

NEWSLETTER

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DEVELOPMENT OF A MASTER PROGRAMME IN THE MANAGEMENT OF INDUSTRIAL
ENTREPRENEURSHIP FOR TRANSITION COUNTRIES

610198-EPP-1-2019-1-ES-EPPKA2-CBHE-JP

Partners :



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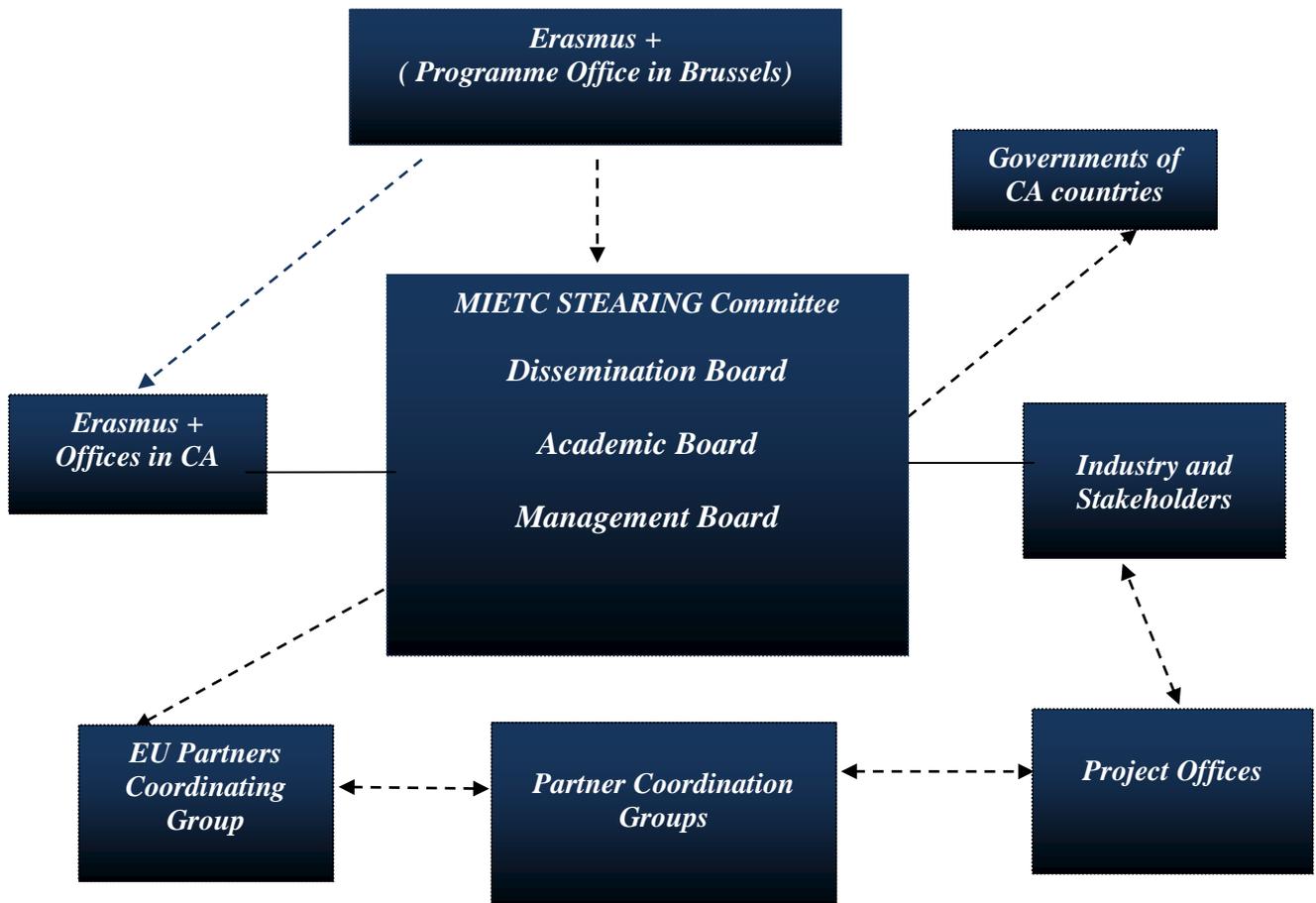


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MIETC Communication and Coordination

MIETC outcomes will fill the gaps in relevant knowledge and skills of local HEIs, students and business in Industrial entrepreneurship and its ability to be constantly linked to the market.

The project's aim is to strengthen academic capacity of HEIs in Industrial Entrepreneurships in Central Asia by developing and implementing an interdisciplinary Master program and to establish sustainable cooperation between partner's HEI and the labor market.



