Application Form

Selection: 2020

KA2 – Cooperation for innovation and the exchange of good practices – **Capacity Building in the field of Higher Education**

Call for Proposals 2020 - EAC/A02/2019

Transforming Architectural and Civil Engineering Education towards a Sustainable Model / TACEESM

DETAILED DESCRIPTION OF THE PROJECT

JOINT PROJECTS

(To be attached to the e-Form)

Please note that, in accordance with Article 193 of the "Financial Regulation Applicable to the General Budget of the Union", grants cannot be awarded retroactively. This means that activities covered by the grant can only be implemented as from the date on which the last party has signed the grant agreement.

As it might not in all cases be possible to sign the grant agreement for a selected proposal before the start date indicated in the application, the project planning should ideally cater for this possibility.

If your work plan does not allow for the necessary flexibility to adapt to such an event and/or if you have scheduled activities that must start on a particular date in the very early phase of the proposed action, you should provide a justification. The justification should explain the reasons why the activities in question cannot be postponed if the contract is not signed by 15 November 2020 or 15 January 2021) and need to take place on the foreseen date.

If this is the case for your project, you should specify below the following **(max 3000 characters)**:

- **the date on which the consortium would need to start its project** activities covered by the grant. Only from this date on costs covered by the EU grant can be incurred;
- **a detailed justification**. The justification should explain why the activities foreseen (and their corresponding costs) cannot be delayed and why such a delay would jeopardise the project's implementation.

Start date of project activity(ies): Activity(ies) and Justification:

PART D – Relevance of the Project

D.1 Why does the consortium undertake this project?

- *Which problem(s) will the project address in the participating Partner Countries? Why are these problems pressing?*
- *Please explain the result of the need analysis carried out for each Partner Country and for each Partner institution and provide qualitative and quantitative evidence for your results. Please refer also to studies carried out and feasibility analyses undertaken. In particular explain for each institution, why the support from the CBHE action is required. (limit 10.000 characters)*

The effectivity of architectural and civil engineering education is a contested issue which plays a key role in EU growth and development strategies such as Modernisation Agenda for Higher Education in EU. A thorough understanding of changing paradigms described in the mentioned strategies is vital in order to meet education responsive to these changes. The existing inflexible and rigid educational system cannot follow increasing and diversified demands and thus cannot prepare a valuable workforce for the 21st century.

However, it is the fact that architecture and civil engineering is being practised internationally and that all equally concern sustainable development, especially since the architects and civil engineers are major creators of build environment - platform for future implementation of sustainable goals. It is impossible to go in line with sustainable development since all students “do not have equal means at their disposal – neither comparable education, nor comparable technology.” (UNESCO,UIA,2002)

TACEESM include following:
1. Modernization of existing courses at BSc and MSc level at partner HEIs
2. Creation of new courses at BSc and MSc level at partner HEIs
3. Creation of on-line platform that will be used in teaching process/ introduction of ICT teching methods
4. Training of partner staff for current relevant topics in the field of architecture and civil engineering and new innovative teaching methods.

New created programs will be organized as following:
-P 5 International Burch University (IBU) – Department of Architecture will remain existing system of study program 3+2 (BSc 3 year – MSc 2 year)
-P 6 University of Bihać (UNBI) – Technical Faculty, Department of Civil Engineering will remain its 4+1 study program according to Bologna system
- P 7 Dzemal Bijedic University of Mostar (UNMO) will remain in current systems of study programmes (3+2) for both faculties that are the subject of this project: Civil Engineering Faculty (BSc – General, Geodesy; MSc – General, Construction, Urban infrastructure) and Design of interiors (BSc and MSc)

-P 8 National University of Architecture and Construction of Armenia Foundation, NUACA will remain existing structure of program, the duration of full-time BSc and MSc programs 4 years and 2 years, and 5 years and 2,5 years for part-time.

-P 10 The Belarussian National Technical University (BNTU) will remain existing structure of study program: 1st cycle 6 years and 2nd cycle (1-1.5 years).
- P 11 Brest State Technical University, Belarus (Faculty of Civil Engineering) will change existing study program from 5 years of BSc + 1 year of MSc full-time (1.5 years of MSc part-time) for the speciality "structural design of high-rise and unique buildings" to 4+2 and for the other specialties to 4+1. Only, architectural program will remain as existing, 6 years BSc + 1 year of MSc full-time or 1.5 years of MSc part-time.

Problems and needs identified at the level of the Partner Country: Bosnia and Herzegovina
- Educational system has remained stagnant

- Rigid planning mechanism applied in the educational system
- Obsolete teaching methods
- Limiting teaching and learning resources
- One of the key issues in architectural and civil engineering profession in partner countries is discrepancy within education and labour market needs. Analysis done in HEIs showed that skills employers seek and those available in the labour pool are not going in the same direction. Often seen as a systematic collapse and shortcoming of country's higher education system, is high rate of unemployed architects and civil engineers.
-Current cooperation with industry is unplanned and superficial

P5 International Burch University – IBU needs and support required:
- To recognize disjunction and manage properly transition of educational program
- Rational analysis of current study programs of HEIs with a view to clarifying and prioritizing program objectives to those that are relevant
- Need for alignment and revision of curriculum that will support every changing demand in architectural and civil engineering profession in line with the labour market needs, Bologna requirements and existing EU strategies of development
- Structure and content of curriculum that offers diverse options for different target groups, including opportunities for students and professionals from education, requalification and upgrading knowledge
- Need for new innovative teaching and learning methods
- Need of improving quality of education and teaching, methodologies and pedagogical approaches throughout
- University – enterprise cooperation

P6 University of Bihać - UNBI needs and support required
- Rational analysis of current study programs of HEIs
- Need for alignment and revision of curriculum that will support every changing demand in civil engineering profession
- Structure and content of curriculum that offers diverse options for different target groups
- Need of improving quality of education and teaching, methodologies and pedagogical approaches throughout
- University – enterprise cooperation

P7 Dzemal Bijedic University of Mostar - UNMO needs and support required
- Rational analysis of current study programs of HEIs
- Need for alignment and revision of curriculum that will support every changing demand in civil engineering profession
- Structure and content of curriculum that offers diverse options for different target groups,
- Need of improving quality of education and teaching, methodologies and pedagogical approaches throughout
- University – enterprise cooperation

Problems and needs identified at the level of the Partner Country: Armenia
- Curriculum - HEIs in Armenia are autonomous in setting objectives for their study programs, developing learning outcomes and curriculum contents. Previously the contents of the study programs were developed based on the state educational standard for the given discipline or professional sector.
-Teaching Methods- Teaching is generally conducted in large groups. Currently, Armenian HEIs strive to introduce the student-centred learning approach
- Employability - There is no structured national policy on widening cooperation between Universities and Enterprises
- Planning policy - Armenian policy-makers point to the problem of an ageing academic workforce and the difficulties in attracting younger qualified personnel to the HE sector due to the fact that young potential teachers and researchers tend to work in other fields than HE because of higher salaries

P8 National University of Architecture and Construction of Armenia Foundation – NUACA needs and support required:
- Need-oriented planning - curricula, forms and methods of organizing the educational process
- Expansion of opportunities
-To ensure accessible, equal and quality education with effective outcome for all
-To increase the number of young people and adults with professional skills with the purpose of finding decent jobs for them, decreasing unemployment and boosting
businesses
-To ensure equal participation opportunity of all vulnerable groups
-To equip all students with knowledge and capabilities contributing to sustainable development of the society

Problems and needs identified at the level of the Partner Country: Belarus
- Unflexible educational system
- Limiting teaching and learning resources
- One of the key issues in architectural and civil engineering profession in partner countries is discrepancy within education and labour market needs. Analysis done in HEIs showed that skills employers seek and those available in the labour pool are not going in the same direction. Often seen as a systematic collapse and shortcoming of country's higher education system, is high rate of unemployed architects and civil engineers.
-Current cooperation with industry is unplanned and superficial

P10 The Belarussian National Technical University – BNTU needs and support required
- Adjustment of the higher education profiles' structure to the International Standard Classification of Education requirements and economic activity categories
- Establishment of enterprise university complexes
- Development of distance and network learning
- Need for new innovative teaching and learning methods
-Enhancing higher education quality and practical orientation

P11 Brest State Technical University - BrSTU needs and support required
- Adjustment of the higher education profiles' structure to the International Standard Classification of Education requirements and economic activity categories
- Establishment of enterprise university complexes
- Development of distance and network learning
- Need for new innovative teaching and learning methods
- Enhancing higher education quality and practical orientation

(*Please add Partner Countries/partners as appropriate)*

Please identify the target groups and their needs in each Partner Country and in each Partner Country institution. (limit 8.000 characters)

TACEESM project application is addressing the future BSc and MSc students, unemployed professionals willing to acquire new skills, employees from Small and Medium-sized enterprises (SMEs), industry, government institutions (Ministry of Spatial Planning, Construction and Environmental Protection, Development Planning Institutes, Institutes for Construction etc.), which need to keep up with changing technologies and Non-government organizations (professional associations of architect etc.). In general, target groups in all partner HEIs can be grouped around prospects students, HEIs employees in particular academic staff and industry.

In all participating HEIs in partner country Bosnia and Herzegovina prospect students are looking for relevant educational opportunity from which they can benefit. The educational system that will provide them competencies with which they will have better chance for personal development and progress, closer contact with the industry sector, and consequently better job opportunities. Academic staff in

partner countries is looking for stimulating and innovative ideas in education process, training for specialized topics in architecture and civil engineering, that will become driving force for future changes in higher education system in partner HEIs. Industry is looking for an analytical minds and research that could support practice with scientific and technological programs. In that sense, university – enterprise cooperation is perfect tool for a future based-vision of industry development. The consolidation of university research and practice is great need in all involved partner countries.

Target groups for HEI in partner Country Armenia are facing similar matters regarding existing problems and needs. Needs of future students are closely connected with the new educational environment and services that HEIs could provide. There is high demand to break down existing generalised education system with specialised educational process that will orient students towards specific and relevant topics an in accordance to market demands. Altogether, with the modern and well-equipped educational environment academic staff need to be trained for innovative and relevant topic for architecture and civil engineering. Industry is facing difficulties in global market due to fact that is acting solely as producer of certain products but not its initial developer and innovator. Therefore, there is need to change the role of industry as isolated body functioning just as provider of services.

Target groups for all HEIs in partner country Belarus are oriented around similia issues. There is need to shift rigid traditional educational system to more flexible and progressive education that could lead future students in desired direction. Also, there is need to practically use university research and direct knowledge more towards practical usage from which could benefit university and industry but also society. In that vein, university enterprise cooperation is seen as perfect tool to overcome discontent of students and staff who do not have space to realize their ideas on HEIs but they are willing to share knowledge and work in close cooperation with the industry sector.

(*Please add partner countries/partners as appropriate)*

How will the project address the relevant thematic national/regional priorities (see https://eacea.ec.europa.eu/erasmus-plus/funding/capacity-building-higher-education-2019_en) set by the Programme for its target country (ies)/region(s)? (limit 8.000 characters)

The project application addresses the thematic national priority of “architecture and construction” set by the programme for each Partner Country:

1. Bosnia and Herzegovina/Region 1 - Western Balkans
2. Armenia/Region 2 – Eastern Partnership Countries
3. Belarus/ Region 2 – Eastern Partnership Countries

By modernizing and implementing new study programmes, TACEESM aims to improve quality of higher education in the Partner Countries in the field of architecture and civil engineering and enhance its relevance for the labour market needs. Therefore, application fits well under the stated national priority, both formally and content-wise.

On the other hand, “architecture and construction” is not regional priority nor for any of the regions involved in the project application.

(*Please add Partner Countries/regions as appropriate)*

D.2 Aims and objectives

- *What does the proposal aim at in general? What are the project’s specific objectives?*
- *Explain how the specific objectives of the project address the problems mentioned in Part D1 and the needs of each target group in each Partner Country. Demonstrate also that the set objectives are realistic and feasible in the national and institutional context(s).*

(limit 8.000 characters)

TACEESM aims to improve quality of higher education in partner countries in the field of architecture and civil engineering and enhance its relevance for the labour market needs and in accordance with European growth and development strategies (such as Modernisation Agenda for Higher Education in EU). This project aims to develop professional architects and civil engineers with European oriented minds in Bosnia & Herzegovina, Armenia and Belarus. Professionals that will bring European values to the partner countries, will be a refreshment to the market in these countries. Architects and civil engineers in the project, whether they are students, academic staff, or professionals, will create a sophisticated working environment that will ensure better designs, buildings, and better usage of space and energy in new designs, as well as reconstructing the old buildings with saving their values. This project aims also to connect the graduated students with companies as they will take part in discussions related to the required courses that will improve and increase the chance of potential candidates in finding jobs.

More specifically, the project objectives are:
1. To increase capacity building for study in architecture and civil engineering offered both in English and in local languages at BSc and MSc levels
2. To develop, accredit and implement new courses in architecture and civil engineering at the BSc (12 courses) and MSc (11courses) levels according to Bologna requirements by the end of the project
3. To develop innovative academic environment for architecture and civil engineering programs throughout the cooperation with industry.

The new developed curricula, as well as the updated one, will contain courses that aim to improve the quality of knowledge and skills for architects and civil engineers, and will be accredited by the official institutions in all partner countries. The new developed curricula will be put in use starting from the third year of project. After that, the development will follow the graduates in the first year of professional life, where feedbacks from working sector related to the graduates' knowledge and skills will be evaluated and additional improvements to the curricula will be made. The new developed curricula will ensure better employment chances, as it will consider the working sector's feedback and suggestions regarding the needed knowledge and skills. The academic staff from all partner universities will be trained to use the new installed laboratories and studios, with the newest technologies and tools that will be supplied to each institution. That will improve the teaching methods at partner universities and will also ensure better conditions for students to achieve higher educational level of knowledge. Labs and technologies will modernize the partner HEIs, and will enable them to follow the latest trends in architectural and civil engineering world.

TACEESM aims and specific objectives will address the problems and the needs of each target group in each Partner Country.

