# RETHINKING HIGHER EDUCATION FOR ARCHITECTS AND URBAN PLANNERS WITH THE COLLABORATION OF THE EUROPEAN UNION PROGRAMME TEMPUS

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#### ABSTRACT

The objectives of the RETHINKe project are to develop a joint degree course whereby the synergies of accumulated knowledge among the partners can be shared. As such, the RETHINK project is an idea for new curricula, a plan for connecting Higher Education Institutions to the world of business/industry, and a wish for a better environment.

The project intends to contribute to establishing connections, strengthening educational/cultural/business bridges and to construct a common language on the sphere of Higher Education and Society- under the theme of **ENVIRONMENT** (a regional priority).

### THE INCORPORATION OF A STRONG ENVIRONMENTAL EDUCATION COMPONENT IN THE CURRICULA OF THE SCHOOLS OF ARCHITECTURE & URBAN PLANNING WITHIN THE RETHINKE PARTNERSHIP

in addition, it intends to integrate and make use of e-Learning systems, development of Joint and Double Degrees, mutual knowledge exchange between EU universities and universities from the partner countries are going to contribute to the international cooperation and to a permanent modernisation process of Higher Educational System.

Tempus is a European Union programme designed to help the process of higher education reform in Partner Countries. It supports projects between the higher education sector in the EU and its 27 partner countries to facilitate university modernisation, mutual learning between regions and peoples and understanding between cultures. The Programme promotes voluntary convergence with EU developments in the field of higher education deriving from the Lisbon agenda and the Bologna process.



Tempus partner regions are:

- Western Balkans
- Eastern Europe and Central Asia
- North Africa and the Middle East

The first Tempus programme lasted from 1990 until 1994. The programme was consolidated and renewed for the 1994-1998 and 1998-2000 periods and, again, for the 2000-2006 period. It has become customary to refer to these periods of the programme as "Tempus I", "Tempus II", "Tempus II bis" and "Tempus III". Currently ongoing is Tempus IV phase the implementation of which is planned for 2007-2013 period.

Tempus

Specific programme objectives:

- To promote the reform and modernisation of higher education in the partner countries;
- To enhance the quality and relevance of higher education in the partner countries;
- To build up the capacity of higher education institutions in the partner countries and the EU, in particular their capacity for international cooperation and for a permanent modernisation process, and to assist them in opening themselves up to the society at large, the world of work and the wider world;
- To overcome the fragmentation of higher education between countries;
- To enhance inter-disciplinarity and trans-disciplinarity;
- To enhance the employability of university graduates;
- To make the European Higher Education Area more visible and attractive in the world;
- To foster the reciprocal development of human resources;
- To enhance mutual understanding between peoples and cultures of the EU and of the partner countries.

The TEMPUS programme is very coveted by European universities and in 2013 from the 930 proposals only 160 were selected for funding, including the RETHINK project. With a budget of 1.3 million euros the RETHINK project will allow the consortium – coordinated by FAUL – to reinvent and to redefine academic curricula within the partner universities.



Partners of the RETHINK project:

P1: Coordination Institution - Faculty of Architecture, University of Lisbon (Portugal) - FAUL

P2: Polytechnic Institute of Leiria (Portugal) - IPL

P3: Business Association of Entrepreneurs (Portugal) – NERSANT

P4: University of A Coruña (Spain) - UDC

P5: Technical University of Delft (Netherlands) - TUD

P6: University of Paderborn (Germany) – UPB

P7: Kaufmann Unternehmensberatung (Germany) - KUB

P8: Gavar State University (Armenia) - GSU

P9: State Engineering University of Armenia (Armenia) - SEUA

P10: Azerbaijan University of Architecture and Construction (Azerbaijan) - AzUAC

P11: Baku Sate University (Azerbaijan) - BSU

P12: Ministry of Education of Azerbaijan (Azerbaijan) - MEA

P13: Brest State Technical University (Belarus) - BrSTU

P14: Polotsk State University (Belarus) - PSU

P15: Ministry of Education of Republic Belarus (Belarus) - MERB

P16: Georgian Technical University (Georgia) - GTU

P17: Tbilisi State University (Georgia) - TSU

P18: Aleco Balti Russo State University (Moldova) - USARB

P19: Technical University of Moldova (Moldova) - TUM

P20: Donbass National Academy of Civil Engineering and Architecture (Ukraine) - DNACEA

P21: Donetsk National Technical University (Ukraine) - DNTU

P22: Ministry Education and Science, Youth and Sports of Ukraine (Ukraine) – MESYSU.