QUALITY PLAN

The Quality Assurance (QA) Plan has been presented by USC.

A detailed Quality Assurance Plan has been developed, discussed and opened for feedback of all the Partners. It defines a Quality Assurance Framework for each task and WP (tangible outputs, quantitative and qualitative indicators and control actions/mechanisms). The first periodic report (covering M1 to M12) has been completed and the second one is in preparation.



The QA process will be horizontal to the project duration. The Partnership conducts continuous internal QA monitoring to check the conformity of the project results with the defined standards and indicators. The main actor involved in internal QA is the Management Board, composed by one representative of each Partner organization and chaired by the Project Coordinator, constituting the highest decision-making body of the project. MB members act as dedicated Quality Assurance Managers. The QAM have a proactive role in overseeing the quality of the project implementation, eliminating project defects, helping balance conflicting priorities, making amendments where necessary and providing insight on long-term strategies.

The remaining management bodies (*Academic Board, Dissemination Board, Entrepreneur Centre Managers*) are made up of specialists with the relevant knowledge in the respective issues attributed to them, thus guaranteeing that the right expertise is applied to support the achievement of the quality standards.

The QAP defines a quality framework for each task and WP: *tangible outputs, quantitative indicators, qualitative indicators and quality control actions/mechanisms*.

All the partners support this work by providing regular information and taking the corrective actions necessary.

The External QA will complement the internal actions taken by the Consortium. The selected candidate will provide a methodology and will elaborate two reports based on the outcomes of the evaluation exercise, identifying shortfalls, methods to address them and potential process redesign and project implementation changes.

HOW COVID-19 AFFECTED MIETC PROJECT

Since the end of 2019 the COVID-19 has spread worldwide, with health and economic consequences. The MIETC Project has also been affected by the coronavirus pandemic, especially the face-to-face activities. Another aspect is COVID 19 which has spread worldwide, with health consequences and affected by the coronavirus

pandemic, especially the face-to-face activities. Therefore, the Programme and strategy updated in order to avoid any risk in the Project implementation.

The COVID 19 crisis generally slowed down work & internal procedures. It also affected the mobilities planned. Some events were adapted to an online format, namely the KoM & the stakeholder workshops. The 2nd management meeting & the Curriculum presentation to stakeholders might also be conducted online. Conversely, the trainings were postponed as the Consortium agreed that carrying them online would be detrimental to its quality, its exploitation, its impact & its monitoring.

The first contingency plan foresaw resuming face-to-face activities in the Spring of 2021. However, the new variants/waves & the continued travel restrictions, prevented in-person activities from being organized safely. Therefore, they have been further postponed until 2022.



Equipment

The purchase of the Equipment was completed by all CA HEIs on June 2021.

Some changes were made to the Equipment to be purchased as compared to the proposal. These modifications were included in the budget amendment that was approved on July 2020.

The list of hardware to be purchased was adapted to the needs of each partner. All CA HEIs purchased videoconferencing equipment and printers/scanners. P5, P9 and P11 also purchased projectors while Turkmen partners (P7, P8) purchased desktop computers and P10 acquired a TV set. This hardware Equipment will be used for teaching purposes and will technically equip the premises intended for educational activities, conducting Master programme classes, seminars and webinars. It will therefore be used once the pilot program is launched, it will increase access to the program and enable blended learning through the recording and live-streaming of classes and lectures.

This Equipment will also aid with the operational functioning of the classes (i.e. printing, scanning and copying class materials and assignments, enhancing interaction with students, etc.). The direct beneficiaries will be the teachers and students of the Master program.

The software purchased by P5 (as leader of the English training program) consisted in a licence for a Learning Management System (OLS). It has provided added value through a range of user-friendly, automated monitoring and management tools.



It also allows for a data-driven learning environment and provides actionable information to enable teachers and administrators to improve learning outcomes. It also made it possible to extend the duration of the English training. OLS platform (Online Language Services) provides 24/7 access. Each of the teachers enrolled a personal access account with unlimited use of the resources of the educational platform. It allows for blended teaching and it includes more than 120 textbooks and more than 5,000 academic hours. All training materials are structured and divided into levels according to the Common European Framework of Reference for Languages (CEFR). The direct beneficiaries are CA teachers (and subsequently the students) of the Master program.

Hardware Equipment has been installed in study rooms and classrooms (with visible Erasmus + stickers) and will be used in lectures, online and offline trainings, seminars in the frame of the project.