Within partner country Bosnia and Herzegovina in each HEIs is agreed that there is need to overcome inconsistencies between matter that students are teaching and the market needs. Thus, by development, accreditation and implementation of new courses in architecture and civil engineering at BSc and MSc level, to students will be offered additional knowledge about specific topics. In such way, with the increased capacity building for study architecture and civil engineering at BSc and MSc level future students will be prepared for real-life situations that will result with better student performance at the university but also after the completion of study program. Altogether, to develop innovative academic environment for architecture and civil engineering programs through cooperation with the industry is priory of each partner HEIs that will force constructive changes in the national but also institutional context.

In the partner country Armenia HEIs through TACCESM is intended to frame specific educational scenario while studying a variety of ways of establishing that unique approach to education. That idea led to intention to develop innovative academic environment for architecture and civil engineering programs through cooperation with the industry. Positioning new educational environment as extraordinary in the

national scene it would be impossible without development, accreditation and implementation of new courses in architecture and civil engineering at BSc and MSc level and without the increased capacity building for study. In this way, in-depth analysis of target groups and their needs makes project objectives realistic and feasible in the national and institutional context.

Looking for alternatives of rigid educational system that will reinforce existing higher education mechanism with innovative approach, that will attract new users, and satisfy requirements of diverse target groups, partner country Belarus and each participating HEIs aims to develop innovative academic environment for architecture and civil engineering programs through cooperation with the industry. After thorough analysis of market needs, competences and student satisfaction, specific accent will be given to development, accreditation and implementation of new courses in architecture and civil engineering at BSc and MSc level according to Bologna requirements. The idea to have innovative educational environment will be sported by increasing capacity building for studying. On this way, only planning that is result of comprehensive analysis of existing system, its strengths, weakness, opportunities and threats, will result with the realistic and feasible objectives in the national and institutional context.

(*Please add Partner Countries/regions as appropriate)*

Please explain how the planned activities and the expected results meet the needs of the identified target groups in the Partner Countries (limit 6.000 characters)

TACEESM aims to articulate and meet 21st century challenges with sustainable model of architectural and civil engineering education at partner universities through core activities of teaching, research and knowledge transfer. It is envisioned that will have a sustained impact on target groups with a long-term benefit for all members involved, but also project results will reflect on community.

TACEESM promotes a vision of future that engage new generations of graduates capable to influence changes on environment. To meet rapid changing labor demands, students with the gained competences become prepared for multi-disciplinary approaches to problem solving. As a result, the project will enhance employability of graduates. By recruiting highly skillful generation of students but also academic staff, project will have concrete impacts on local environment and construction sector.

One of the project goals is embedding sustainable development into institutional functions in all partner countries. By doing so all activities planned by completion of the project will continue to act as only possible way after the project is finished. Project will set up fertile ground for performing future sustainable development of long –term project goals, from which all target groups will benefit, and act as agents of change for sustainable development within architecture and civil engineering.

Changes that are planned by project will reflect not only to higher education system, academic staff and students, but also on all parties that are directly (stakeholders, business) or indirectly (policy makers, relevant local and national leaders, citizens) affected by project results. Changes that are planned in education system in each Partner Country higher education institution through project activities (workshops, conferences, trainings etc.) are including wide range of target groups that will continue to disseminate project goals after project completion.

Valuable physical and human resources set up by project will remain to function after the project implementation. On line platform, established network of industry partners, trained academicians, graduated students, will perform just as driving force towards long- term project goals. Significant impact on target groups by different project phases will further nurture excellence in different spheres of architecture and civil engineering. Innovative character of project will establish inseparable and mutual links between all target groups that will simultaneously advance local, national and regional economy, environmental health and quality of life. In this aspect, sustainable model of architectural and civil engineering education transformation must be of primary interest of all decision-making bodies of partner countries because they lead towards prosperous future of all citizens.

Partner Country: Bosnia and Herzegovina
As mentioned above, all the planned activities and results meet the needs of identified target groups. TACEESM project application is addressing the future BSc and MSc students, academic staff and industry sector. The envisioned project activities together with positive expected results and its implications can be crucial to diminish brain-drain from Bosnia and Herzegovina (mass migration of young population and educated people looking for better educational and job opportunities that currently threatened Bosnia's future). In addition, the planned activities and results will meet the needs of students from lower socio-economic groups in Bosnia and Herzegovina bringing for them various educational and working opportunities.

Partner Country: Armenia
As mentioned above, all the planned activities and results meet the needs of identified target groups in Armenia. Innovative educational environment will transmit positive and prosperous working atmosphere within partner institutions. This will decrease the number of young people that are leaving the country for studying or number of graduates that are looking for better job opportunities abroad. Additionally, attractiveness and effectiveness of program created by this project will meet the needs high school students, bachelor students, and industry. After all, the project will ensure equal participation opportunity of all vulnerable groups and equip all students with knowledge and capabilities contributing to sustainable development of the society.

Partner Country: Belarus
As mentioned above, all the planned activities and results meet the needs of identified target groups in Belarus. By introducing new way of progressive education through the planned activities, academic staff, students, industry, become main actors of continues changes. Empowering partner institutions to foster diverse and innovative educational environment will results with a high-profile and skilled student, well trained and specialized academic staff, that will potentially decrease rate of unemployment and open many possibilities for new innovative business and cooperation's.

(*Please add Partner Countries as appropriate)*

How will the project and its results contribute effectively to the objectives of the action Capacity-Building in the Field of Higher Education in each targeted Partner Country? (limit 6.000 characters)

TACEESM is viewed as long-term process of transformation through which each participating institution will benefit. In this way, the partner network is seen as a growing resource for future potential collaborations on globally important issues. TACCESM project and its planned results will contribute effectively to the objectives of the action Capacity Building in each Partner Country (Bosnia and Herzegovina, Armenia and Belarus) involved.

The project application is seen as revolutionary development of partner HEIs that enhance 'traditional' ways of delivering knowledge with the potential for a high impact on the other higher education institutions on local, national and regional level. It asserts new forms of delivering education through online platform that opens up enormous possibilities for partner countries to become part of European network of education and industry and brings new dimension of education through virtual space. It employs a broad range of shared materials, instructional modules for particular architectural and civil engineering units, software's, innovative teaching methods, designed and prepared by collaborative work of partners and stakeholders that links newly formed educational environment to project objectives.
This project will increase flexibility and efficiency of education that follows ever-changing labour market needs. By re-orienting educational system all partner institutions will have possibility to follow trends and answer on demands of European market. All partner HEIs will be an exemplar case of sustainable model of HEIs that will influence changes in the region. Through dynamic, up to date, and innovative

activities HEIs will have shared understanding of sustainable model of education that will collaborate closely with local community, industry and international partners.

The training by EU institutions on relevant and innovative topic in architecture and civil engineering produces knowledgeable academicians in partner HEIs specialized to lead educational process based on sustainable model. Moreover, project will develop network of academicians trained in specific architectural and civil engineering disciplines.

All these mentioned above will greatly contribute that the objectives of the action Capacity Building in each Partner Country (Bosnia and Herzegovina, Armenia and Belarus) and institution will be achieved in the best possible way.

Partner Country Bosnia and Herzegovina
3 participating partner institutions from Bosnia and Herzegovina P 5 International Burch University – IBU, P 6 University of Bihać – UNBI, P 7 Dzemal Bijedic University of Mostar – UNMO have leading role of architectural and civil engineering education. 3 partner institutions involved are administrative centres of different Cantons of BiH and as such will have great impact on different regions. Therefore, the project and its results will contribute effectively to the objectives of action evenly across partner country Bosnia and Herzegovina. IBU - Sarajevo is the capital and largest city of Bosnia and Herzegovina, including Sarajevo Canton, East Sarajevo and nearby municipalities. UNBI - Bihać is a city and the administrative center of Una-Sana Canton of the Federation of Bosnia and Herzegovina, an entity of Bosnia and Herzegovina. UNMO - Mostar is a city and the administrative center of Herzegovina-Neretva Canton of the Federation of Bosnia and Herzegovina, an entity of Bosnia and Herzegovina.

Partner Country Armenia
P 8 National University of Architecture and Construction of Armenia Foundation - NUACA staff are renowned architects from leading construction companies, representatives of state and local governing bodies and P 9 National Polytechnic University of Armenia – NPUA is the premier provider of technological education in Armenia that will mainly act through the Faculty of Computer Systems and Informatics. Therefore, it is apparent that the project and its results will contribute effectively to the objectives of action in partner country.

Partner Country Belarus
P10 The Belarussian National Technical University – BNTU is considered as the best engineering educational, methodological, research and industrial centre of the Republic of Belarus and P11 Brest State Technical University - BrSTU is one of the largest educational and scientific center that undertakes research into architecture, construction, electronics and mechanical engineering. Regarding to their role and impact on Belarus higher education space, it is apparent that the project and its results will contribute effectively to the objectives of action in partner country.

(*Please add Partner Countries as appropriate)*

How do the project's objectives fit in with the modernisation and internationalisation agenda of the targeted higher education institutions in the Partner Countries and with the development strategy for higher education in each Partner Country involved in the project? (limit 6.000 characters)

Implementation of new curricula stresses out modernization and internationalization of HEIs in partner countries in the field of architecture and civil engineering taking in consideration strategical documents of all institutions involved in the project and in accordance with European growth and development strategies. All institutions involved in this project in their strategical development plans have clearly defined goals of modernization and internationalization that goes in line with goals of strategical EU documents.

The Council of Ministers of Bosnia and Herzegovina accepted the Decision on Adopting priorities for the Development of Higher Education in Bosnia and Herzegovina for the period 2016-2026. The Decision states that these priorities are "presented as the main measures and activities to be carried out in Bosnia and Herzegovina in order to strengthen, on the one hand, the development of higher education, and on the other hand, its full involvement in the European Higher Education Area." (Article 2)

Within active, International Burch University Development Plan, one of strategic goals are to develop international scientific and educational environment and infrastructure and to orient development of University towards entrepreneurship. Also, priority goals focus on an Internationally active research university and international educational cooperation. Moreover, as written in the IBU Strategy for Internationalization 2018 – 2023 the mission of the IBU is to provide international, innovative, sustainable and entrepreneurial high education standard as well as to conduct internationally recognized research and international projects as one of the leading High Education Institution in South East Europe.

Internationalization Strategy of Dzemal Bijedic University of Mostar 2018-2023 goes in line with the vision of the UNMO development is to become flexible, functional and socially responsible a higher education institution, recognized in the region by modern study programs of all cycles, open cooperation, internationalization and orientated quality.

One of the strategical goals of the Development Strategy of University in Bihać 2017-2022 is international cooperation thought application programs for EU funds, fostering modernization and continuous development of internationally recognizable quality of scientific, artistic and professional research and high-quality education.

In 2011, the Government of the Republic of Armenia ratified the “Education Development 2011-2015 State Programme of the RA” (the Law of the Republic of Armenia No HO-246-N of 19 July 2011 "On Ratifying the Education Development 2011-2015 State Programme of the Republic of Armenia"). In 2015 a new state programme for 2016-2025 was developed covering goals, objectives and scope of activities of education reforms in all levels of education in RA, some of them being: 1. Need-oriented planning - curricula, forms and methods of organizing the educational process, 2. Collaboration with partners 3. Flexibility of educational programmes, opportunities of adjusting them to the needs of students, their families, community and economy, 4. Proposition of the new ways of organization of education: distance learning opportunities, mechanism of recognition of non-formal education, modern methods of organizing training sessions, diversification of the educational system, expansion of opportunities for the joint establishment of educational institutions.

Nowadays internationalization is deemed to be crucial part of Higher Education Institution development strategies in of the National University of Architecture and Construction of Armenia Foundation and the National Polytechnic University of Armenia. International and Interuniveristy Cooperation Division supports the establishment of partnerships among the international scientific institutes and think-tanks, collaboration on projects, promotion of membership in various international organizations and associations.

At present, the higher education development strategy of Belarus has been adopted at the session of the National Council of Rectors of higher education institutions (9-10 October 2014). In order to promote integration of Belarus into the European Higher Education Area, the Minister of Education issued an order "On measures for introducing tools of European Higher Education Area into the national education system" of 07.30.2015 №628, aimed at implementing the provisions of the Roadmap for the Republic of Belarus to achieve the principles, objectives and values of the Bologna Process.

Main strategic directions of the Belarussian National Technical University development: Introducing innovative training programs taking into account global higher education context and the membership in the European Higher Education Area (EHEA) the Republic of Belarus was granted recently; Actively embracing best practices in training specialists with the focus on internships and training in prominent

foreign universities, as well as enterprises and organizations dominating world market; Establishing effective links with the leading industrial organizations, academic and educational establishments and centers, including foreign ones; Developing the University resource base and introducing modern equipment, novel information technologies, and telecommunication systems into training process; Shaping the spirit of leadership and corporate culture in the University.

Internationalization is a key strategy for the Brest State Technical University development that provides the country's access to the world markets of education, labor and high-technology sectors of the new economy. In the frame of the "Development Programme of the Republic of Belarus in 2016–2020" the internationalization strategy of Brest State Technical University (BrSTU) has been developed for 2016–2020. Thereby, the fundamental principles of the BrSTU internationalization are: 1. System approach that presupposes the presence of an international dimension in all university activities; 2. Combination of centralized and decentralized management of international activities; 3. Goals' achievement of the strategic development of BrSTU in the implementation of international cooperation.

(*Please add Partner Countries/partners as appropriate)*

Please explain how the proposal will pay attention to the issues of inclusion, diversity and socio-economically disadvantaged participants and/or organisations in the Partner Countries. (limit 2.000 characters)

Drawing on the fact that there is lack of accord between the policy priorities of the EU and individual member states, one of the central issues address with this proposal is to help Partners countries to harmonize their policy and practice in relation to EU context. Consequently, examining patterns of social stratification evident in the institutional architecture of higher education across Europe, and precisely in the Partner countries, this proposal seeks to come up with the mechanism of higher education that will work as a generator of prosperous future for all. In that vein, TACEESM recognized the important role of HEIs that could act as a vehicle for fostering social mobility cohesion, and diversity. By transforming architectural and civil engineering education towards sustainable model is reinforced sustainable economic growth that could contribute gradually to European economic revival. The idea to go step forward with interventions in the partner HEIs are far from solely commodification of Curricula, local or national prestige of HEIs, but rather, it is to gain results that have wider impact and that could achieve enormous social benefits.

