



4th Press release – The 1st round of Team Teaching Pilot Program

December 2023

The International Cooperation Framework for Next Generation Engineering Students (NextGEng) is a threeyear Cooperation Partnership project, co-funded by the European Union under the Erasmus+ KA2 programme. In the project there are several lines of actions that aims to increase the quality of the pedagogical process in engineering by developing new teaching models. These new models promote international team-teaching with the support of new learning material and teaching methods that are aligned with the European Education Area 2025 and are in accordance with labor market needs.

NextGEng Team Teaching Pilot Program (TTPP) is one of the main activities planned to be implemented in the project. TTPP brings a new international and cooperative dimension to already existing courses in the curricula of HEI partners by creating new content and teaching methods that enable participation of lecturers and company experts in the learning process. In this way, students can benefit from the best practices and methods of each HEI and knowledge of the partner companies in applying the theory to practice. A flexible, modular design of courses is proposed in terms of contents and levels so that students can adapt their learning process based on their capacities and background. New study cases and laboratory work are developed in direct connection with real examples from industry. The new learning materials integrates eco-friendly elements in direct connection with the theory, with the scope of sustaining the development of student green competences. All courses are designed focusing on features of student-centered learning, experiential learning and self- and peer-evaluation.



TTPP road map

The proposed road map that implements the NextGEng TTPP is presented in the above figure. The activity started with a training seminar organized by JAMK in January 2023. At the event participated a number of 29 teachers involved in the courses upgrade process. The first round of course upgrading involved four of six courses, which are Strength of Materials (C1), Industrial Automation (C2), Design Project (C3) and Quality

















Assurance and Applied Methods (C4). The upgrading process started in February 2023 and ended in September 2023. The new developed pedagogical materials and methods were putted to the test during autumn semester 2023, when the first round of cooperative teaching implementations was started in three partner universities. There has been teaching mobilities from all three partner universities and to all three partner universities.

During the autumn semester 2023 12 co-teaching courses were implemented in all three HEIs for C1, C3 and C4.



Course teaching activities at UJA and TUCN.

In collaboration with the company partners, 6 face to face and 7 online laboratory activities for C3 and C4 were implemented in all 3 HEIs.



Onsite labs at Bosch Cluj Plant, TUCN, ISR and Valmet.



















Online labs with Valmet and Bosch Cluj Plant.

The second round of the course upgrading includes two of six courses, Computer Aided Design (C5) and Manufacturing Technology (C6). The upgrading process will start in February 2024 and their cooperative teaching implementations will be implemented starting with the autumn semester 2024.

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