elemend





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ELEMEND Consortium





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TECHNOLOGICAL EDUCATION INSTITUTE OF STEREA ELLADA



УНИВЕРЭИТЕТ У ИСТОЧНОМ СДРДЈЕВУ University of East Sarajevo



















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Project Summary

Facilitated by the developments in renewable energy sources RES and distributed generation as well as ICT technologies, smart grid and microgrid technologies are recognized as a world changing trend that will permeate everyday life and reshape all energy related industry and businesses. These developments have expedited the deregulation of existing electricity markets and facilitated the emergence of new ones. The new paradigms of electricity grids and markets require that the staff operating in the new technological and economical environment as well as electricity end users are properly educated and trained.

ELEMEND is a capacity building project de-

signed to facilitate electrical engineering curricula to be competitive through teaching and training in smart gird technologies and electricity markets. Expected outputs include new and updated BSc courses and MSc programmes, training of academic and technical staff, new ICT pedagogical tools, such as e-learning platforms and gamified content combined with blended learning, an internship programme for the most motivated of the EL-EMEND students, new laboratories accessible to all WBC partners, an ELEMEND network around the core group of the project's industrial partners. The student projects carried out in ELEMEND labs in the third project year will focus on real-life problems while the e-learning courses, gamified applications, virtual labs, new courses and MSc programmes are expected to engage new students and relevant target groups after the lifetime of the project as well as enhance public's awareness.

Objectives

- To increase capacity building in WBC universities in smart grid studies in both English and local languages, at the undergraduate and graduate level.
- To develop, accredit and implement new courses and curricula in the 9 WBC ELEMEND partner univiersities.
- To introduce and develop new ICT self-learning tools
- To increase employability and business opportunities

Main Outcomes

- Competence matrix based on market survey and SWOT analyses of EU and WBC state of the art
- BSc courses developed, implemented and accredited
- New MSc programmes (60-120 ECTS) developed, and accredited
- E-learning courses developed and imple-

mented

- Internship programme
- Staff training in micro learning, practice oriented teaching and gamified learning
- ELEMEND laboratories with state of the art equipment, trained staff
- ELEMEND On-line platform
- ELEMEND Network

Impact

ELEMEND aspires to modernize curricula in WBC to address the needs resulting by the new paradigms of electricity grids and markets.

At the local level, engineering students will be trained to use, analyse and implement relevant technologies and evaluate the performance of such systems taking into account market considerations which place the end user in a decision making position. ELEMEND graduates and students are expected to have increased employability rates and play a leading role in their field.

At the national / regional level, ELEMEND is expected to expedite the growing of new market sectors focusing in energy microgeneration, demand side control, energy services, energy efficiency, new retail energy related business and ICT applications, such as elearning platforms, gamified content and applications, that will play a pivotal role in the public's behavioral modification and awareness.

At the EU level, ELEMEND courses and curricula will pave the way towards modernizing EU engineering curricula to address the current and future challenges of the emerging power grids and markets. TEI of Sterea Ellada, Greece (Coordinator) www.teiste.gr Elektroprivreda BiH d.d., Bosnia & Herzegovina www.elektroprivreda.ba

International Burch University, Bosnia & Herzegovina www.ibu.edu.ba

MANT, Montenegro

www.mant.me

Mediterranean University, Montenegro www.unimediteran.net

Riga Technical University, Latvia

www.rtu.lv/en

Singidunum University, Serbia

www.singidunum.ac.rs Technical College of Applied Sciences Urosevac, Kosovo*

> www.vtsurosevac.com Technical University of Vienna, Austria

www.tuwien.ac.at

University for Bussines and Technology, Kosovo*

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www.uns.ac.rs

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www.prosmart.rs

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