Idea of sharing knowledge led by moto "equal opportunities for all" with created programs, online platform, new educational environment, internship program, cooperation with labor market, will at the final stage brought new opportunities for participating partner HEIs but also for target groups. Overall, this will provide more chances for quality education and progress for socio-economically disadvantaged groups in the Partner countries. It will decrease number of youth unemployment, but also unemployment in general and open new possibilities of collaboration.

Deeply thought-out changes in partner HEIs with all activities suggested, give a secure mechanism to gradually overcome negative connotations attributed to European context, such as financial retrenchment and differences concerning to socioeconomic status. In relation to changes within partner HEIs,the TACEESM is envisaged as the means of reaching better educational environment, and competencies that confers labour market advantages in all European countries.

D.3 Innovative character

Demonstrate why the proposal is innovative.
If it is complementary to previous/existing funded projects nationally or internationally please explain how the new proposal build on it/them and demonstrate its added value and why it is not a simple continuation thereof. (limit 2.000 characters)

Drawing on wider objective of the project to support modernization of HEIs in partner countries in the field of architecture and civil engineering through implementation of new curricula based on the labor market needs and in accordance with European growth and development strategies, it is essential to reassess teaching methods and education process in architectural and civil engineering education. The innovative academic environment for education programs is considered, by the HEIs of partner countries, to be a key driver for the successful growth and the continuous cooperation with industry. Relying on the network that will be created between the industry and the university in partner countries, further collaboration will go in direction of realization of internship programs, and will also include a joint projects between HEIs and industry (e.g. Master thesis). Further, innovative educational approaches will be implemented in terms of upgrading resources and equipment needed for project-oriented student work. To support newly set up goals academic staff of all HEIs partner countries will be trained in new innovative teaching methods (such as integrated studio approach, mentorship based learning, etc.). Also, establishment of on-line platform used in teaching process for Master program will further enforce student's ability for continuous education to match the ever-changing market demands. In this regard, in line with goals of EU countries, project is seeking to transform architecture and civil engineering education to new reality imposed by economic, political and societal context. The project will promote architecture and civil engineering as diverse professions offering well-structured programs and thus train students to gain universal professional competences. Consequently, modernisation of study program is increasing employment opportunities not only in local companies but also abroad.

If the proposal builds on any previous or existing EU-funded/non-EU funded national or international activities/projects in this field, please fill the following table for each of these projects.

Reference number			
Project dates *(year started and completed)*		**Programme or initiative**	
Funded by			
Title of the project			
Coordinating organisation			
Partner Countries /institutions targeted by this project			
Website	http://		
Password / login if necessary for website			
(a)Summarise the project outcomes (b) Explain how ownership/copyright issues are to be dealt with (limit 2000 characters).			

Please copy and paste tables as necessary

D.4 European added value

Why is there a need for cooperation with the Programme Countries in this area of activity and a funding via the Erasmus+ Programme? Why can the intended results not be achieved through national, regional or local funding in the Partner Countries? (limit 2.000 characters)

Common understanding of key elements affecting quality of architectural and civil engineering education in Europe is crucial in the process of improvement architectural and civil engineering education in partner countries. Goals to be pursued in the project among HEIs in partner countries cannot be achieved without synergy with European educational sector and their experiences in realisation of good ideas.

Architectural and civil engineering schools across EU address importance of restructuring education in a way that will strength students capabilities to cope with relevant topics. Drawing from both an architect's and a civil engineer's experiences in partner countries more than ever there is a need for European educators to keep up together and share best practices. In that context, European education system could be strengthen only if educators work together towards a sustainable model.

Therefore, it is evident that EU cooperation is vital to reach goals of the project and that they could not be achieved through national, regional or local founding, since existing local funds are limited and they are not offering adequate sources for this type of activities.

D.5 Cross-regional cooperation

If your proposal is cross-regional, demonstrate the need for this cooperation between institutions from different regions. Please also explain the added value of this cross-regional cooperation for the targeted Partner Country institutions. (limit 2.000 characters)

TACEESM is cross-regional project that concernes Partner Country Bosnia and Herzegovina from Region 1 (Western Balkans) and Armenia and Belarus from Region 2 (Eastern Partnership Countries).

The project tends to generate a sustainable cross-regional value by valorisation of regional capacities and transformation of partners HEIs towards sustainable model for the benefit of all. Established cross-regional partnership network will potentially result in many economic, socio-cultural, institutional, political added values some of them being: close partner cooperation without losing their respective independence and autonomy, efficient management of the partnership, increased economic, social and territorial cohesion and cooperation, strong mobilization participation of regional actors in future projects, strengthening the regional organisation capacity and extensive knowledge of regional identity.Having said that, although Bosnia and Herzegovina, Armenia and Belarus have diverging positions, including the type of regime, the geopolitical considerations, the stakes in the economic and energy spheres; similar historical background and enormous desire to embrace potential given by EU has conditioned that together they are able to positively influence educational process and shape advanced conditions for education, although in a different way and to a different extent.

The valuable improvement of existing educational system towards targeted Partner Country Institutions respecting their specific needs is envisioned by nurturing recognized values as well as the regional core competences. Moreover, by systematically expanding and managing recognized regional values in sphere of architecture and civil engineering through education, this project will intentionally open new learning opportunities and knowledge generation. By generating critical mass - key actors of these two Regions by joint forces and resources through shared vison of TACEESM will built solution to common problems that are evident in partner HEIs.

PART E – Quality of the Project Design and Implementation

E.1 Project activities and methodology

Please provide a detailed description of the activities and the working methodology to be used for achieving the objectives (including major milestones, measurable indicators, etc.). (limit 6.000 characters)

TACEESM is organized in 8 WP and activities are planned according to participant's role, needs and expertise. Two groups of courses (architectural and civil engineering) at BSc and MSc level will be modernized and designed. Based on needs, objectives and structure of program,partner HEIs will develop certain number of courses from these groups. Number of ECTS credits and status of courses will be defined within the project. The revision of BSc and MSc curriculum of partner HEIs will introduce upgrading existing courses or/and design of new courses. The new courses will be officially recognized by University authorities and accredited by the National Agencies at partner HEIs.

10 ARCHITECTURAL courses modernized - BSc and MSc
1. Computer Literacy in Architecture
2. Architectural Structures
3. Construction material science
4. Architecture
5. Freehand Drawing
6. Contemporary Architectural Discourse
7. Urban Design
8. Architecture Landscape and Technology
9. Multifunctional Space Design
10. Critical Theory/ Culture and Architecture

10 CIVIL ENGINEERING courses modernized - BSc and MSc
1.Construction materials
2. Introduction to engineering informatics
3. Statics in civil engineering
4. Planning and construction of specific road facilities
5. Construction modelling
6. Reinforced concrete and masonry structures
7. Timber and plastic structures
8. Advanced Structural Analysis
9. Advanced Construction Technology and Management`
10. Civil Engineering Materials

13 ARCHITECTURAL courses designed - BSc and MSc
1. Professional Practice
2. Studies in light and materials
3. Ornament Theory and Design
4. Contemporary Architectural Discourse
6. Techno-Sensation Architecture
7. Green Design and Interior
8. BIM Technology
9. Architectural projection of contemporary construction systems
10.Territory Improvement and engineering development of area
11. Sustainable architecture
12. Project management for architects
13. Contemporary methods of preservation of historical environment

10 CIVIL ENGINEERING courses designed - BSc and MSc

1. Structural Stability
2. Advanced Structural Analysis
3. Construction Machinery and Equipment's
4. Road maintenance and repair
5. Construction plant and equipment
6. Waste management
7. Operations Research and Linear Programming
8 Computer-Aided Design for Construction
9. Applied Hydraulics
10. Actions on Structures

Courses content and outcomes will be related with expected qualifications of students based on market needs. Multi-dimensional chain of collaboration between industry and universities will be created. New equipment and softwares, expanded and purchased literature will enable teaching activities. On-line platform will open possibilities of technology enhanced learning.

WP1 Current programmes in EU and partner HEIs - State of the Art (M2 - M5) will result in 1 final report on analysis of architectural and civil engineering programmes at HEIs that will consist of join reports from partner countries. Also, 1 final report will be done by program countries on EU practices. Reports on benchmark of market needs will be based on 1 survey of analysis of market needs at each partner country. 1 final report will summarize reports from all partner countries. Suggested competences for programs at partner HEIs will result in 1 final document at partner countries.

WP2 Development of new courses in the field of architecture and civil engineering (M6-M22)
Modernized - 10 ARCHITECTURAL and 10 CIVIL ENGINEERING courses /BSc and MSc/
Designed - 13 ARCHITECTURAL and 10 CIVIL ENGINEERING courses /BSc and MSc/

WP3 Capacity building (M11-M24) - 40 academic staff from partner countries will be trained, new equipment and online platform installed.

WP4 University Enterprise Collaboration (M14-M36) - Network between industry and universities, internship program and joint projects will be created.

WP5 Implementation of new programmes (M24-M36) - Modernized and designed BSc and MSc courses implemented, internship and online platform functioning.

Within WP 1 – WP5, 4 workshops, 2 visits of partner HEIs to program HEIs and 1 training will be performed. Professional development of staff will be in M12 at UM. Training will facilitate concepts of teaching of relevant topics in architecture and civil engineering using innovative methods.

WP6 Quality Control and Monitoring (M1 – M35) - creation of procedures for quality control and monitoring, internal quality control activities, external quality assurance activities, external financial audit.

WP7 Dissemination & Sustainability (M1 – M36) - establishing of dissemination plan, setting up and maintaining project Web site, dissemination activities, final conference, financial and institutional sustainability plan.

WP8 Project management- led by Ud'A, PM and SC. SC will be created at the first coordination meeting in M2 at Ud'A.

Please demonstrate that the activities and the methodology mentioned are the most appropriate to achieve the envisaged results and that they are feasible. (limit 3.000 characters)

There is no doubt that it is right time for change and that, after all, innovation is social responsibility. Recent vigorous debate on higher education system and its transformation, on the one hand discourses the traditional way of education as already tested way of sharing knowledge and, on the other, contrasting options that advocated new forms od education that is technology based and alternative or kind of "hybrid" to everything that we use to practice so far.

Looking to reach that flexibility ad change in educational system capable to foster change of future generation, the TACCESM application offer various segments of Curricula reform essential to lead positive change. Looking for the particularities of professions involved in this application, architecture and civil engineering that work side by side with each other, suggested methodology is reflected in the inevitable connection of the chain elements – education, industry, technology.
After detecting specific problems evident in partner countries and in each participating partner HEIs it is suggested plan of activities with the accompanying methodology. In order to reach set up goals by the project and accordingly articulate and meet 21st century challenges with sustainable model of architectural and civil engineering education at partner universities are planned inventive core activities of teaching, research and knowledge transfer. In the context of each partner HEIs planned activities and envisioned results at first glance may look to ambitious. However, careful analysis of potential of each partner HEIs prove that with the support of the Programme countries and EU funds they are within the capabilities of partner HEIs and have a positive prediction about its feasibility.

The suggested TACEESM methodology offer opportunity to recapitulate and redirect the ongoing debate of transformation of higher education system. Along with partner HEIs capacities and new program suggested, this project place university – enterprise cooperation at centre stage, from which many changes could evolve and that have potential to shed new light.

What concrete, tangible results are expected to be achieved at the end of the project's activities in each of the targeted Partner Countries? (limit 6.000 characters)

At the end of the project activities in each of the targeted partner country and participating partner HEIs valuable physical and human resources set up by project will remain after project implementation. Modernized and new courses at BSc and MSc Level, new educational environment (Literature, equipment and software's purchased), online platform, established network of industry partners, trained academicians, graduated students, will perform just as driving force towards long- term project goals and its sustainability.

In partner HEIs in Bosnia and Herzegovina tangible results achieved and evident in the educational environment will improve image of the HEIs and increase its local but also regional visibility. Modern equipment, software and literature will provide vital working environment for all, students and staff. Online platform will give another virtual dimension of education that goes in line with modern technology and give possibility of new concept of sharing knowledge so far unknown in partner HEIs.

In partner country Armenia participating HEIs will experience apparent transformation of educational environment enriched with new modern equipment and trained academic staff. Online platform will offer specific technology-based character to education. Moreover, established network of partners between industry will encourage young generations to be actively engaged in process of development innovation and production.

Partner country Belarus and participating HEIs will integrate new program that will go in line with new created educational environment. Purchased equipment and online platform will enriched existing HEIs resources and offer new teaching and learning atmosphere. Trained staff for innovative and specialized topic in architecture and civil engineering will continue to upgrade knowledge and share teaching method among young academic employees. Collaboration established with industry partners will result with new contacts and future projects.

(*Please add Partner Countries as appropriate)*

*For all **types of activities** (curriculum development, modernisation of governance, management and functioning of HEIs; strengthening of relations between HEIs and the wider economic and social environment), for **each Partner Country institution** please provide information in Part F.2 Organisation and Activities.*

E.2 Quality control and monitoring

Please explain what mechanisms will be put in place for ensuring the quality of the project and how the evaluation will be carried out. If an external evaluation is foreseen, provide information on the purpose and expected outcomes of this evaluation. Please define the specific quality measures established, as well as the benchmarks and indicators foreseen to verify the outcome of the action. Make sure that the information in this section is consistent with the project Logical Framework Matrix. (limit 3.000 characters)

Quality control and monitoring activities follow the project from the early beginning, and will last utill it ends. Quality control and Monitoring activities aim to ensure quality assurance and control monitoring system that complies with the European Association for Quality Assurance in Higher Education (ENQA) standards and guidelines. In order to ensure better sustainability and higher level of confidence from the potential prospective students, the Quality Control and monitoring of this project and its individual activities and Work Packages are carefully prepared, developed and followed.
Highly qualified staff are hired to ensure and achieve better quality control. Experienced staff are hired to educate staff from partner institutions regarding the quality control and monitoring procedures, and to examine the quality of individual activities done during the programme. Reporting to the SC and PM about trouble, obstacles, or irregularities is another activity that is assigned to the Quality Control and Monitoring Team.

