


2019 Calls for Proposals Projects/ Проекти конкурсу 2019 р.

	<p><b>Boosting the role of HEIs in the industrial transformation towards the Industry 4.0 paradigm in Georgia and Ukraine</b></p> <p><b>609939-EPP-1-2019-1-BE-EPPKA2-CBHE-JP</b></p>
<p><i>Project acronym:</i> HEIn4</p>	
<p><i>Regional Multi-Country Joint Project</i></p>	<p><i>Priority:</i> University-enterprise cooperation, entrepreneurship and employability of graduates</p>
<p><i>Project duration:</i> 15 January 2020 – 14 January 2023</p>	
<p><i>EU funding instrument:</i> European Neighbourhood Instrument (Erasmus+: KA2 CBHE)</p>	
<p><i>Erasmus+ (CBHE) grant amount:</i> 973 240,00 €</p>	
<p><i>Target groups:</i> universities, industry</p>	
<p><i>Grant holder:</i> Katholieke Universiteit Leuven, Belgium</p>	<p><i>Coordinator and General Manager:</i> Geert DE LEPELEER, Head of Internationalisation, Faculty of Engineering Technology, <i>Contacts:</i> tel.: +32 9 331 65 66 e-mail: geert.delepeleer@kuleuven.be</p>
<p><i>Partnership:</i></p> <ul style="list-style-type: none"> <li>▪ Katholieke Universiteit Leuven, Belgium</li> <li>▪ Instituto Politécnico do Porto, Portugal</li> <li>▪ Kungliga Tekniska Högskolan, Sweden</li> <li>▪ Volvo Cars Gent, Belgium</li> <li>▪ Akaki Tsereteli State University, Georgia</li> <li>▪ Batumi Shota Rustaveli State University, Georgia</li> <li>▪ Business and Technology University, Georgia</li> <li>▪ Georgia's Innovation and Technology Agency, Georgia</li> </ul>	<ul style="list-style-type: none"> <li>▪ Donetsk National Technical University, <u>Ukraine</u></li> <li>▪ Lutsk National Technical University, <u>Ukraine</u></li> <li>▪ National Metallurgical Academy of Ukraine, <u>Ukraine</u></li> <li>▪ Odessa I.I.Mechnikov National University, <u>Ukraine</u></li> <li>▪ Daughter Enterprise “Festo”, <u>Ukraine</u></li> </ul>
<p><i>Project goals and objectives:</i></p> <p>Wider objective is to reinforce the role of HEIs in assisting industrial transformation in Georgia and Ukraine under Industry 4.0 paradigm.</p> <p><i>Specific project objectives are:</i></p> <ul style="list-style-type: none"> <li>• To reinforce capacities in HEIs (human resource, material base, institutional units) in response to emerging Industry 4.0 paradigm;</li> <li>• To reinforce collaboration of HEIs with industry by delivery tailored courses and consultancy services for companies (large and SME) towards exploring the opportunities of new Industrial Revolution through reconfiguration of business models;</li> <li>• To set new taught module "Industry 4.0 Business Management" for the MSc students for enhancing graduates' employability under emerging market conditions;</li> <li>• To develop recommendations for updating the Engineering curriculum towards competencies</li> </ul>	



required for operating the factories of the future.

**Activities:**

- Study of teaching methodologies and curriculum of EU HEIs in relation to Industry 4.0;
- Development of methodology concept and content of curriculum;
- Study of capacity building practices for collaboration with industry;
- Development of Case Studies;
- Development of short courses for industry;
- Development of Industry 4.0 Business Management module for Master students;
- Development of recommendations to update Engineering curriculum;
- Setting Virtual Factory Learning Labs;
- Training of the staff for Virtual Factory Learning Labs;
- Development of content and capacity for consultancy services;
- Implementation of internal and external quality control measures;
- Dissemination of project activities and results on national and international levels;
- Piloting and adjustment of the project results, development of sustainability measures;
- Coordination and operational management of the project.

**Expected results:**

- I. Human resource developed in Georgian and Ukrainian HEIs in response to emerging Industry 4.0 paradigm:
  - academics familiar with the advanced European teaching methodologies and curriculum in relationship to Industry 4.0 – 36 in Georgia and 48 in Ukraine;
  - HEI administrators acquainted with the European capacity building practices for collaboration with industry – 18 in Georgia and 24 in Ukraine;
  - staff members (full and part-time) of Virtual Factory Learning Labs – 18 in Georgia and 24 in Ukraine.
- II. Concept for methodology and content of curriculum in response to Industry 4.0 (Higher Education 4.0 Concept);
- III. Case Studies representing the EU HEIs experience and practices to wider audience;
- IV. Recommendations for updating Engineering curriculum delivering the insights on the new transdisciplinary competencies required for operating the factories of the future and how this can be addressed in higher engineering education;
- V. Taught module "Industry 4.0 Business Management" (5 ECTS credits) developed and embodied into existing Master programs;
- VI. Short courses for upgrading industrial staff (3 ECTS) offered by Georgian and Ukrainian HEI;
- VII. Virtual Factory Learning Labs set in each Georgian and Ukrainian HEI and complemented with their international network as a focal point of collaboration in the Industry 4.0 context.
- VIII. Permanent colloquium for retraining of teaching staff regularly held at each HEI;
- IX. Consultancy services for the industrial companies available at each Virtual Factory Learning Lab;
- X. Stakeholders' round tables led by the Virtual Factory Learning Labs and integrated into HEIs practice;



XI. Business Sustainability Plans for Virtual Factory Learning Lab at each HEI. XII. Project's website, paper-based and on-line publications disseminating the best practices gained and promoting the project to other HEIs and industry in Georgia and Ukraine.	
<b>Project coordinator in Ukraine</b>	
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