ALIEN's aim is to improve the quality of higher education by providing more motivating, stimulating, and effective learning contexts that prepare students for their professional life through the development of industry desired competences.

ALIEN implements an Active Learning context through Problem and Project-based Learning methodologies addressing real-life issues related to science, technology, engineering and math (STEM) concepts.

The methodology will be supported by a virtual learning environment that will a set of digital tools that will allow students to experiment, collaborate, and communicate in an extended and multinational learning community that will also include other stakeholders like teachers and researchers.

Active Learning in Engineering Education aims at promoting PBL approaches in Engineering.

More on ALIEN

www

http://projectalien.eu

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CBHE Project ALIEN

ALIEN

Active learning
in Engineering
Education

ΙΔΡΥΜΑ ΚΡΑΤΙΚΩΝ ΥΠΟΤΡΟΦΙΩΝ
IKY

Erasmus+

Problem-Based Learning

Project and Problem-based learning (PBL) are active and learner-centred methodologies in which students develop their knowledge and competences by following a problem solving process, usually based on real-life situations. The benefits for engineering and technology students are considerable improvements in critical, lateral and creative thinking, problem solving strategies, group collaboration, communication skills, entrepreneurship and integration with the society.

How?

The methodology will be supported by a virtual learning environment that will a set of digital tools that will allow students to experiment, collaborate, and communicate in an extended and multinational learning community that will also include other stakeholders like teachers and researchers.

What will ALIEN produce?

- A strategic plan for the deployment of Active Learning and PBL
- A pedagogical methodology that promotes Active Learning through ICT
- A properly equipped and staffed PBL laboratory in each participating University in Asia
- An on-line collaborative platform that supports the production, storage and reuse of problems and challenges to be used in PBL
- A set of 45 serious games and pedagogical guidelines that demonstrate PBL scenarios
- A set of training actions motivating and preparing teachers for the implementation of PBL

Partners