



Erasmus+

Electrical Energy Markets and Engineering Education / ELEMEND

Selection: 2017

KA2 – Cooperation for innovation and the
exchange of good practices – **Capacity Building
in the field of Higher Education**

What is ELEMEND?

- **ELEMEND is an ERASMUS+ project**
- **ELEMEND addresses the need for capacity building in engineering teaching staff and MSc students through:**
 - 1. the modernization of existing BSc engineering curricula at partner country HEIs by introducing new courses or reshaping existing courses in BSc level (6 courses in WBC HEIs)**
 - 2. the introduction of new Master programmes (120 ECTS / 60 ECTS) in Smart grids at WBC universities involved in the project**
 - 3. the introduction of ICT based teaching methods - the development of gamified content and course content for e-learning platforms that will be used in the teaching process**
 - 4. the training and retraining of teaching staff in all partner country HEIs**

ELEMEND addresses the upgrading of the teaching infrastructure placing emphasis on laboratory and project work. Simulation laboratory and smart grid laboratory will also be implemented. ELEMEND promotes the university - enterprise cooperation through the active involvement of companies in the project in the shaping of the course material and content.

What is ELEMEND....?

- **More specifically the ELEMEND objectives are:**
- **1. To increase capacity building for study in smart grids offered both in English and in local languages at BSc and MSc level at 9 WBC HEIs.**
- **2. To develop, accredit and implement new courses in smart grids at the BSc (6 courses) levels at the 8 WBC HEIs involved in the project by the end of the project**
- **3. To develop, accredit and implement new MSc programme (8/12 courses - 60/120 ECTS) in the field of smart grids and electricity market according to Bologna requirements and the new developments in smart grids by the end of the project**
- **4. To introduce new ICT tools as a self-learning tools in participating WBC institutions**
- **5. To increase employability by targeting WBC labor market needs in smart grid field**

ELEMEND Partners?

1. **Technological Education Institution of Sterea Ellada, Greece**
2. **Technical University of Vienna, Austria**
3. **University of Vigo, Spain**
4. **Riga Technical University, Latvia**
5. **International Burch University, Bosnia and Herzegovina**
6. **University of Tuzla, Bosnia and Herzegovina**
7. **University of East Sarajevo, Bosnia and Herzegovina**
8. **Mediterranean University, Montenegro**
9. **University of Novi Sad – UNS, Serbia**
10. **Singidunum University, Serbia**
11. **University of Pristina in Kosovska Mitrovica (UPKM), Kosovo**
12. **Technical college of applied sciences Urosevac, Kosovo**
13. **MANT, Montenegro**
14. **Public electric utility Elektroprivreda of BA, Bosnia and Herzegovina**
15. **Prosmart, Serbia**
16. **University for Business and Technology (UBT), Kosovo**

ELEMENTS, outcomes

- Main outcomes:
 - **6 new courses at the BSC level**
 - **a new MSc programme (60/120 ECTS) in the field of smart grids and electricity markets will be developed**

New courses:

- **1. Electricity Markets (6 ECTS) - MSc**
- **2. Energy Management (6 ECTS) - MSc**
- **3. RES integration in smart grids (7 ECTS) - BSc/MSc**
- **4. Energy storage (6 ECTS) - BSc/MSc**
- **5. Electric vehicles and smart grids (8 ECTS) - MSc**
- **6. Intelligent grid control (8 ECTS) - BSc/MSc**
- **7. Smart grid technologies (7 ECTS) BSc/MSc**
- **8. System modeling (8 ECTS) BSc/MSc**
- **9. Advanced optimization techniques in Energy systems (7 ECTS) MSc**
- **10. Energy efficiency techniques (7 ECTS) MSc**
- **11. IT Management with Enterprise Architecture (7 ECTS) MSc**
- **12. Wireless Communications and Networks (8 ECTS) BSc/MSc**
- **13. Power electronics in smart grids (6 ECTS) BSc**
- **14. Smart electrical networks and systems (6 ECTS) BSc**

ELEMEND'S WPs

- **WP1, Analysis of existing curricula and study programmes in the field of smart grids and electricity markets in EU and Western Balkans HEIs, Preparation**
- **WP2, Development of new courses in the field of smart grids and electricity markets, DEV**
- **WP3, Improving the capacity building at 9 HEIs in WBC , DEV**
- **WP4, Implementation of new updated programmes, DEV**
- **WP5, Project Quality control and monitoring , QC**
- **WP6, Dissemination of the project results and activities, DISS, EXP**
- **WP7, Project management, MNGT**

That is all

Discussion pls.