In the first coordination meeting, members of SC and PM will discuss and select the External Quality Team (EQT) and will set expectation in front of them. The team will be formed from two experts from non-participating EU institutions. In the second coordination meeting, EQT will present the quality control and monitoring procedures to the members of the SC and PM.

The EQT is aiming to assure whether:
- The new syllabi include the developed intended learning outcomes;
- The students and professional representatives are involved in the syllabi design;
- The evaluation of the curriculum and the content of the program are reviewed by all institutions and stakeholders in the project, and whether their suggestions and notes were taken into consideration;
- It has been taken into consideration the special requirements and needs of individual institution;
- Resources regarding teaching and lecturing to teachers and students are available;
- The Universities authorities and Higher Education Ministry have adopted the new designed program and courses;
- The students' progress is positive.

Internal team for Quality Control and Monitoring will be formed at each partner institution. The team will aim to prepare all needed intermediate reports and to present them to the EQT, SC, and PM. The team will be formed from one Assistant Professor, one student, and one expert and representative of Industry.

The financial reports are also part of each intermediate report. Reports will contain all issues, difficulties, and potential problems, and will be discussed on coordination meetings in order to find solution and resolve conflicts. Also, reports are there to prepare a strategy for solving potential problems that might occur during the programme. External finacial audit will be organized and this activity will go under subcontracting.

E.3 Budget and cost effectiveness

Please describe the strategy adopted to ensure that the proposed results and objectives will be achieved in the most economical way, and on time. Explain the principles of budget allocation amongst partners. Indicate the arrangements adopted for financial management. What sources of co-funding will be used? (limit 3.000 characters)

Due to the nature of this project, which is demanding and aiming to bring the educational level at partner universities to a higher level close to the EU countries, costs are carefully analysed and budget is set precisely.

The project includes in total 16 partners (HEIs and companies) from which are: 7 HEIs and 5 companies from partner countries and 4 HEIs from EU countries.

The budget is determined according to the activities previewed in LFM and later assigned to institutions involved in the project. The principle of assigning budget depends on:
- The expertise and availability of institution involved,
- The mobility costs,
- Costs of establishing or modernization of laboratories,
- The costs of needed subcontracts.

Due to the complexity and demanding nature of the project, the managerial costs are set higher in order to enable managers to concentrate on the project, and to ensure high quality of project outputs.

Managers also are responsible for optimizing costs of the project. Cost effectiveness should take advantages of:
- Possibility of using modern conferencing tools and communication resources at all involved institutions in order to reduce the costs of project.
- By using modern communication, to reduce costs of mobility length of stay,

Costs of printing materials and brochures for promotion, materials for workshops, and questionnaire for the representatives of target population of the programme will be financed by the HEIs partner institutions involved in the project. Costs for translation are minimized as all conferences, excluding the final one, will be held in the local and English languages. No costs for renting are included in the budget, as all institutions involved have their premises, and all activities can take place at them.

Partners will contribute by allowing the usage of their capacities, as much as it is possible, for the purposes and activities of the project. Co-financing is expected to be 5% of the total budget.

Rules of ERASMUS+ grants will be applied for the financial management. Grant Applicant will strongly follow whether the rules are respected and implemented. Guidelines will be given by Grant Applicant and will be explained to all staff that will work on determining the budget and SC on the first coordinating meeting.

Before any activity, the costs of it will be reviewed and the expected costs will be compared to the ones estimated at the start of the project. All financial reports, as well as audit reports, will be posted on the portal developed for the purpose of following the project by all partners.

If your project involves any "exceptional costs" related to travel, please justify them here. (limit 2.000 characters)

Please justify the equipment costs for each Partner Country Institution:

- *why the Partner Country institutions need them for the implementation of the project;*
- *their relations with the content to be developed and the specific activities to be implemented) and*
- *the estimated timeframe for their purchase as well as the estimated place where they will be located (limit 3.000 characters)*

In order to perform activities planned by the Curricula new and modernized educational environment will support teaching process in each partner HEIs. Purchasing necessary literature, equipment and software is one of the activities (ACT 3.5) within WP 3 Capacity Building. By modernizing laboratories, equipment and software, and by expanding and purchasing literature at each partner university, new environment for teaching will be created. At some level, newly formed teaching setting will enforce innovative teaching environment.

For procurement of equipment (labs, computers, softwares, scanners, printers, LCD projectors, Books, Videoconferencing Suite, Interactive boards etc.) is planned 30.000 EUR for 6 partner HEIs. Only for the P 9 - National Polytechnic University of Armenia – NPUA is planned 10.000EUR since its role is to support project by its expertise in ICT methods. NPUA will be main actor in creation of online platform, training on innovative teaching methods, and creation of project web site.

Literature, equipment and software list will be finalized in the workshop 3 in M14 at National Polytechnical University of Armenia Foundation – NPUA. Each partner university will be responsible for tendering and purchasing agreed materials. Since, the planned teaching setting will be needed for accreditation process all materials are planned to be set up by M15.

Partner Country Bosnia and Herzegovina
- Partner institution P5 International Burch University - IBU: 30.000EUR
- Partner institution P6 Univeristy of Bihać - UNBI]: 30.000EUR
- Partner institution P 7 Dzemal Bijedic University of Mostar - UNMO: 30.000EUR

Partner Country Armenia
- Partner institution P 8 National University of Architecture and Construction of Armenia Foundation - NUACA: 30.000EUR
- Partner institution P 9 National Polytechnic University of Armenia - NPUA: 10.000EUR

Partner Country Belarus
- Partner institution P10 The Belarussian National Technical University - BNTU: 30.000EUR
- Partner institution P11 Brest State Technical University - BrSTU]: 30.000EUR

(*Please add Partner Countries as appropriate)*

***Please complete the following Logical Framework Matrix**:*

E.4 Logical Framework Matrix – LFM

Wider Objective: *What is the general objective, to which the project will contribute?* - to improve quality of higher education in partner countries in the field of architecture and civil engineering and enhance its relevance for the labor market needs and in accordance with European growth and development strategies -	**Indicators of progress:** *What are the key indicators related to the wider objective?* -revised and accepted curricula at BSc and MSc level at partner HEIs -modernization and internationalization of HEIs in partner countries -reinforced collaboration between partner HEIs, EU and industry	**How indicators will be measured:** *What are the sources of information on these indicators?* - statistics on number of students -statistics on number of updated and new courses at BSc and MSc level -statistics from institiutional alumni -data on employability - institutional records and datas		
Specific Project Objective/s: *What are the specific objectives, which the project shall achieve?* -to increase capacity building for study in architecture and civil engineering offered both in English and in local languages at BSc and MSc levels -to develop, accredit and implement new courses in architecture and civil engineering at the BSc (12 courses) and MSc (11	**Indicators of progress:** *What are the quantitative and qualitative indicators showing whether and to what extent the project's specific objectives are achieved?* -number of updated and new courses in the field of architecture and civil engineering -number of academic staff trained -number of new students	**How indicators will be measured:** *What are the sources of information that exist and can be collected? What are the methods required to get this information?* -universities reports on academic achievements -universities databases and registered on equipment purcased -number of teaching materilas published and printed -database with all partners from industry	**Assumptions & risks** *What are the factors and conditions not under the direct control of the project, which are necessary to achieve these objectives? What risks have to be considered?* -assumptions -growing demand for professionals in the filed of architecture and civil engineering in partner countries - high responsiveness of all partners to actively enforce project objecives	**How the risks will be mitigated:**

courses) levels according to Bologna requirements by the end of the project -to develop innovative academic environment for architecture and civil engineering programs throughout the cooperation with industry	-number of developed and introduced teaching materials -online platform for teaching process -number of agreements with industry -amount of new HEIs building capacity	-univeristy datas with official agrements with partners from industry -list of newly registered students -courses reports -checking the implementation schedule following due dates and milestone	- adequate allocation of physical , financial and human resources by partner institutions - Risks lack of adequate and continuous response by target groups inefficient administrative producers between partners	
Outputs (tangible) and Outcomes (intangible): *Please provide the list of concrete DELIVERABLES - outputs/outcomes (grouped in Work packages), leading to the specific objective/s.:* • WP1 Current programmes in EU and partner HEIs - State of the Art • 1.1 Report on existing EU programmes and practices • 1.2 Report on existing partner countries programmes and practices	**Indicators of progress:** *What are the indicators to measure whether and to what extent the project achieves the envisaged results and effects?* • reports from EU partners finalized until M3 • reports from partner countries finalized until M3 • created matrix of compentences based on market needs until M4 • report on lerning outcomes creted until M5 • timeline-based and Gantt-based versioning of all relevant documents,	**How indicators will be measured:** *What are the sources of information on these indicators?* • reports on current state published at project web site • timelines and Gantt charts showing the project tracking • reports on internal and external quality control • management and quality control reports • tracking development on project web site • database at universities with available internal documents	**Assumptions & risks** *What external factors and conditions must be realised to obtain the expected outcomes and results on schedule?* • Assumptions • Sufficient human resources, knowledgeable and committed members, at EU and partner universities • Effective share of experience and knowledge between industry and the partner universities • Risks • Inefficient administrative producers	**How the risks will be mitigated:**

• 1.3 Benchmark on market needs • 1.4 Defined learning outcomes • WP 2 Development of new courses in the field of architecture and civil engineering • 2.1 Existing 13 courses at BSc and 7 at MSc level modernized • 2.2 New 12 courses at BSc level developed • 2.3 New 11 courses at MSc level developed • 2.4 Accreditation of new courses by the national accreditation institution in HEIs • WP3 Capacity building • 3.1 Trained partner HEIs staff for current relevant topics in architecture and civil engineering	published on the project website • defined the scope and content, performance standards, learning outcomes, teaching methods, competences, and instructional resources for each BSc and MSc programme until M12 • number of complited visits • prepared all legal documents needed for accredittaion until M19 • BSc and MSc programmes officially approved at month 22 • • number of teaching staff retrained (min. 2 academic staff from each partner HEIs) until M12 • number of new developed and published teaching materials (min.2 publications by each BSc and MSc program) and	• student offices database at each parner HEIs • evidence of participants of trainings at human resources register at each partner HEIs • documents of National accreditation institution • available insight into financial reports at HEIs (tendering proceduress, invioces etc.) • administrative office at each HEIs • meeting minutes from each meeting available on project web site	• Unpredictable changes of relevant bodies at partner HEIs	

• 3.2 Trained partner HEIs staff in new innovative teaching methods • 3.3 Teaching materials developed and published • 3.4 On-line platform for teaching process • 3.5 Literature, equipment and software purchased • WP4 University Enterprise Collaboration • 4.1 Developed network between the industry and partner universities • 4.2 Internship program at partner HEIs • 4.3 5 Joint projects between HEIs and industry created • - WP5 Implementation of new programmes • 5.1 New 12courses delivered at BSc level	established online courses (min. 10 courses x 4 programmes) until M15 • tendering procedure announced at M10 • new literature, equipment and softwers purchased and installed until M15 • online platfrom created until M15 • • call for enrollment at each partner HEIs • new enrolled students at BSc and MSc programmes until M24 (min.25 students at BSc and 15 students at MSc at each partner HEIs) • student feedback evaluation for each BSc and MSc program until M34			

• 5.2 New 11 courses delivered and offered at MSc level • 5.3 Evaluation report on new implemented courses • WP6 Quality control and monitoring • 6.1 Quality control mechanism created • 6.2 Internal quality assurance reports • 6.3 External quality assurance reports • 6.4 External financial audit • WP7 Dissemination • 7.1 Established Dissemination Plan • 7.2 Setting up the web site • 7.3 Dissemination activities within partner universities	• monitoring reports on internal quality control published at project web site • monitoring reports on internal and external quality in M7, M12, M14, M24 and M36 assessments published at website • 3 reports (M12,M24 and M35) on external quality control published at web site • number of adverstising pamphlets • number of dissemination events min. 6 workshops, min.6 open days, 1 press conference, 2 conferences, stakeholder events			

• 7.4. Dissemination events with stake holders organized • 7.5 Final dissemination conference organized • 7.6 Strategic Sustainability Plan Developed • 7.7 Financial and institutitutional Sustainability • 7.8 Sustainable cooperation with labour market • WP8 Project management • 8.1 Overall project management and administration • 8.2 Project coordination meetings • 8.3 Periodical and final reports prepared	• Min. 2 yearly meetings with university authorities at each partner HEIs • number of official agreement sign with partners from industry (min. 5 at each partner HEIs) • periodical and final reports prepared			

Activities: *What are the key activities to be carried out (**grouped in Work packages**) and in what sequence in order to produce the expected results?*	**Inputs:** *What inputs are required to implement these activities, e.g. staff time, equipment, mobilities, publications etc.?*		**Assumptions |& risks** *What pre-conditions are required before the project starts? What conditions outside the project's direct control have to be present for the implementation of the planned activities?*	**How the risks will be mitigated:**
• WP1 • 1.1 Analysis of related courses/programmes and practices at EU universities • 1.2 Analysis of related programmes and practices at partner universities • 1.3 Analysis of market needs • 1.4 Creation of the learning outcomes • WP2 • 2.1 Modernization of existing courses at BSc level • 2.2 Design of new courses at BSc level • 2.3 Design of new courses at MSc level	• Sufficient staff time from program and partner countries • Cat 1: 510 days • Cat 2: 2326 days • Cat 3: 370 days • Cat 4: 575 days • Mobility from program countries to partner countries • Mobility from partner countries to program countries • Mobility from program countries to program countries • • Equipment • 10 computers, softwers, 5 scanners, 5 printers, 5 LCD projectors, 30 Books, Videoconferencing Suite,		• support from the Ministries of Education • shared interest of partners towrads project goals • Available resources for co-funding • -Support from accreditation institution • High responsiveness of partners from industry	

• 2.4. Accreditation of the programme at the partner universities • WP3 • 3.1. Training of partner HEIs staff for current relevant topics in the field of architecture and civil engineering • 3.2 Training of partner HEIs staff in new innovative teaching methods • 3.3 Writing new teaching materials for related courses • 3.4 Developing on-line platform that will be used for teaching process • 3.5 Purchasing necessary literature, equipment and software • WP4 • 4.1 Developing network between the industry	3 Interactive boards - per each partner HEIs • server for online platfrom • -Printing and publishing • reports 1.1, 1.2, 1.3 and 1.4 (4 x 2 progr. x 10 copies = 80 copies) • accreditation documents (2 programmes x 5 copies = 10 copies) • teaching materials (min. 2 publications x 2 programmes by each partner HEIs= 20 publications), • e-courses publishing (min. 10 online courses x 4 programmes = 40 online courses), • student feedback evaluation (2 programmes evaluations) • internal monitoring reports (3 years x 2 reports = 6 reports),			

and the partner universities • 4.2 Creating internship program between partner universities • 4.3 Creating 5 joint projects between HEIs and industry • WP5 • 5.1 Enrolment of new students at all 2 levels of study – administrative procedures • 5.2 Delivering new courses at BSc level • 5.3 Delivering new courses at MSc level • 5.4 Preparation of the report on new programs • -WP6 • 6.1 Creation of procedures for quality control and monitoring • 6.2 Internal quality control activities	• external monitoring report (3 reports) • materials for workshops (min. 6 workshops), open days (min. 6 open days), materials for conferences, stakeholders events • advertising pamphlest (2programmes x 100) • project promo material • materials for coordination meetings			

• 6.3 External quality assurance activities • 6.4 External financial audit • WP7 • 7.1 Establishing Dissemination Plan • 7.2 Setting up and maintaining the project web site • 7.3 Dissemination activities within partner universities • 7.4 Dissemination events with stakeholders • 7.5 Organizing final conference • 7.6 Creation of financial and institutional Sustainability Plan • 7.7 Sustainable cooperation with labour market • - WP8				

• 8.1 Overall Project management and administration • 8.2 Project coordination meetings • 8.3 Preparing periodical and final reports				

Please complete the following work plan.

