

Co-funded by the Erasmus+ Programme of the European Union

#### Work Package 3:

E-learning courses development and capacity building for staff (Lead Partner - National and Kapodistrian University of Athens / NKUA)

This WP aims at performing the instructional design for e-learning courses and developing the learning materials and assessment tests for e-learning courses. Additionally, it aims at the training and capacity building of the relevant staff who will soon after teaching the new courses at Partner HEIs.

### Work Package 4:

Quality and evaluation (Lead Partner - Katholieke Universiteit Leuven / KU Leuven)

The aim of this work package is twofold. Firstly, to ensure a high quality of deliverables of the project and its results, and secondly to ascertain the quality of the process and the commitment to develop a sound framework for devising, implementing, and reporting internal and external evaluation activities.

#### Work Package 5:

Dissemination and exploitation activities of project results and achievements (Lead Partner – European University of Tirana) On the basis of a valorization and dissemination strategy the project will continuously develop dissemination activities, and this is done as an attempt to increase the number beneficiaries as much as possible as well as assure the sustainability of the achieved impact.

#### Work Package 6:

Project Management and coordination - (Lead Partner -Polytechnic University of Tirana / UPT) Within this WP, the lead partner will ensure a smooth and efficient management and implementation of the project.

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#### WHAT TO KNOW MORE?

Project Website: Engine – Project (engineproject.eu) Facebook Page: https://www.facebook.com/ENGINE

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# ENGINEERING CURRICULA MODERNIZATION IN RENEWABLE ENERGY IN ALBANIAN UNIVERSITIES ENGINE



**ENGINE** – "Engineering curricula modernization in renewable energy in Albanian Universities", co-funded by the Erasmus+ Programme of the European Union and led by Polytechnic University brings together 11 partners. The project aim is the modernization and internationalization of VET and Bachelor curricula in Engineering for Renewable Energies in the targeted universities in Albania through innovation of curricula in line with the new development in the area and the labor market demand. The use of renewable energy sources and the improvement of energy efficiency ensures a sustainable economy based on the conditions of scientific development. In order to meet all national objectives and obligations set by the EU for member states, but also for candidate countries (such as Albania), it is necessary to raise awareness of the younger generation on the use of RES, improve energy efficiency, design curricula and upgrading existing ones, training academic staff and building laboratories, expanding the network of collaboration with International Higher Education Institutions for the recognition and implementation of modern energy technologies.

## **AIMS AND SPECIFIC OBJECTIVES:**

The project aim is modernization and internationalization of VET and bachelor curricula in engineering for renewable energies in the targeted universities in Albania through innovation of curricula in line with the new development in the area and the labor market demand.

## Its specific objectives are:

 To analyze the educational needs in engineering for renewable energies through problem and job analysis, and to define the necessary knowledge, skills and competencies of engineers in the sector of renewable energies in terms of learning outcomes.



- To design syllabi and course content and assessment for compulsory and elective courses in VET and bachelor engineering education for renewable energy to meet the market needs and upgrade the university academic offer accordingly.
- To develop new e-learning courses with modular structure for the innovated curricula of Partner HEIs and to establish a platform for knowledge sharing between Albanian HEIs and program partner institutions.
- To innovate the laboratory equipment and to perform a pilot test and to start the implementation of the joint modules/ courses delivery during the last project year.

### **PROJECT OUTCOMES**

- Innovated curricula in ren ewable energies
- Innovated laboratories
- Training of teachers from Partners Country universities in ECTS and learning outcomes approach

## WHAT DO WE DO?

### Work Package 1:

Electrical Engineering and Energy study practices analysis and in-depth needs assessment in Partner Albanian HEIs – (Lead Partner - Aleksander Moisiu' University of Durres / UAMD) The overall aim of this WP is to assess the current market needs in Albania in the field of energy and assess current academic offer at each partner HEI. Additionally, Preparation WP aims at mapping the existing VET curricula and bachelor in Program Countries which after will be used as a reference point for the development of the new curricula and update the existing study programs. The assessment of the academic offer at Partner HEIs will be done through problem and job/content analysis, and to define the necessary knowledge, skills and competencies for engineers in the sector in terms of learning outcomes.

### Work Package 2:

*Syllabi and course content development- (Lead Partner - Katholieke Universiteit Leuven / KU Leuven)* 

The overall aim of this WP is to design syllabi, course content and assessment for new higher VET degrees and updated bachelor programs in renewable energies education to meet the user needs and to the learning outcomes defined in WP1. The content of the new and updated VET and bachelor curricula will be designed for the learning outcomes defined in WP1.