Market Needs Analysis

In order to avoid implementing a program that is misaligned with student needs & market demand, a detailed competence analysis has been carried out using a data-driven approach. It helped define the skills with greatest demand for the target groups and the trends that affect the industrial skills required for sustainable development.



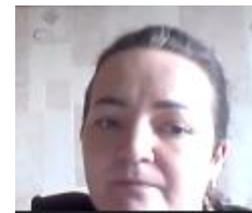
This analysis has provided insight into how the program should be designed based on current & future demand, in addition to how it should be positioned from a creative standpoint within the larger education market. It also shined a light on how the program should be delivered considering growing digitalization trends and how information is consumed by students. Students and teachers' main backgrounds (engineering or social sciences) will be taken into account to adjust master content to their competences.



The project seeks to improve the employability of students and the lack of market-oriented education by providing students with skills and competences more aligned to the needs of their labour markets.

In the same manner, the project will tackle ‘brain drain’ and loss of human capital by contributing to avoid student migration to other countries due to the lack of high-quality programmes which are not connected to the labour market.

The market needs analysis consists of the one side of quantitative analysis based on the statistical data, constructing labour market and industrial indicators to analyse market characteristics from supply and demand side. At the macroeconomic level the analysis will comprise (a) the national and regional perspectives and urban data.





Main results:

Good performance in the main aggregate indicators for labour market, however:

- Lower wages associated to lower skills and lower productivity in Turkmenistan than in Kazakhstan and EU28,
- Increase of skills, average wages and productivity in recent years,
- Important regional differences,
- We take into account other relevant information such as environmental, urban/rural information that can be important for future skills,
- DELPHI analysis will allow to identify the most needed skills to increase market's qualifications and productivity,
- STAKEHOLDERS are key for the assessment of the market needs and the project development.

National Contexts

The project remains relevant to the national contexts addressing national strategies & policy development.

In TKM, the project reflects the national strategic priorities that will provide greater government support (i.e. Development Strategy of Turkmen Education). In this regard, training of specialists in industrial management is an important and urgent task for Turkmenistan.

The Strategic Development Plan of the Republic of Kazakhstan until 2025, is aimed to accelerate high-quality economic growth, to raise the standard of living through the development of entrepreneurship, and to improve of regional policy and the quality of education. The project also addresses the regional priorities. The level of development of small and medium-sized businesses in the East Kazakhstan region, where P5 is located, is 1.7 times lower than the national average (according to the Statistics Committee of the Ministry of National Economy). The project will build the capacity of local HEIs, students and increase cooperation with the private sector.

In TJ, industrialization is the fourth national and strategic objective of the country. In addition, entrepreneurship has been identified as a key factor for the sustainable development of Tajikistan and this issue has a wide coverage in the National strategy for development of the Republic of Tajikistan until 2030. The Master program will be key catalyst for ensuring the aforementioned goals providing human capital and knowledge.



Analysis of international Master programs

One of the aims of MIETC is to create the curriculum of a Master programme in Industrial Entrepreneurship taking into account the experience of the local Higher Education Institutions (HEIs) and firms and the knowledge of the European Union (EU) HEIs using a co-design strategy.

In the preparation phase of the curriculum, its development will be based on a detailed market needs analysis, provided by Task 2.3. The conclusions of this analysis showed the existence of entrepreneurial skill shortages on the labour markets of the countries to which the Central Asian HEIs belong.

Task 2.4 aimed to survey the international supply of Master Programmes that currently provide these type of entrepreneurial skills all around the world. In order to structure this task, the following elements were taken as points of departure:

- The basic structure for the Programme presented in the MIETC proposal, consisting of twelve subjects distributed in four thematic blocks:
 - o Block 1: Data Research.
 - o Block 2: Management.
 - o Block 3: Business & Entrepreneurship.
 - o Block 4: Engineering.
- Two existing Master programmes, well known by the European members of the consortium, to be used as basic benchmarks:
 - o The MSc in Management (Operations pathway) offered by the Birmingham Business School.
 - o The MSc in Entrepreneurship and Innovation Management offered by the KTH Royal Institute of Technology.
- A selection of top American and European Master programmes focused on building entrepreneurial skills.



Involvement of people with fewer opportunities

The project intends to pay special attention to the issues of diversity and inclusion of socio-economically disadvantaged participants. The Master program will incorporate gender and minority inclusiveness in some of its subjects. The use of modern teaching methodologies such as blended learning, that combine different modes of learning (offline and online) will favour the participation of people with fewer opportunities, improving access and offering a possibility to reduce costs (i.e. commuting).