RETHINK – Reform of Education THru INternational Knowledge exchange – this project intends to link the United Nations strategy of Education for Sustainable Development, the "Europe 2020" strategy, and the Bologna Process with the TEMPUS' programme objectives for Modernisation of Higher Education Institutions (HEI) in the EU's neighbouring area. In line with the strategies mentioned above and from the Regional Priorities list - for the Eastern Neighbouring Area (ENPI East) - the ENVIRONMENT was the selected priority for the RETHINK project; however, the underlying theme of the RETHINK project is new, inclusive whereby ENVIRONMENT and SUSTAINABILITY are intertwined with BUSINESS and EDUCATION. In fact, the RETHINK project encompasses these two themes, and also integrates the concept of the knowledge triangle "education/research/innovation" from an environmentally sustainable perspective. The project RETHINK intends to rethink the curricula of the partner HEIs -in the priority area of ENVIRONMENT- through the development of innovative Joint (Masters and PhD) Degrees in the fields of:

- 1 Architecture, Urban planning and
- 2 Climate Engineering/Environmental Sciences.

These degrees will encompass a "CO<sub>2</sub>RETHINK" component and an "Innovation/Entrepreneurship" component within a transdisciplinary framework. By refocusing the role of planning regarding CO<sub>2</sub> emissions and CO<sub>2</sub> management, RETHINK's new curricula aims at contributing to global warming mitigation and to the reduction of Green House Gases.

For the integration of these Double Master and PhD Degrees to the educational system of every partner the RETHINK project foresees following activities:

- 1- Analysis SWOT of Curricula of the Partner Countries' universities;
- 2- Development of new teaching materials on English for newly developed Double (Joint) Degrees.
- 3- Courses of Technical English for the teachers and students of the Partner Countries
- 4- Creation of the e-learning classes for the integration of distant education between the European Union universities and universities of the Partner Countries;
- 5- Partner Countries' student mobilities to European Union universities for Innovation/Entrepreneurship trainings;
- 6- Partner Countries' teachers mobility to European Union universities for

training methods' upgrade;

7- Integration of Quality Assurance System's standarts to the Higher Educational System of the Partner Countries universities.

The Faculty of Urbanism and Architecture of the Technical University of Moldova is participating in the RETHINK project in the subjects of "Architecture, Urban Planning" and "Climate Engineering/Environmental Sciences" with the main objective of Double Master Degree development together with Faculty of Architecture of the University of Lisbon (Portugal), with Polytechnic Institute of Leiria (Portugal), with the University of Coruña (Spain), and with Technical University of Delft (Netherlands).

In conclusion, the project RETHINKe due to its partner composition, to the pertinence of its theme, to the synergies which will be provoked, and the respect for the regional priorities will have a strong and lasting impact on the whole partnership. For it is our belief that it is absolutely necessary to interconnect the interests of business with the interests of the environment. In fact, without real incentives the required changes toward environmental sustainability will take much longer to come about.

As such, the curricula reform that is envisioned in the RETHINKe project will address the needs and aspirations of our societies for a corps or a body of experts that will be able to manage the apparent conflicting interests of environmental sustainability and business.

Local Coordinator of the RETHINK project at the Faculty of Urbanism and Architecture of the Technical University of Moldova is Prof. Valeriu Lungu. As Prof. Valeriu Lungu is responsible for the project implementation at this instituion, he has to be contacted for all organisational, promotional, and mobilities' activities in the frame of the RETHINK project.

More information is available on the project's website: <u>http://rethink.fa.ulisboa.pt/</u>.

#### **RETHINK:**

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