



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



This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

## Partners and Contacts



Slavka Tzanova  
[slavka@ecad.tu-sofia.bg](mailto:slavka@ecad.tu-sofia.bg)



Filippo Spertino  
[filippo.spertino@polito.it](mailto:filippo.spertino@polito.it)



Christian Thomsen  
[christian.thomsen@tu-berlin.de](mailto:christian.thomsen@tu-berlin.de)



Magali Roue  
[magali.roue@ines-solaire.org](mailto:magali.roue@ines-solaire.org)



Lodoiravsal Choimaa  
[lodoiravsal@num.edu.mn](mailto:lodoiravsal@num.edu.mn)



Uuganbayar Tumurkhuu  
[uuganbayar@must.edu.mn](mailto:uuganbayar@must.edu.mn)



Sarantuya Nadmidtseden  
[utis.mn@gmail.com](mailto:utis.mn@gmail.com)



Usukhbayar Choindon  
[ikhgolomtiinilch@gmail.com](mailto:ikhgolomtiinilch@gmail.com)



## Euro-Mongolian Cooperation for Modernisation of Engineering Education



### Erasmus+ CBHE Project

585336-EPP-1-2017-1-BG-EPPKA2-CBHE-JP

EU-Mong

<http://eu-mong.eu>



EU-Mong project's aim is modernisation and internationalisation of the HE in engineering sciences in Mongolian Universities through innovation of MSc curricula in line with the new development in the area, the labour market demand and the opportunities for virtual mobility through e-learning provided by the ICT.

### Objectives

1. To analyse the educational needs in electrical engineering, communications and energy efficiency and to define the necessary knowledge, skills and competencies of engineers in the sector in terms of learning outcomes.
2. To design syllabi and course content and assessment for compulsory and elective courses in electrical engineering, communications and energy efficiency to meet the user needs.
3. To develop new e-learning courses with modular structure for the innovated curricula and to establish a platform and procedures for knowledge sharing inside Mongolian and European academy and students.
4. To perform a pilot test and to start the implementation of the joint modules/courses delivery during the last project year.

### Courses

- Research methodology in engineering
- Patent study
- Modelling for engineering students
- PLC and microprocessor technique
- Control and data acquisition system
- Computer based control systems
- Theory of digital automation
- Digital filter design
- Automatic control for industrial process
- Digital electronic design
- Industrial robots and manipulators
- Advanced course on power electronics
- Instrumentation, control and measurement
- CMOS VLSI design
- Solid state electronics
- Control systems
- Image processing and pattern recognition
- 3D display
- Artificial intelligence and machine learning
- Safety engineering
- Use new resource of energy in power supply
- Techniques to determine losses of electric supply system
- Specific course of electrical machinery
- Calculation of the electrical energy supply
- Electric energy quality and application mode
- Nanotechnology, material science
- Specific course of electric supply