E.5 Work Plan

On the following pages, please provide your work plan for each year of the proposed project

- *Please use the model provided below.*
- *Please complete a one-page work plan for each project year.*
- *For each year of your proposal, please complete a work plan indicating the deadlines for each outcome and the period and location in which your activities will take place.*
- *If needed, please insert additional rows into the work plan tables.*
- *The same reference and sub-reference numbers as used in the logical framework matrix must be assigned to each outcome and related activities.*

  Examples:

  Activity carried out in the Programme Country: **=** *(E.g. activity in France for two weeks in the first month of the project 2= under M1)*

  Activity carried out in the Partner Country (ies): ***X*** *(E.g., activity in Tunisia for three weeks in the second month of the project: 3X under M2)*

WORKPLAN for project year 1

Activities		Total duration (number of weeks)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Ref.nr/ Sub-ref nr	Title													
1.1	Analysis of related courses/programmes and practices at EU universities	**8**			**=**	**=**								
1.2	Analysis of related programmes and practices at partner universities	**10**		**X**	**X**	**X**								
1.3	Analysis of market needs	**8**			**X**	**X**								
1.4	Creation of the learning outcomes based on the needs from labour market and industry	**10**				**X**	**X**	**X**						
2.1	Modernization of existing courses at BSc level	**8**						**X**	**X**	**X**	**X**	**X**		
2.2	Design of new courses / curricula at BSc level	**14**						**X**	**X**	**X**	**X**	**X**	**X**	**X**
2.3	Design of new courses/ curricula at MSc level	**10**								**X**	**X**	**X**	**X**	**X**
3.1	Training of partner HEIs staff for current relevant topics in the field of architecture and civil engineering	**4**											**=X**	**=X**
3.2	Training of partner HEIs staff in new innovative teaching methods (such as integrated studio approach, mentorship-based learning, etc.)	**4**											**=X**	**=X**
3.5	Purchasing necessary literature, equipment and software	**2**												**X**
4.1	Developing network between the industry and the partner university	**6**				**X**			**X**				**X**	
6.1	Creation of procedures for quality control and monitoring	**6**	**=X**	**=X**	**=X**									
6.2	Internal quality control activities	**6**			**X**				**X**					**X**
6.3	External quality assurance activities	**8**											**= X**	**= X**
7.1	Establishing the dissemination plan	**3**	**=X**	**= X**	**= X**									

7.2	Setting up and maintaining the project Web site	**11**		**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
7.3	Dissemination activities within partner country universities	**2**		**=X**										
7.4	Dissemination events with stakeholders, labour market and local authorities (workshops, info days, etc.)	**3**				**=X**				**=X**				**=X**
7.6	Creation of Financial and institutional sustainability plan	**4**											**=X**	**=X**
8.1	Overall project management and administration	**12**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**
8.2	Project coordination meetings	**4**		**= X**					**= X**					**= X**
8.3	Periodical and final reports prepared	**8**						**= X**						**= X**

WORKPLAN for project year 2

Activities		Total duration (number of weeks)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Ref.nr/ Sub-ref nr	Title													
2.3.	Design of new courses/ curricula at MSc level	**8**	**X**	**X**	**X**	**X**								
2.4.	Accreditation of the programme at the partner universities	**12**							**X**	**X**	**X**	**X**		
3.3.	Writing new teaching materials for related courses	**8**			**X**	**X**	**X**							
3.4.	Developing on-line platform that will be used for teaching process in Master	**20**			**X=**	**X=**	**X=**	**X=**	**X=**	**X=**	**X=**	**X=**	**X=**	**X=**
3.5.	Purchasing necessary literature, equipment and software	**6**	**X**	**X**	**X**									
4.1.	Developing network between the industry and the partner university	**8**		**X**			**X**			**X**			**X**	
4.2.	Creating internship program between partner universities	**10**		**X=**	**X**	**X**	**X**	**X**						
4.3.	Creating 5 joint projects between HEIs and industry (Master thesis)	**2**												**X=**
5.1.	Enrolment of new students at all 2 levels of study – administrative procedures	**2**												**X**
6.2.	Internal quality control activities	**8**		**X**			**X**			**X**			**X**	
6.3.	External quality assurance activities	**8**										**= X**	**= X**	
7.2	Setting up and maintaining the project Web site	**15**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
7.4	Dissemination events with stakeholders, labour market and local authorities (workshops, info days)	**3**				**=X**				**=X**		**=X**		
7.7	Sustainable cooperation with labour market	**6**			**X**			**X**				**X**		
8.1	Overall project management and administration	**12**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**
8.2	Project coordination meetings	**4**						**= X**						**= X**
8.3	Periodical and final reports prepared	**8**						**= X**						**= X**

WORKPLAN for project year 3

Activities		Total duration (number of weeks)	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Ref.nr/ Sub-ref nr	Title													
4.1.	Developing network between the industry and the partner university			**X**				**X**			**X**			**X**
4.3.	Creating 5 joint projects between HEIs and industry (Master thesis)	**18**	**X**		**X**		**X**		**X**		**X**		**X**	
5.1.	Enrolment of new students at all 2 levels of study – administrative procedures	**2**	**X**											
5.2.	Delivering new courses at BSc level at the partner universities	**36**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
5.3.	Delivering new courses at MSc level at the partner universities	**36**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
5.4.	Preparation of the report on new programs	**4**					**X**						**X**	
6.2.	Internal quality control activities	**8**		**8**			**8**			**8**			**8**	
6.3.	External quality assurance activities	**8**										**= X**	**= X**	
6.4.	External financial audit	**4**					**=**	**=**	**=**	**=**	**=**	**=**		
7.5	Organizing Final Conference	**2**												**= X**
7.7	Sustainable cooperation with labour market	**2**	**X**		**X**									
8.1	Overall project management and administration	**12**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**	**= X**
8.2	Project coordination meetings	**4**						**= X**						**= X**
8.3	Periodical and final reports prepared	**8**						**= X**						**= X**

Please complete the information on each work package for your project

E.6 Work packages

Please enter the different project activities you intend to carry out in your project. Make sure that the information in this section is consistent with the project Logical Framework Matrix.

Work package type and ref.nr	**PREPARATION**	**1**
Title	**Current programmes in EU and partner HEIs - State of the Art**	
Related assumptions and risks	**Assumptions** Sufficient human resources (academic staff and authorities) at EU and partner Universities Good coordination and high commitment between project partners Interest by industry to be involved in process of analysis of the labour market needs and creation of learning outcomes A well-planned working programme by host institutions **Risks** Unpredictable changes of relevant bodies at partner country universities	
Description	This WP is essential step in ongoing curriculum development. The analysis represents an articulation of criteria necessary to obtain assessment of educational program. The WP addresses evaluation of existing programmes at partner universities with the purpose to: 1. outline current situation of architectural and civil engineering programme and practices at partner universities 2. provide baseline of information on architectural and civil engineering market in partner countries Further, this is done by curriculum evaluation process in partner countries with the aim to: - Provide set of comprehensive analysis with the summative evaluation on positive and negative aspects of program - Provide means for its ongoing development taking in the account possible risks - Suggest methods of assessing the achievement of goals The final report on analysis of architectural and civil engineering programmes and practices at partner universities will consist of join reports from each partner country. Concluding remarks on analysis of existing programmes will be presented during the workshop 1 in M3 at the University of Maribor. Working teams from the partner countries becomes the driving force for curriculum analysis. Working teams consisting of two academic staff will be formed in each partner university. The final report will identify key issues for curriculum development that contribute to improved architectural and civil engineering education quality in partner countries. Analysis of related courses/programmes and practices at EU universities will be done by EU partners. Two persons from each EU institution will be included in this activity. A report delineates clear philosophy and set of overreaching goals of courses together with instructional resources (physical resources, material and textbooks). Partners from industry involved in the project will provide baseline of information on architectural market structure in partner countries. With the aim to develop responsive curriculum to emerging issues in architectural and civil engineering practice, survey of	

	analysis of market needs will be conducted. This activity will be supported by EU partners and leading experts for market research in each partner country. This activity will be carried out separately in each partner country and comprised in one final report. The formulation of such reports will be the guiding tool that assists in planning of learning outcomes at partner universities. The suggested competences for programs at each partner university will be compatible with the market needs, since involvement of industry together with EU experts is expected to have direct input in creation of these. All these issues will be discuses in workshop 1 organized in M3 with the participants from each institution. During this WP one workshop will be organised in M3 at the University of Maribor. Two participants from each institution will participate in the workshop. Milestone (M5): Recommendations on new BSc and MSc courses, reports prepared by the EU and partner HEIs staff.		
Tasks	ACT 1.1 Analysis of related courses/programmes and practices at EU universities ACT 1.2 Analysis of related programmes and practices at partner universities ACT 1.3 Analysis of market needs ACT 1.4 Creation of the learning outcomes based on the needs from labour market and industry		
Estimated Start Date (dd-mm-yyyy)	01-11-2020	**Estimated End Date (dd-mm-yyyy)**	01-02-2021
Lead Organisation	University of Maribor (Faculty of Civil Engineering, Transportation Engineering and Architecture) - UM (FGPA), Slovenia Co - Leader - Brest State Technical University, Belarus		
Participating Organisation	All institutions		
Costs *Please explain the necessary costs for this WP: What travels are necessary? If equipment is requested, explain why it is required. If subcontracting is necessary, explain why the task cannot be performed by the partner.*	**Total Costs (EUR): 60,292.00** 1. Staff Costs: 36,957.00 EUR 2. Travel Costs: 7,375.00 EUR Travels are necessary for the one workshop that will be organised in M3 at the University of Maribor. Two participants from each institution will participate in the workshop. 3. Costs of Stay: 15,960.00 EUR		

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**1.1.**	
	Title	Report on existing EU HEIs programmes and practices	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☐ Service/Product
	Description	In order to assist the partner countries curriculum development, survey on existing EU HEIs programmes and practices will be launched. The final report will be presented on workshop 1 organised in M3 at the University of Maribor. The report will identify brief description on educational system in EU countries,	

		methodologies used in curriculum implementation, along with guidelines and suggestions that could help partner countries in curriculum development. Report lay outs the scope and content of curriculum, performance standards, learning outcomes, teaching methods, competences, and instructional resources (physical resources and textbooks). Involvement of two professionals from participating EU universities is expected.
	Due date	M2 – M3
	Languages	English
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional ☐ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**1.2.**	
	Title	Report on existing partner HEIs programmes and practices	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☐ Service/Product
	Description	Report on existing partner HEIs programmes and practices will be made. Each partner country will have to prepare separately these reports. The final report will consist of reports from each partner country and will identify key issues that be presented on the workshop. In addition, EU partners must be introduced with the reports from the partner countries before the final discussion on that theme during the workshop 1 in M3 at the University of Maribor. Involvement of two professionals from each partner university as well as two professionals from EU universities is expected. In addition, partners from industry involved in the project will provide baseline of information on architectural market structure in partner countries. Also, this activity will be done separately in each partner country and will be comprised in one final report.	
	Due date	M2 – M3	
	Languages	English	
Target groups	☒ Teaching staff ☐ Students ☐ Trainees		

	☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☐ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**1.3.**	
	Title	Benchmark on market needs	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☐ Service/Product
	Description	All components addressed in reports as products of activity 1.1. and activity 1.2. will create base ground for report of benchmark on market needs. The aim of this report is to help each partner country in the development of competencies to create responsive curriculum to emerging issues in architectural practice. Report will be based on the survey of analysis of market needs. This report will be done with the support of industry, EU partners and leading experts for market research in each partner country. Created matrix of competences will be discussed in one local workshop (LW1) in M3 (before the Workshop 1) in a context of each partner country. Summary of this report will be presented through workshop 1 in M3 at University of Maribor. In this case, competences at each partner country will build on creation of learning outcomes.	
	Due date	M3 – M4	
	Languages	English – Local languages	
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**1.4.**	
	Title	Defined learning outcomes based on the needs from labour market and industry	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☐ Service/Product