The materials of the Master will be produced in plain and easy-to-understand language (in three different languages for each partner), in an open and unrestricted access manner with the goal to reach and engage the widest audience of participants possible (especially those with fewer opportunities).

At country level, the CA Partners are considering targeted measures to involve people with fewer opportunities, for instance by providing financial support (scholarships) or establishing quotas in Kazakhstan, special attention will be paid to students from rural areas and lower socio-economic backgrounds, trying to ensure that they are adequately supported.

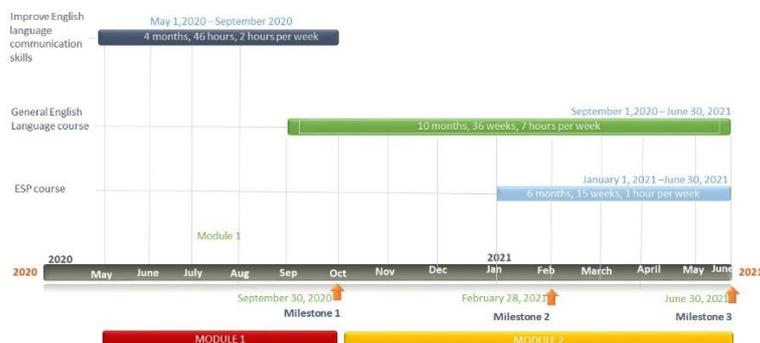
Tajik partners will particularly address cultural factors that affect inclusiveness by taking advantage and implementing the Presidential quotas that are being introduced since 2006 in the HE system to provide free tuition for women and people from disadvantaged families and those residing in remote mountain areas.

Turkmenistan adheres to the UN Sustainable Development Goals (SDGs) until 2030: Goal 4: Provide inclusive and equitable quality education and promote lifelong learning for all. With this purpose, practices are being introduced in the context of supporting people with disabilities or abilities (DSS - Disability Support Services). The Laws of Turkmenistan related to social policy provide for issues that allow people with disabilities to take advantage of all opportunities and carry out their activities on an equal basis with others.



English Language Training

The updated calendar for the English training is as follows:



The training activities of the course have been developed with the objective of adapting the learning process to the different abilities, needs and interests of the trainees. These activities will include (a) different practical activities distributed throughout the course, (b) weekly events (virtual face-to-face sessions, discussion forums, tests, peer assessment, reading of the complementary material, videos tutorials, presentations and webinars) and (c) a final research presentation where the knowledge acquired will be put into practice. These will be complemented with personal study and tutorship. The final qualification will consist of a final online test and a research presentation and the continuous evaluation of the progress and activities carried out throughout the 10 weeks of the course.

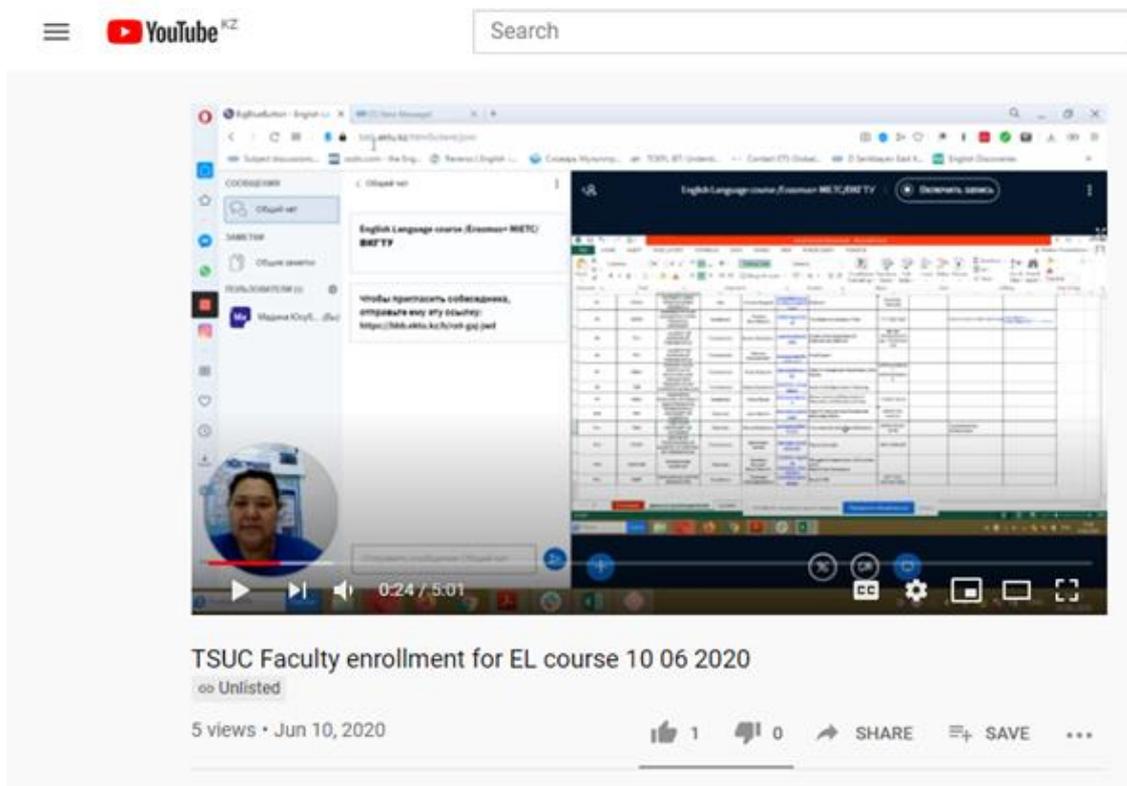
Trainees will be able to do by the end of the ESP course:

