, thermal loads and thermal comfort, heat pump technologies, CO₂ systems, natural refrigerants and low-GWP technologies, passive heating and cooling strategies, ASHRAE standards, energy renovation of buildings, nZEB principles, LEED-certified buildings, AI applications in building energy systems, and broader sustainability aspects related to materials, circularity and resource efficiency.

STRUCTURE

- Action 1 | Online lectures
Mondays, September 28th, October 5th and October 12th 2026, 14:00–17:00 CEST
- Action 2 | Onsite Workshops | Athens NTUA
Friday, October 16th until Friday, October 23rd 2026
- Action 3 | project presentations: Saturday 24th October 2026



CONTENT – LEARNING OUTCOMES

Language: English (min. B1)

- Action 1 | Online lectures on buildings, HVAC and decarbonization, heat pump technologies, CO₂ systems and natural refrigerants.
- Action 2 | Onsite lectures, workshops, technical visits and project work in Athens on building energy simulation with DesignBuilder, HVAC systems, LEED-certified buildings, ASHRAE standards, nZEB concepts, AI applications and sustainable energy technologies.
- Action 3 | project presentations

Students will gain practical skills in building energy modelling, evaluation of heating and cooling strategies, and development of sustainable, smart and low-carbon building solutions.

ECTS

Upon successful completion of the BIP Program, students will receive 4 ECTS credit points from the National Technical University of Athens. Recognition of these ECTS credit points as part of the students' study programme is contingent upon their respective sending universities' policies. It is recommended to contact study counselors or EULIST local coordinators prior to the program. Completion of the program will be documented in the diploma supplement.

PARTICIPATION PROFILE

The BIP Program is addressed to undergraduate and postgraduate students coming from the coorganizing Universities who are interested in sustainable building energy technologies, smart energy systems and decarbonisation. The programme is particularly relevant for students enrolled in fields such as Mechanical Engineering,

Energy Engineering, Architecture, Civil Engineering, Environmental Engineering, Sustainable Design and related STEM disciplines.

SUPPORT

Participating students from the coorganizing Universities will receive the following support covering the duration of the physical component:

- Mobility fund from their sending universities
- Additional support in case of confirmed green travel (sustainable means of transport)
- Free meals card for lunch and dinner at NTUA's restaurants (Zografou and Patission campuses)
- Suggested low-cost houses and hotels in regions close to NTUAs campuses

ENTRY REQUIREMENTS - CRITERIA

- Certificate of studies
 - Undergraduate after the 2nd year of studies / postgraduate
 - GPA and field of study will be considered
- English language proficiency (min. B1 level)
 - Accreditation according to home institution requirements
- Curriculum vitae
- Letter of intent

APPLICATION

Please submit your application to **the Erasmus office of your university** within the defined application period.

IMPORTANT DATES 2026

June 18th

BIP "Advances in Sustainable Building Energy Technologies and Smart Decarbonisation" announcement

July 24th

Deadline for students' applications

July 24th - July 27th

Student selection

August 1st

Notification of students' participation

September 28th | October 5th | October 12th

Action 1 | Online Lectures

October 16th – October 24th

Action 2 | Onsite Workshops, location Athens NTUA

October 24th

Action 3 | project presentations

MORE INFORMATION

For more information interested students can contact Assist.Prof. Tryfon Roumpedakis: troumpedak@central.ntua.gr

NTUA BIP Coordinator:

Assist.Prof. Tryfon Roumpedakis: troumpedak@central.ntua.gr

Prof. Irene Koronaki: koronaki@central.ntua.gr