	Description	The formulation of reports from activity 1.3. will be the guiding tool that assists in planning of learning outcomes at partner universities for the planned BSc and MSc courses. The suggested competences for programs at each partner university will be compatible with the market needs since involvement of industry together with EU experts is expected to have direct input in creation of these. The learning outcomes will provide context for performance standards with the clearly defined competences of academic staff to ensure implementation of set goals.
	Due date	M4 – M5
	Languages	English
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional ☒ National ☒ International

Work package type and ref.nr	**DEVELOPMENT**	**2**
Title	**Development of new courses in the field of architecture and civil engineering**	
Related assumptions and risks	**Assumptions** High engagement of academic staff Willingness of universities and academic staff to participate Available technical and functional capacity of partner universities Available pool of qualified local stakeholders and business willing to share practices **Risks** Unpredictable changes of relevant bodies at partner country universities Insufficient understanding of curriculum changes and its effects on national level among key decision makers (institute for accreditation, ministry for education etc.) Lack of adequate and continuous support from industry	
Description	After having thorough analysis on Current programmes in EU at partner HEIs - State of the Art that resulted with final reports, new courses in curricula at BSc and MSc is planned to be developed at each partner university. They will be defined through overreaching philosophy of the program that will effectively address relevant practices in architectural education. Involvement of new courses will describe content expectations presenting: - target groups, set of course goals and objectives, intended learning outcomes, content of course, resource materials to ensure program implementation, adequate time for students per course - time spend on learning	

	- number of ECTS credits, admission and specific requirements, suggested instructional techniques for teaching, presented assessment instruments to measure progress **In order to reach continuity of education program that goes in line with labor market needs, this project is treating both, BSc and MSc study programs at partner countries.** There will be modernized and developed **two groups of courses** on BSc and MSc level - **architectural courses** and **civil engineering courses**. Since in the project are included **3 Faculties of Architecture** and **3 Faculties of Civil Engineering** from partner countries list of courses to be modernized and newly created are presented according to these groups and not study programs. According to needs, objectives and structure of study program of partner countries each HEIs will develop certain number of courses from these two groups (architectural and civil engineering) of courses. Number of ECTS credits and status of courses (prerequisite, obligatory or elective) will be defined within the project implementation since institutions from partner countries have different study programs. Moreover, **modernization** and **creation of new of courses** during the project time life will be supported by project activities such as analysis of study programs, benchmark on market needs, defined learning outcomes, visits to participating EU HEIs, trainings, workshops etc. TACEESM is organized in 8 WP and activities are planned according to participant's role, needs and expertise. Two groups of courses (architectural and civil engineering) at BSc and MSc level will be modernized and designed. Based on needs, objectives and structure of program,partner HEIs will develop certain number of courses from these groups. Number of ECTS credits and status of courses will be defined within the project. The revision of BSc and MSc curriculum of partner HEIs will introduce upgrading existing courses or/and design of new courses. The new courses will be officially recognized by University authorities and accredited by the National Agencies at partner HEIs. **10 ARCHITECTURAL courses <u>modernized</u> - BSc and MSc** 1. Computer Literacy in Architecture 2. Architectural Structures 3. Construction material science 4. Architecture 5. Freehand Drawing 6. Contemporary Architectural Discourse 7. Urban Design 8. Architecture Landscape and Technology 9. Multifunctional Space Design 10. Critical Theory/ Culture and Architecture **10 CIVIL ENGINEERING courses <u>modernized</u> - BSc and MSc** 1.Construction materials 2. Introduction to engineering informatics 3. Statics in civil engineering 4. Planning and construction of specific road facilities 5. Construction modelling 6. Reinforced concrete and masonry structures 7. Timber and plastic structures 8. Advanced Structural Analysis 9. Advanced Construction Technology and Management` 10. Civil Engineering Materials **13 ARCHITECTURAL courses <u>designed</u> - BSc and MSc** 1. Professional Practice

	2. Studies in light and materials 3. Ornament Theory and Design 4. Contemporary Architectural Discourse 6. Techno-Sensation Architecture 7. Green Design and Interior 8. BIM Technology 9. Architectural projection of contemporary construction systems 10.Territory Improvement and engineering development of area 11. Sustainable architecture 12. Project management for architects 13. Contemporary methods of preservation of historical environment **10 CIVIL ENGINEERING courses <u>designed</u> - BSc and MSc** 1. Structural Stability 2. Advanced Structural Analysis 3. Construction Machinery and Equipment's 4. Road maintenance and repair 5. Construction plant and equipment 6. Waste management 7. Operations Research and Linear Programming 8 Computer-Aided Design for Construction 9. Applied Hydraulics 10. Actions on Structures International Burch University, Department of Architecture, will modernize 2 courses (architectural group) on BSc level. Further, IBU Architecture will design 10 new courses at BSc and MSc level from which 7 are from architectural group of courses and 3 are from civil engineering group. Technical faculty of University of Bihać, Department of Civil Engineering planned to introduce 3 new courses at BSc level, and 2 new courses at MSc level. In addition, UNBI Civil Engineering will modernize 3 compulsory courses at BSc level and 2 courses at MSc level. All courses are in civil engineering group of subjects. Dzemal Bijedic University of Mostar (UNMO) Civil Engineerinf Faculty (BSc – General, Geodesia; Msc – General, Construction, Urban infrastructure) and Design of interiors (BSc and MSc) will modernize 4 courses in BSc and MSc level. Further on, UNMO will design 6 new BSc and Msc courses from which 4 are architectural and 2 civil engineering courses. National University of Architecture and Construction of Armenia plans to design 6 courses at BSc and MSc Levels. NUACA will design 3 courses (architectural group) at BSc level and 3 courses at MSc level. The Belarussian National Technical University (BNTU) will improve 5 courses (architectural group) at BSc level and 2 courses (civil engineering group) at BSc and MSc level and design 2 civil engineering courses. Brest State Technical University (BrSTU) will introduce 1 new course at BSc level and upgrade 5 courses (civil engineering and architectural group) at BSc and MSc level. Course content is planned to be widely validated by business community with the adequate involvement industry in creation of course content. Effectiveness of the programme content will be further nurture through collaboration with industry and creation of student's internship program at BSc level. The curriculum review and evaluation will be provided to get feedback on relevance and quality of program. Effective curriculum quality check, according to internal quality control procedures on each partner university, examines suggested changes and benefits

	of newly formed program. Final decision on new courses will be discussed on the University Council and Senate separately for each partner country by the M15. To ensure process of recognition/accreditation of new courses/program by the National Accreditation Agency, each partner country will work on all documents needed. Support for this activity will be given from administrative and office for quality control. Under assumption that period of accreditation will take approx. two months this activity could be completed by the end of M22. Following modernization of BSc courses and creation of new courses at BSc and MSc level in M11 workshop 2 will be organized at University G. D'Annunzio - Chieti-Pescara, on which two persons from each institution (partner and EU) will be participate. The process of modernization of existing courses at BSc and MSc level and design of new courses at BSc and MSc level will follow two short visits of partner universities in M6 and M8 (two members from each partner university) to one of EU partners. In that way partner universities, will be introduced to learning and teaching methodologies, form of practical training schemes regarding the modern technologies and real-life cases.		
Tasks	ACT 2.1 Modernization of existing courses at BSc and MSc level ACT 2.2 Design of new courses / curricula at BSc level ACT 2.3 Design of new courses/ curricula at MSc level ACT 2.4. Accreditation of the programme at the partner universities		
Estimated Start Date (dd-mm-yyyy)	01-03-2021	**Estimated End Date (dd-mm-yyyy)**	01-07-2022
Lead Organisation	University G. D'Annunzio - Chieti-Pescara, Italy Co-Leader - University of Bihać (UNBI), BiH		
Participating Organisation	All institutions		
Costs *Please explain the necessary costs for this WP: What travels are necessary? If equipment is requested, explain why it is required. If subcontracting is necessary, explain why the task cannot be performed by the partner.*	Total Costs for DEVELOPMENT - WP2, WP3, WP4, WP5 (EUR): 512,691.00 **Total Costs for WP 2: 104,846 EUR** 1. Staff Costs: 36,786.00 EUR 2. Travel Costs: 11,300.00 EUR The process of modernization of existing courses at BSc level will follow visits of partner universities (two members from each partner university) to one of EU partners for 7 days in M6. Visits will be planned according to partner HEIs needs and different group of courses that they have (architectural and civil engineering). The process of establishment of new courses will follow visits of partner universities (two members from each partner university) in M8 to one of EU partners. In that way partner universities, will be familiar with the infrastructure of EU university needed for implementation of their programmes. Following modernization of BSc courses and creation of new courses at BSc and MSc level in M11 workshop 2 will be organized at University G. D'Annunzio - Chieti-Pescara, on which two persons from each institution (partner and EU) will be participate. 3. Costs of Stay: 26,760.00 EUR 4. Subcontracting Costs: 30,000.00 EUR 5,000.00 EUR for 6 partner HEIs is planned for accreditation of new courses by the national accreditation institution at partner universities		

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**2.1.**	
	Title	Existing 13 courses at BSc and 7 courses at MSc level modernized	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☐ Service/Product
	Description	In total modernization of 13 courses at BSc level and 7 courses at MSc will be pursued at partner universities. Depending on already existing program, each partner university will modernize certain number of courses at BSc and MSc level. Adjustments of existing courses will be design in order to ensure consistence with the new planned BSc and MSc courses. The modernisation will concern upgrading content of existing syllabuses, clearly defining learning objectives and outcomes, new teaching methods, modernization of physical and instructional resources. The process of modernization of existing courses at BSc level will follow visits of partner universities (two members from each partner university) to one of EU partners for 7 days in M6. Visits will be planned according to partner HEIs needs and different group of courses that they have (architectural and civil engineering). Both working groups (architectural and civil engineering) will visit LEIPZIG UNIVERSITY OF APPLIED SCIENCES – HTWK Germany. Architectural working group will visit Faculty of Architecture and Social Sciences – HTWK Leipzig and civil engineering working group will visit Faculty of Civil Engineering – HTWK Leipzig. In that way partner universities, will be introduced to learning and teaching methodologies, form of practical training schemes regarding the modern technologies and real-life cases. This visit will be also referred to the activity from the WP 2.2. Crucial discussion within partner universities representatives (minimum three academic staff from each partner university) will be organized in one local workshop (LW2) in M7 in each partner university with the support of industry. Modernization of existing BSc and MSc courses will be discussed during the workshop 2 organized in M11 at University G. D'Annunzio - Chieti-Pescara which will be attended by two persons from each institution (partner and EU).	
	Due date	M6 – M10	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		

Dissemination level	☒ Department / Faculty ☐ Institution	☒ Local ☐ Regional	☐ National ☐ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**2.2.**	
	Title	New 12 courses at BSc level developed	
	Type	☒ Teaching material ☒ Learning material ☒ Training material	☐ Event ☐ Report ☐ Service/Product
	Description	In total 12 new courses (architectural and civil engineering group of courses) at BSc level will be developed at partner universities. Depending on already existing program, each partner university will introduce certain number of courses at BSc level. Active participants of one local workshop (LW3) in M 8 at each partner university will be academic staff (minimum three academic staff from each partner university) and EU partners. Also, in order to respond to the market needs in the establishment of new courses representatives from industry will be involved as well. The process of establishment of new courses will be reinforced by visit conducted as part of the WP 2.1. in M 6 of partner universities (two members from each partner university) to one of EU partners. In that way partner universities will be familiar with the infrastructure of EU university needed for implementation of their programmes. Values of planned new BSc courses will be discussed during the workshop 2 organized in M11 at University G. D'Annunzio - Chieti-Pescara on which will be attended by two persons from each institution (partner and EU).	
	Due date	M6 – M12	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☐ Institution	☐ Local ☐ Regional	☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**2.3.**	
	Title	New 11 courses at MSc level developed	
	Type	☒ Teaching material ☒ Learning material ☒ Training material	☐ Event ☐ Report ☐ Service/Product

	Description	In total 11 new courses (architectural and civil engineering group of courses) at MSc level will be developed at partner universities. Depending on already existing program, each partner university will introduce certain number of courses at MSc level. New master courses will be planned in order to broaden scope of learning objectives and outcomes with the aim to produce diversity of student profiles by completion of this program. In addition, new courses offer various professional skills to students to become a skilled workforce in order to cope with challenges of the 21 century. The process of establishment of new courses will follow visits of partner universities (two members from each partner university) in M8 to one of EU partners. In that way partner universities, will be familiar with the infrastructure of EU university needed for implementation of their programmes. Developing new master courses will rely on active participation in one local workshop (LW 4) in M9 of academic staff from each partner university (minimum three academic staff from each partner university) and experts from EU universities. Determining courses content and outcomes will be directly related with expected qualifications of students based on market needs. Hence, involvement of industry representatives at each partner university will be of foremost importance. Values of planned new MSc courses will be discussed during the workshop 2 organized in M11 at University G. D'Annunzio - Chieti-Pescara which will be attended by two persons from each institution (partner and EU).
	Due date	M8 – M16
	Languages	English - Local language
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☐ Institution ☐ Local ☐ Regional ☒ National ☒ International	

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**2.4.**	
	Title	Accreditation of new courses by the national accreditation institution at partner universities	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☐ Service/Product
	Description	This process includes accreditation of new BSc and MSc courses. To secure proper accreditation all materials by each partner	

		country must be prepared in line with agency guidelines and with the support of academic staff and Quality office. Depending on the governance of the national higher education system in partner countries necessary steps will be undertaken to ensure recognition/accreditation before the end of the project. Until M19 all steps by each partner university will be conducted to secure that programmes and new courses are successfully recognized/accredited at M22 and that remain as regular study programmes. In accreditation process National Qualifications Framework, University authorities, and relevant national institutions (Ministry of Education) will play a fundamental role. Drawing upon materials sent to the National accreditation agency process of recognition/accreditation of new Master and Bachelor courses/program is expected to be completed in two months, by the end of M22. **Note:** Being aware of possible difficulties in the accreditation process in partner country Bosnia and Herzegovina by the National Accreditation Institution there is possibility to use services of the International Accreditation Agencies.
	Due date	M19 – M22
	Languages	English - Local language
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☒ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☐ Institution ☐ Local ☐ Regional ☒ National ☒ International	

