

## ERASMUS+ PARTNER SEARCH FORM

(to be completed in English)

<b>General information</b>	
Partner-country	Uzbekistan, Kashkadarya region, Karshi city
Name of university: website:	<b>Karshi engineering-economic institute, KEEL, website:</b> <a href="http://www.qmii.uz">www.qmii.uz</a>
Participant Identification Code (PIC)	<b>PIC: 925175040</b>
Brief description of university, faculty, department, number of students	<p>Karshi Engineering-Economics Institute was established by the Cabinet of Ministers of the Republic of Uzbekistan in 1995. Currently, the institute has 7 faculties (Economics, Industrial technology, Geology and Mining, Oil and gas, Energy, Engineering-technical), 27 education departments, the department of science and scientific-pedagogical staff, the center of "Professional Development", the center of "Gifted Students" and 2 academic lyceums. Today, 7557 bachelors are trained in 30 specialties, 78 masters in 8 specialties in the institute. There are 306 teachers, from which 15 are doctors and professors, 125 are associate professors and candidates of science. International relations are well organized and "The department of international relations" is in act. Currently, scientists of the institute are working with more than 20 foreign countries' (such as Germany, China, Italy, Southern Korea, Netherlands, Poland, USA, Israel, Sweden, Spain, Russia, Ukraine, Belarus and Kazakhstan) higher educational institutions based on mutual scientific-applied co-operative contracts. Our students are currently studying at the foreign higher educational institutions of the countries such as USA, Italy, England, Belgium, and Germany. More than 40 of our teaching staff members have improved their qualifications in foreign universities.</p>
Relevant information on previous or on-going international cooperation	<ol style="list-style-type: none"> <li>1. Tempus program. Project: PROMENG - Practice Oriented Master Programs in Engineering in RU, UA and UZ. 2010 November-2013 November;</li> <li>2. Tempus program. Project: SWAN - Towards Sustainable Water Resources Management in Central Asia. 2010 January-2012 December;</li> <li>3. Tempus program. Project: PERSEUS - Plan to Establish Research-Science-Enterprise oriented Universities for the benefit of Society. 2010-2013.</li> <li>4. Erasmus Mundus. Action 2. Project: MANECA - Mobility Academic Network between EU and Central Asia. 2009-2013;</li> <li>5. TEMPUS program, MATCHES (Towards the modernization of higher education in Uzbekistan) project. 2013-2016.</li> </ol>
Contacts of responsible person: name, title (Mr, Mrs, Dr, Prof), position, telephone, fax, e-mails	<p>Mr. Alibek Eshev            Head of international relations department and Erasmus coordinator of KEEL. Tel: +998752210417, mob: +998914568805.            e-mail: <a href="mailto:alibek_8805@mail.ru">alibek_8805@mail.ru</a> <a href="mailto:alibek_8805@yahoo.com">alibek_8805@yahoo.com</a>.</p>
<b>Project description</b>	
Type of the project:	Joint Project

Joint Project (JP) or Structural Measure (SM)	
Area of project: category A B , C or D	Project category A, B
category A Curriculum Development project: Subject area/academic discipline if applicable	Renewable energy sources, hydraulic engineering, water resources management, exploitation of hydraulic structures and pumping stations.
Relevance to national or regional priorities	Regional priority
Brief need analysis	<p>There is a strong need to update and improve the quality of the curricula and to develop new modules and directions of education (B.S. and M.S.) in the field of hydraulic engineering and renewable energy sources, in accordance with the best programs of the leading educational institutions. These developments allow organizing the learning process and evaluating the results of studies on ECTS (European Credit Transfer and Accumulation System) technology. In addition, these newly updated training programs takes into account the needs of sustainable development of society, modern environmental requirements and serve to train specialists - designers of micro hydro power plants in hydraulic structures and energy efficient rural houses, which are the most in demand.</p>
Objectives and activities	<p>According to the European Community Action Plan, which reduces greenhouse gas emissions in the European Union, the share of renewable energy in total energy consumption is increasing. Our department is working on projects to use the energy of water sources to generate electricity mainly by micro-hydropower plant installations. In the near future, the staff of the department must solve the following tasks:</p> <ul style="list-style-type: none"> <li>• Optimal management of micro-hydropower plants combined on the basis of renewable energy sources;</li> <li>• Determination of the best options for hydraulic energy storage;</li> <li>• Optimal use of free water flow without using dams and pipelines.</li> </ul> <p>In our department, more than 10 patents have been obtained for utility models for saving energy and generating electricity using micro hydro power plant installed in hydraulic structures and prepared monographs and textbooks on this field.</p>
Expected results	<ol style="list-style-type: none"> <li>1) Modernization of the curriculum, the development of new modules of two levels of education (B.S. and M.S.) and the evaluation of the results of studies based on the competencies of ECTS technology in the field of hydraulic engineering and renewable energy sources in accordance with the best practices of the EU.</li> <li>2) Developing and testing a new direction of bachelor's training "Renewable energy sources and hydroelectric power stations" using the ECTS technology.</li> <li>3) Creating a network of centers "Green Energy" in the universities of partner countries, in which the mobility of students, undergraduates and doctoral students is organized, as well as the</li> </ol>

	<p>exchange of experiences on professional activities.</p> <p>4) Developing and testing a new interdisciplinary model of engineering and practical training of engineers to raise awareness and respond to changes in the environment.</p> <p>5) Creating a platform for interaction between education, science and industry with the aim of forming a modern professional competence of a specialist in accordance with the needs of a sustainable society in the field of hydraulic engineering and renewable energy sources.</p>
<p>Target groups and stakeholders (enterprises, student organizations, for SM – Ministry of Higher and Secondary Specialized Education of Uzbekistan)</p>	<ul style="list-style-type: none"> <li>- Ministry of higher and secondary-specialized education of the Republic of Uzbekistan;</li> <li>- Ministry of agriculture and water industry of the Republic of Uzbekistan;</li> <li>- Administration of Amu - Kashkadarya Basin Irrigation System;</li> <li>- Administration of “Karshi main channel” Irrigation System</li> <li>- Kashkadarya regional Administration of pumping stations.</li> </ul>
<p>If possible information about other HEIs in Uzbekistan to be involved in project</p>	<ul style="list-style-type: none"> <li>- Tashkent Institute of irrigation and melioration;</li> <li>- “ The research institution of Irrigation and water problems” of Tashkent Institute of irrigation and melioration;</li> <li>- Namangan engineering-pedagogical institute.</li> <li>- Andijan Institute of agriculture.</li> </ul>