Read and understand a range of authentic academic texts in Management, Marketing, Finance and Data Analysis Understand lectures and presentations Prepare and give different types academic presentations, Write a variety of essays and other assignments, Use academic vocabulary.

By the end of the English language training trainees will have a minimum B2 level of English to use English as the language of instruction.

The second training module also includes an academic English course in the field of professional communication. The aim of the course is to teach teachers of management, marketing, finance and data analysis to use professional English for academic purposes. The course will be implemented using a tool on Edusoft, OpenEdx platforms and will last 10 weeks. The course assignments are designed to adapt the learning process to the different abilities, needs and interests of the learners. These assignments include (a) various hands-on activities, (b) weekly activities (virtual face-to-face meetings, discussion forums, quizzes, assessments, reading supplementary materials, video tutorials,

presentations and webinars) and (c) and a final project when working on which teachers will apply the knowledge gained in practice to create texts of lecture courses. The course assessment includes a final online test and project presentations.



TARGET AUDIENCE REACHED

Due to an unprecedented pandemic situation, visits to Central Asia partner-universities were replaced by the online Info-days, in which useful comments about skills mismatches on the labour market from KEUK partner, stakeholders and technoparks has been received. For example, Business-Pro technoparks confirmed that recent graduates lack skills required by employer.

15 experts from different labour segments (HEIs, policy makers and firms) for each region/country - East Kazakhstan region, Karaganda region, Tajikistan (Dushanbe) and Turkmenistan (Ashkhabad) - were involved for the Delphi analysis and 2 rounds of survey



were conducted to identify the skill requirements of the labour markets in each of the Central Asia countries.

After conducting the first round of the survey in Kazakhstan and Tajikistan, the opinions and suggestions of experts were added to the second round and we send back the questionnaire to the whole list of participants, so experts could adjust their answers. Since there are a lot of difficulties for engaging Turkmenistan experts due to COVID-19, we were able to do just one round.

Students and teachers were invited to participate in competence analysis, i.e. to shine light onto not only what is in demand from a skills perspective, but also how it should be delivered, considering growing digitalization trends and how information is consumed by students.

Public Authorities will be involved in supporting the accreditation process of the Master (i.e. Ministries of Higher Education) and will be invited to attend the workshops that will be held in CA. Partners are targeting authorities at local and national level, for example the Business and Innovative Industrial Development Administration of East Kazakhstan, the Education Administration of East Kazakhstan region, the Chamber of Commerce and Industry of the Republic of Tajikistan. Additionally, in Turkmenistan, all projects within the framework of international organizations are carried out with the agreement and permission of the Cabinet of Ministers of Turkmenistan. The Ministry of Finance and Economy of Turkmenistan is the national coordinator of international projects carried out in Turkmenistan and has a supervisory role.

Target Audience

Administrative/policy makers

Cabinet of Ministries of TKM, Ministry of Education of TKM, Ministry of Education of KAZ, Ministry of Education of TAJ.

Public Servants/society

Erasmus + Office, Servants in the structures of state and private sector like related ministries, agencies, organisations. Public experience and knowledge sharing among the wide range of audience.

HEIs and Research structures/Techno centers

Ministry of Education of Turkmenistan, Oguz Han Engineering and Technology University of Turkmenistan, Entrepreneurs and industrial companies. Industry/ Private and public business environment, The Union of Industrialists and Entrepreneurs of Turkmenistan, Institute of Chemistry of AST, NGO «Tebigi Kuvvat», Closed TKM Company «ARA»