Work package type and ref.nr	**DEVELOPMENT**	**3**
Title	**Capacity building**	
Related assumptions and risks	**Assumptions** Continued engagement of academic staff at partner universities in training activities High support of EU institutions in training programs for academic staff at partner universities Adequate allocation of physical, financial and human resources by partner institutions **Risks** Academic staff turnover at all partner universities Uneven skills among academic staff	
Description		

	The ultimate goal of this working package is capacity improvement at partner universities that will support educational process and foster quality of teaching. To support capacity building various activities are planned to be implemented. A central purpose if this work package is to strength capacity building at each partner university through implementation of various activities. In order to respond to growing demand for relevant teaching techniques, professional development activities will be organized. Professional development of academic staff (two from each partner university) will be carried out in M12 at University of Maribor. Training will facilitate basic concepts of teaching of current relevant topics in the field of architecture and civil engineering using innovative teaching methods to improve teacher's practices. The professional development of academic staff will contribute to better learning outcomes of newly planned courses. Knowledge gained on training will be shared with all members of academic staff in partner universities. The training for professional development of academic staff will be organized with the accent on the new innovative methods of teaching. The training for academic staff that will be organized is matter of inventible teaching methods in order to achieve the goals and objectives envisioned for curriculum development. Professional dialog among academic staff on relevant topics will result with the teaching materials needed for new courses. In line with above mentioned goals, on-line platform for teaching process of master program will be developed. On-line platform will open various possibilities of technology enhanced learning and will act as a base for instructors and students with the embedded content, diversified teaching materials, resource hub etc. On-line platform will provide chance for self-learning and will offer students-controlled learning process with the accessibility of all materials. In the end, it is not expected that on-line platform will substitute instructor's role in the teaching process but in contrary that it will be additional tool in achieving better quality of education for master students. All parties of the project, partner and program countries (two persons from each institution) will be included in creation of online platform. The structure of on-line platform as well as necessary teaching materials will be discussed and defined on the workshop 3 in M14 organized by National Polytechnical University of Armenia Foundation – NPUA. Two persons from each institution will attend this workshop. By modernizing laboratories, equipment and software, and by expanding and purchasing literature at each partner university new environment for teaching will be established. These resources will aid students in carrying out their teaching activities. At some level, newly formed teaching setting will enforce innovative teaching environment. On the workshop 3 in M14 organized by National Polytechnical University of Armenia Foundation – NPUA list of necessary literature, equipment and software will be defined.		
Tasks	ACT 3.1 Training of partner HEIs staff for current relevant topics in the field of architecture and civil engineering ACT 3.2 Training of partner HEIs staff in new innovative teaching methods (such as integrated studio approach, mentorship-based learning, etc.) ACT 3.3 Writing new teaching materials for related courses ACT 3.4 Developing on-line platform that will be used for teaching process ACT 3.5 Purchasing necessary literature, equipment and software		
Estimated Start Date (dd-mm-yyyy)	01-08-2021	**Estimated End Date (dd-mm-yyyy)**	01-09-2022

Lead Organisation	University of Maribor (Faculty of Civil Engineering, Transportation Engineering and Architecture) - UM (FGPA), Slovenia Co – Leader - National Polytechnical University of Armenia Foundation – NPUA
Participating Organisation	All institutions
Costs *Please explain the necessary costs for this WP: What travels are necessary? If equipment is requested, explain why it is required. If subcontracting is necessary, explain why the task cannot be performed by the partner.*	Total Costs for DEVELOPMENT - WP2, WP3, WP4, WP5 (EUR): 512,691.00 **Total Costs for WP 3: 255,929.00 EUR** 1. Staff Costs: 24,279.00 EUR 2. Travel Costs: 13,570.00 EUR The training (T1) that will be organized in M12 at University of Maribor will cover training of partner HEIs staff (2 staff members) for current relevant topics in the field of architecture and civil engineering together with the training of partner HEIs staff in new innovative teaching methods (such as integrated studio approach, mentorship-based learning, etc.) Content and major elements of material for each new course at partner universities will be discussed during the workshop (W3) in M14 at National Polytechnical University of Armenia Foundation – NPUA. Also, on the W3 the structure of on-line platform will be discuses and defined. Two persons from each institution will attend this workshop. 3. Costs of Stay: 28,080.00 EUR 4. Equipment Costs: 190,000.00 EUR 6 partner HEIs will receive 30,000.00 EUR for creation of new educational environment (equipment, software, literature). Due to different role of one partner HEIs, P9 NPUA will receive 10,000.00EUR for equipment necessary to supports project activities.

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**3.1.**	
	Title	Trained partner HEIs staff for current relevant topics in the field of architecture and civil engineering	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☒ Event ☐ Report ☐ Service/Product
	Description	Professional development of academic staff (two from each partner university) will be carried out in M12 at University of Maribor. Training will facilitate basic understanding of content of new courses and teaching approach of current relevant topics in the field of architecture and civil engineering. The professional development of academic staff will contribute to better learning outcomes of newly planned courses. Knowledge gained on training will be shared with all members of academic staff in partner universities. The training (T1) that will be organized in M12 at University of Maribor will cover training of partner HEIs staff for current relevant topics in the field of architecture and civil engineering together with the training of partner HEIs staff in new innovative teaching methods (such as integrated studio approach, mentorship-based learning, etc.)	
	Due date	M11 – M12	

	Languages	English - Local language
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☒ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☒ Institution ☐ Local ☐ Regional ☐ National ☒ International	

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**3.2.**	
	Title	Trained partner HEIs staff in new innovative teaching methods (such as integrated studio approach, mentorship-based learning, etc.)	
	Type	☒ Teaching material ☒ Learning material ☒ Training material	☐ Event ☐ Report ☐ Service/Product
	Description	In order to respond to growing demand for relevant teaching techniques, professional development activities will be organized. The training for professional development of academic staff (two from each partner university) will be organized with the accent on the new innovative methods of teaching. The training for academic staff that will be organized is matter of inventible teaching methods in order to achieve the goals and objectives envisioned for curriculum development. Knowledge gained on training will be shared with all members of academic staff in partner universities. The training (T1) that will be organized in M12 at University of Maribor will cover training of partner HEIs staff for current relevant topics in the field of architecture and civil engineering together with the training of partner HEIs staff in new innovative teaching methods (such as integrated studio approach, mentorship-based learning, etc.)	
	Due date	M11 – M12	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		

Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☐ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**3.3.**	
	Title	Teaching materials developed and published	
	Type	☒ Teaching material ☒ Learning material ☒ Training material	☐ Event ☐ Report ☐ Service/Product
	Description	Professional dialog among academic staff on relevant topics will resulted with the teaching materials needed for the new courses at BSc and MSc level at partner universities. This material will support planned curriculum implementation and will be designed until M17. Process of creation of materials will include involvement of all participants of the project. Content and major elements of material for each new course at partner universities will be discussed during the workshop (W3) in M14 at National Polytechnical University of Armenia Foundation – NPUA. Also, on the W3 the structure of on-line platform will be discuses and defined. Two persons from each institution will attend this workshop.	
	Due date	M15 – M17	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**3.4.**	
	Title	On-line platform for teaching process	
	Type	☒ Teaching material ☒ Learning material ☐ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	On-line platform for teaching process will be developed. On-line platform will open various possibilities of technology enhanced learning and will act as a base for instructors and students with the embedded content, diversified teaching materials, resource hub etc. On-line platform will provide chance for self-learning and will offer student-controlled learning process with the accessibility of all materials. In the end, it is not expected that	

		on-line platform will substitute instructor's role in the teaching process but in contrary that it will be additional tool in achieving better quality of education of master students. In creation of online platform all parties of the project, partner and program countries (two persons from each institution) will be included. The structure of on-line platform will be discuses and defined on the workshop (W3) organized in M14 at National Polytechnical University of Armenia Foundation – NPUA.
	Due date	M15 – M24
	Languages	English - Local language
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☐ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☐ Department / Faculty ☒ Institution ☐ Local ☐ Regional ☒ National ☐ International	

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**3.5.**	
	Title	Literature, equipment and software purchased	
	Type	☒ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	By modernizing laboratories, equipment and software, and by expanding and purchasing literature at each partner university, new environment for teaching will be created. These resources will aid students in carrying out their teaching activities. At some level, newly formed teaching setting will enforce innovative teaching environment. Literature, equipment and software list will be finalized in the workshop 3 in M14 at National Polytechnical University of Armenia Foundation – NPUA. Each partner university will be responsible for tendering and purchasing agreed materials. Since, the planned teaching setting will be needed for accreditation process all materials are planned to be set up by M15.	
	Due date	M12 – M15	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☐ Administrative staff		

	☒ Technical staff ☐ Librarians ☐ Other
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*
Dissemination level	☐ Department / Faculty ☒ Institution ☐ Local ☐ Regional ☒ National ☐ International

Work package type and ref.nr	**DEVELOPMENT**	**4**
Title	**University Enterprise Collaboration**	
Related assumptions and risks	**Assumptions** Willingness of industry and universities to understand core objectives and to actively enforce them through join projects Effective share experience and knowledge exchange between industry and the partner universities High responsiveness of partners from industry to projects with universities **Risks** Cultural difference between industry and universities sectors Intellectual property rights Unrealistic expectations from university leaders	
Description	The main objective of this working package is to create sustainable and multi-dimensional chain of collaboration between industry and the partner universities. Partner universities will operate within specific domain fostering skill development environment based upon market needs and will work on generation of knowledge that in the end could offer quality enterprising workface. Further, such linkages will be secured through close cooperation that will improve information flows between industry and universities. Mutually beneficial cooperation will be focused on various activates to take advantage of synergy between industry and universities and on that way, foster economic development. Developing network between industry and partner universities may expand the area of operation and create new possibilities for each partner university. This network could help students as well to academicians from HEIs to be engaged in research partnerships, internship programs and many other informal interactions. Each partner university will respond thoughtfully in identifying and establishing partnership with companies that will be involved in project development and internship programmes. Partner universities will have common database of companies that will give possibility to overview relationships and preferences for collaboration of each company. In the end mode of collaboration or structure of relationships will be clearly defined. Further, collaboration between partner universities will be fostered through internship program. As an integral part of each partner university curriculum, internship program will be developed based upon already created network between industry and partner universities. Internship programs will have distinct focus on student's involvement in real industry environment. Internship learning activities are essential in order to provide practical experience and qualification of students that could comply with industry requirements after finishing their studies.	

	BSc program will have 60 days of summer practice at each partner university. Number of credits and general procedure (scope of work of students, expectations from company, final evaluation of internship etc.) each partner university will define with the help of program universities. Final internship program is expected to be finished and presented in the workshop (W4) in M17 at University of Malaga. As long-term collaboration between HEIs and industry 5 joint projects are planned to be developed. This activity offers possibility to sustain relationships established through networking. Research – based collaboration with industry will be created through Master program at partner universities. Focus of collaborative graduate projects -master thesis will be to identity and evaluate area of interest of companies in order to bring innovative ideas through collaboration with universities. These projects could lead with transfer of university generated projects to industry environment their commercialisation etc. Research partnership will provide a multifaceted platform where companies could create" innovative capacity in the long run, building upon the capabilities, methods and tools of universities." (Koschatzky and Stahlecker, 2010). Within this work package, one workshop (W4) in M17 at University of Malaga will be organized. Two members from each institution are expected to be involved. EU partners will share their experience on different modes of collaboration with industry, structure of internship programs and joint projects with industry.		
Tasks	ACT 4.1 Developing network between the industry and the partner university ACT 4.2 Creating internship program between partner universities ACT 4.3 Creating 5 joint projects between HEIs and industry (Master thesis)		
Estimated Start Date (dd-mm-yyyy)	01-11-2021	**Estimated End Date (dd-mm-yyyy)**	01-09-2023
Lead Organisation	University of Malaga, Spain Co – Leader - UNMO, Mostar, BiH		
Participating Organisation	All institutions		
Costs *Please explain the necessary costs for this WP: What travels are necessary? If equipment is requested, explain why it is required. If subcontracting is necessary, explain why the task cannot be performed by the partner.*	Total Costs for DEVELOPMENT - WP2, WP3, WP4, WP5 (EUR): 512,691.00 **Total Costs for WP 4: 53,447.00 EUR** 1. Staff Costs: 24,062.00 EUR 2. Travel Costs: 11,385.00 EUR Within this work package, one workshop (W4) in M17 at University of Malaga will be organized. Two members from each institution are expected to be involved. EU partners will share their experience on different modes of collaboration with industry, structure of internship programs and joint projects with industry. 3. Costs of Stay: 18,000.00 EUR		

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**4.1.**
	Title	Developed network between the industry and the partner universities

	Type	☐ Teaching material ☐ Learning material ☐ Training material	☒ Event ☐ Report ☐ Service/Product
	Description	Developing network between industry and partner universities may expand the area of operation and create new possibilities for each partner university. Mutually beneficial cooperation will be focus on various activates to take advantage of synergy between industry and universities. This network could help students as well as academicians from HEIs to be engaged in research partnerships, internship programs and many other informal interactions. Each partner university will respond thoughtfully in identifying and establishing partnership with companies (min. 5 companies) that will be involved in project development and internship programmes. Partner universities will have common database of companies that will give possibility to overview relationships and preferences for collaboration of each company. In the end mode of collaboration or structure of relationships will be clearly defined. The modes of collaboration will be discussed during the workshop 4 in M17 at University of Malaga. Two members from each institution are expected to be involved. EU partners will also share their experience on structure of internship programs and joint projects with industry.	
	Due date	M36	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☒ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☒ Institution	☒ Local ☐ Regional	☐ National ☐ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**4.2.**	
	Title	Internship program at partner universities created	
	Type	☒ Teaching material ☒ Learning material ☒ Training material	☒ Event ☐ Report ☐ Service/Product
	Description	Collaboration between partner universities will be fostered through internship program. As an integral part of each partner university curriculum, internship program will be developed based upon already created network between industry and partner universities. Internship programs will have distinct focus on student's involvement in real industry environment.	

