CERIS Civil Engineering Research and Innovation for Sustainability

HiHTC – Sustainable, High-Performance Hybrid Timber Building Construction

Summary

Project HiHTC aims to fulfil the future demands in higher education of students in design and construction of environmental high-performance hybrid timber building construction by trans-disciplinary innovative student-centered learning approaches.

The project matches the specific priority 'Tackling skills gaps and mismatches' and supported actions as: a) new learning-outcomes-oriented curriculum of BSc/BA module "Sustainable, High-Performance Hybrid Timber Building Construction" will be developed; use of innovative project based learning, learning by doing and blended learning approaches will better meet the learning needs of students; new module will be relevant for the employment market, as it will be developed in close consultation and cooperation with business sector, and for the wider society, as sustainable construction with environmentally friendly timber material will be promoted; b) trans-disciplinary approach will be used, as the project will join efforts of participants from five HEIs, one enterprise and association from different backgrounds (architecture, civil engineering and architectural technology and building management); c) blended learning approach will be used and e-learning platform will be developed for education of students; d) university-business cooperation in education of students and joint scientific research will be ensured in development and delivery of the new study module.

The project also tackles specific priority 'Rewarding excellence in learning, teaching and skills development', as: a) quality culture of teaching will be promoted; b) teachers/trainers from participating HEIs and enterprise will be trained in new and innovative project based learning, learning by doing and blended learning approaches, also they will use transdisciplinary approaches in development of the new module curriculum design, including innovative assessment methods; c) partnership will collaborate with associated partners from commercial and non-commercial organizations from timber design and construction sector; d) the project will develop new practices based on educational research and creativity; as a result innovative competency framework will be prepared and joint academic publications will be published.

The topic of education is focused on sustainable, high-performance hybrid timber building construction. It directly corresponds to horizontal priority theme 'Environmental and climate goals'. The project will develop competences in sustainability-relevant construction sector, green sectorial skills strategies and methodologies, as well as future-oriented BSc/BA module "Sustainable, High-Performance Hybrid Timber Building Construction" that better meet the needs of individuals. The project will test innovative project based learning, learning by doing and blended learning approaches to prepare learners and teachers with high environmental awareness, committed to save resources, will reduce energy use and waste in construction, and also will reduce carbon footprint emissions.

Project Reference

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Leading Institution

Claude Bernard University Lyon (France)

Partners

TTK University of Applied Sciences, (Estonia), Gdańsk University of Technology (Poland), Kauno Technikos Kolegija (Lithuania), Study and Consulting Center (Lithuania), NOVA University of Lisbon (Portugal)

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Project Website

www.hihtc.eu