

The Erasmus+ project "digital Decathlon" has been initiated, ... the student design competitions shall start in autumn 2023 and autumn 2024

The project "digital Decathlon", co-funded by the European Union in the Erasmus+ program (Action type KA220-HED - Cooperation partnerships in higher education), has begun on December 1, 2022, with completion scheduled for March 31, 2025.

Project leader is:

Jade Hochschule (Jade University of Applied Sciences), Germany, Gregor Grunwald

Partners are as follows:

Bergische Universität Wuppertal (University of Wuppertal), Germany, Anica Meins-Becker

Università degli studi di Firenze (University of Florence), Italy, Antonella Trombadore

Karelia Ammattikorkeakoulu Oy (Karelia University of Applied Sciences), Finland, Ossi Laakkonen

Politechnika Warszawska (Warsaw University of Technology), Poland, Ireneusz Czmocho

"digital Decathlon" is a student design competition held at European universities. The goal of the project is to develop an innovative, curriculum-integrated educational offering to enhance digitization competencies in higher education and to teach Building Information Modelling (BIM) technology through the participation in an interdisciplinary design team. The competition promotes interdisciplinarity through the collaboration of construction-related disciplines on a joint project and internationalizes higher education to promote social and intercultural competences and strengthen European identity.

Two competitions are planned, each to be held during one winter semester, the first in the 2023/2024 academic year and the second in 2024/2025. At the beginning of each competition joint lectures and workshops will be held for all participants, and at the end of each competition there will be a central final event with the presentation of projects and the selection of winners. All projects will be published on a dedicated website.

The ten disciplines of the "digital Decathlon" are divided among the five universities.

Jade University of Applied Sciences shall be responsible for integrated study programs as decentralized simulation games and will and Jade University shall focus on architectural aspects as well as will be responsible for Quantity Take Off based on 3D model.

The BIM Institute at the University of Wuppertal has developed an e-learning course that will be upstreamed as a qualification for participating in the competition. The second discipline is product tracking to provide site transparency and comprehensive insight into the production of building materials.

The Karelia University of Applied Sciences shall introduce Green BIM in the scope of competition works. As the competition is not only about building more digitally, but also about using the digital transformation to build better, more resource-efficient, climate-friendly and quality-assured buildings. The Karelia University of Applied Sciences is supporting the project in the disciplines of timber construction/structural design and life-cycle assessment.

The University of Florence, with its focus on simulation with 3D models, can contribute to the investigation and optimization of student projects for sustainability aspects. Their second discipline is construction process simulation.

The Warsaw University of Technology will be responsible for designing building services, coordination and communication through BIM tools, techniques and processes. Both disciplines are very important for obtaining well-coordinated industry BIM models and equipped with systems properly modeled, as well as designed for the assumed function of the building.





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