		Internship learning activities are essential to provide practical experience and qualification of BSc students that could comply with industry requirements upon completion of their studies. BSc program will have 60 days of summer practice at each partner university. Number of credits and general procedure (scope of work of students, expectations from company, final evaluation of internship etc.), each partner university will define with the help of program universities. Final internship program is expected to be finished and presented in the workshop 4 in M17 at University of Malaga. Two members from each institution are expected to be involved. EU partners will share their experience on structure of Internship programs but also on joint projects with industry from act 4.3.
	Due date	M14 – M18
	Languages	English - Local language
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional ☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**4.3.**	
	Title	5 joint projects between HEIs and industry (Master thesis) created	
	Type	☒ Teaching material ☒ Learning material ☒ Training material	☐ Event ☐ Report ☐ Service/Product
	Description	As long-term collaboration between HEIs and industry 5 joint projects are planned to be developed. This activity offers possibility to sustain relationships established through networking. Different modes of joint projects will be discussing during the workshop 4 in M17 at University of Malaga. Two members from each institution are expected to be involved. EU partners will share their experience in joint projects with industry but also on structure of Internship programs. Research – based collaboration with industry will be created through Master program at partner universities. Focus of collaborative graduate projects - master thesis will be to identity and evaluate area of interest of companies in order to bring innovative ideas through collaboration with universities. These projects could lead with transfer of university generated projects to industry environment, their commercialisation etc. Research partnership will provide a multifaceted platform where companies could create “innovative capacity in the long run,	

		building upon the capabilities, methods and tools of universities." (Koschatzky and Stahlecker, 2010).
	Due date	M24 – M36
	Languages	English - Local language
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. (Max. 250 words)	
Dissemination level	☒ Department / Faculty ☒ Institution ☐ Local ☐ Regional ☒ National ☒ International	

Work package type and ref.nr	**DEVELOPMENT**	**5**
Title	**Implementation of new programmes**	
Related assumptions and risks	**Assumptions** Support of institutions Increased interest of target groups for study programs Knowledgeable academicians to lead education process Adequate responsiveness of EU staff to transfer knowledge High engagement of industry **Risks** Academic staff turnover at partner universities	
Description	The main aim of this work package is implementation of new courses at partner HEIs with the support of EU countries and industry. Administrative policies and procedures for admission of new BSc and MSc program will commence in M24 - M25. All requirements by each partner HEIs will be specified regarding students' academic requirements, proof of language proficiency etc. The revision of the BSc and MSc curriculum of each partner university will introduce some changes in terms of upgrading already existing courses and insertion of new courses. Newly created education environment will fully support performance of new courses and in that sense help academicians to transfer their knowledge to students in the best manner. The quality within BSc and MSc curriculum will be enforced by involvement of EU partners (two weeks of teaching) and industry, which will become integral part of some courses. New courses delivered at BSc and MSc level will encompass relevant and innovative topic and will be delivered to students at partner HEIs through collaborative work of academicians from partner universities, EU partners (two weeks of teaching) and active involvement of industry.	
Tasks	ACT 5.1 Enrolment of new students at all 2 levels of study – administrative procedures ACT 5.2 Delivering new courses at BSc level at the partner universities ACT 5.3 Delivering new courses at MSc level at the partner universities	

	ACT 5.4 Preparation of the report on new programs		
Estimated Start Date (dd-mm-yyyy)	01-09-2022	**Estimated End Date (dd-mm-yyyy)**	01-09-2023
Lead Organisation	LEIPZIG UNIVERSITY OF APPLIED SCIENCES – HTWK Leipzig, Germany Co-Leader – The Belarussian National Technical University (BNTU)		
Participating Organisation	All institutions		
Costs *Please explain the necessary costs for this WP: What travels are necessary? If equipment is requested, explain why it is required. If subcontracting is necessary, explain why the task cannot be performed by the partner.*	Total Costs for DEVELOPMENT - WP2, WP3, WP4, WP5 (EUR): 512,691.00 **Total Costs for WP 5: 82,519.00 EUR** 1. Staff Costs: 34,594.00 EUR 2. Travel Costs: 11,205.00 EUR Within this work package, one workshop (W4) in M17 at University of Malaga will be organized. Two members from each institution are expected to be involved. EU partners will share their experience on different modes of collaboration with industry, structure of internship programs and joint projects with industry. 3. Costs of Stay: 36,720.00 EUR		

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**5.1.**	
	Title	New students at all 2 levels of study enrolled – administrative procedures	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☒ Event ☐ Report ☐ Service/Product
	Description	Administrative policies and procedures for admission of new BSc and MSc program will commence in M24 - M25. All requirements by each partner HEIs will be specified regarding students' academic requirements, proof of language proficiency etc. In addition, requirements for international students will be also considered in terms of proving their financial ability. Initial review of student's applications will be done by admission committee within the Department and make final admission decision.	
	Due date	M24 – M25	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☒ Administrative staff ☐ Technical staff ☐ Librarians ☒ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☒ Institution	☒ Local ☐ Regional	☐ National ☐ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**5.2.**	
	Title	New 8 courses delivered at BSc level at partner universities	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☒ Event ☐ Report ☐ Service/Product
	Description	The revision of the BSc curriculum of each partner university will introduce some changes in terms of upgrading already existing courses and insertion of new courses. Newly created education environment will fully support performance of new courses and in that sense help academicians to transfer their knowledge to students in the best manner. The quality within BSc curriculum will be enforced by involvement of EU partners (two weeks of teaching) and industry, which will become integral part of some courses.	
	Due date	M25 – M36	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**5.3.**	
	Title	New 20 courses delivered and offered at the MSc level at partner universities	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☒ Event ☐ Report ☐ Service/Product
	Description	The aim of this working package is to enhance quality of master education at partner universities with the new Master program in third year of project implementation. New courses delivered at MSc level will encompass relevant and innovative topic and will be delivered to students at partner HEIs through collaborative work of academicians from partner universities, EU partners (two weeks of teaching) and active involvement of industry.	
	Due date	M25 – M36	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☒ Students		

	☐ Trainees ☐ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*
Dissemination level	☒ Department / Faculty ☒ Institution ☐ Local ☐ Regional ☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**5.4.**	
	Title	Evaluation report on new implemented courses	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☐ Service/Product
	Description	The focus of this working package is to help to evaluate results achieved by new BSc and MSc programmes and in the end to successfully summarize all results to successfully implement recommendations given by committee at each partner university. The report will be prepared by academic staff at each partner university. The evaluations' strongest prospect is to support academicians that by completion of courses in the process of revision of course content and employed teaching methods have insight in to the feedback of students. Student feedback will be evaluated thought he questionnaires. The particular attention of evaluation is to measure effectiveness of methods used for teaching.	
	Due date	M29 - M35	
	Languages	English - Local language	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☒ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☒ Institution ☐ Local ☐ Regional ☒ National ☒ International		

Work package type and ref.nr	**QUALITY PLAN**	**6**
Title	**Quality Control and Monitoring**	

Related assumptions and risks	**Assumptions** Students will be involved and will support the activities proposed by the project Technical and administration staff will be helpful during the project and will provide the representative of the institution with all required information Top management will be involved in the process of controlling and monitoring the progress of project and be fully supportive The infrastructure and technical support will be cooperative and will give the essential help and support required External audits and Internal quality monitors are available **Risks** Low interest from private professional sector in the project Lateness due to the complication of paperwork in partner countries
Description	Quality plan is a type of work that lasts as the project and will be followed and coordinated by the LEIPZIG UNIVERSITY OF APPLIED SCIENCES – HTWK, Germany. The aim is to ensure quality assurance and control monitoring system that complies with the European Association for Quality Assurance in Higher Education (ENQA) standards and guidelines. In order to ensure better sustainability and higher level of confidence from the potential prospective students, the Quality Control and monitoring of this project and it individual activities and Work Packages is carefully prepared, developed and followed. To achieve better quality control and monitoring, the staff hired for performing these duets should be highly qualified for examining the activities' quality and to report precisely about the troubles or problems. The first initiative meeting, the elected members of SC with the PM will select the External Quality Team (EQT) and will clearly explain to them the set of expectations. The team will be formed from two experts from EU institutions that are not involved in the project. On the second meeting in the M3 at the EQT the procedures of Quality Control and Monitoring will be presented to OT and PM. The main aims of the EQT is the assure whether: - The new syllabi include the developed intended learning outcomes; - The students and professional representatives from are involved in the syllabi design; - The evaluation of the curriculum and the content of the program are reviewed by all institutions and stakeholders in the project, and whether their suggestions and notes were taken into consideration; - The specific requirements and needs of individual institution have been taken into consideration; - Resources regarding teaching and lecturing to teachers and students are available; - The Universities authorities and Higher Education Ministry have adopted the new designed program and courses; - The students' progress is positive. At the level of each partner institution, an Internal Team for Quality Control and Monitoring will be formed with the aim to prepare all needed intermediate reports and present them to the EQT, SC and PM. The Internal Quality Control and Monitoring team is comprised of one Assistant Professor, one student, and one expert and representative of the Industry. Financial reports are part of the intermediate reports (every 6 months), and will be also prepared by the team and presented to EQT, SC and PM. In the Meetings of Coordination, the reports of EQT and Internal Quality Control and Monitoring team will be discussed by the SC and PM in order to determine potential problems and resolve them. All reports prepared by the External team and intermediates reports will be discussed at the SC meetings. Based on these reports, potential problems will be identified and solved during the project implementation.

Tasks	QPLN 6.1 Creation of procedures for quality control and monitoring QPLN 6.2 Internal quality control activities QPLN 6.3 External quality assurance activities QPLN 6.4 External financial audit		
Estimated Start Date (dd-mm-yyyy)	01-11-2020	**Estimated End Date (dd-mm-yyyy)**	01-08-2023
Lead Organisation	LEIPZIG UNIVERSITY OF APPLIED SCIENCES – HTWK Leipzig, Germany		
Participating Organisation	All institutions		
Costs *Please explain the necessary costs for this WP: What travels are necessary? If equipment is requested, explain why it is required. If subcontracting is necessary, explain why the task cannot be performed by the partner.*	**Total Costs (EUR): 68,888.00** 1. Staff Costs: 34,088.00 EUR 2. Travel Costs: 6,840.00 EUR Each year of the project, the EQT will visit the partner institutions and make a report that will include the evaluation of the individual progress of each. They will visit each partner institution in the M12, M24 and M35. 3. Costs of Stay: 12,960.00 EUR 4. Subcontracting Costs: 15,000.00 EUR External financial audit		

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**6.1.**	
	Title	Quality control mechanism created	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☒ Service/Product
	Description	The system of quality control and the report contents will be developed by the EQT, and will be presented to the OT and PM. The guidelines given by the EQT will be explained to the Internal Quality Control and Monitoring Team, so they can prepare their reports according to the given set of guides. The EQT will develop rulebook in which the criteria of the quality control, all procedures required for controlling and monitoring, and the regulations that need to be followed while conducting the reports are explained. In the rulebook, the role of each academic staff, administrative staff, students, and industry's representatives will be given and explained.	
	Due date	M1 - M3	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☒ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		

Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**6.2.**	
	Title	Internal quality assurance reports	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☐ Service/Product
	Description	The Internal Quality Control and Monitoring Team will prepare reports within the institution they are acting in front of it, and will be present it to EQT, SC and PM in the Coordinating meeting. Reports are prepared in accordance to the rulebook and guidelines given by the EQT and will be related to the syllabi, the course materials, the staff progress and involvement, students' involvements, University top management involvements, and the financial report about the project. These reports will be presented starting from the 3rd meeting and until the 12th meeting. Reports based on the internal quality procedures, involving evaluation of syllabi, course material, staff training, portal, by students / staff / administration / stakeholders, will be Delivered on M7, M12, M14, M24, M36. Financial reports will also be included and sent to the SC and project coordinator.	
	Due date	M35	
	Languages	English	
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**6.3.**	
	Title	External quality assurance reports	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☐ Service/Product
	Description	The team of External Quality Control and Monitoring EQT will prepare the external reports and evaluation of the project progress and goals achieved. The team will be moving to the partner institutions included in this project to monitor the work and give instructions to the Internal Quality Control and Monitoring Teams. Each year of the project, the EQT will visit the partner institutions and make a report that will include the	

		evaluation of the individual progress of each. They will visit each partner institution in the M12, M24 and M35. Their evaluation and report will serve as checkpoint for the institutions involved and the project. Their reports will be regarding the financial situation, the development of the curricula and its implementation, and the overall progress of the project.
	Due date	M35
	Languages	English
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☐ Local ☒ National ☒ Institution ☐ Regional ☒ International	

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**6.4.**	
	Title	External financial audit	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☐ Service/Product
	Description	The Grant Applicant will suggest an organization specialized in preparing financial reports and audit on the SC coordination meeting. The External financial audit will be appointed after the meeting of SC in M22. The External Financial Audit will deliver the report and will present it in the M29 to SC. This report will be part of the final report that is to be sent to the Erasmus + Programme office. External financial audit will be organised at coordinating institution. This report will be a part of the Final project report that will be sent to the EACEA. External financial audit will be realised with aim to ensure quality of the financial report. This activity will be sub-contracting.	
	Due date	M29 – M34	
	Languages	English	
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☒ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		

Dissemination level	☐ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☐ National ☒ International

Work package type and ref.nr	**DISSEMINATION & EXPLOITATION**	**7**
Title	**Dissemination & Sustainability**	
Related assumptions and risks	**Assumptions** Universities top management will be supportive and will endorse the work Industry and private professional sector will be interested in taking a part in the project The academic staff in the included Universities, and that are not involved in the project, will be interested in supporting and helping their universities to success in such project to enhance their reputations **Risks** Low media interest regarding educational programs	
Description	All activities related to dissemination will start with the kick off of the project and will last till its end. These activities will be performed by all institutions involved in this project. Dissemination of the project will aim to: - Increase the interest of wide public about the project and its deliverables and goals, - Increase the number of potential students, - Increase the interest of professionals for getting higher education by the EU standards. The target population is: - High-school students, - Bachelor students from different Universities, - Students from involved institutions, but different study programs, - Architects and Engineers working in the Construction Industry, - Researchers from Universities that are not involved in the project, - Academic staff from universities that are not involved in the project, - Architectural and Civil Engineering companies, - Municipalities and governmental agencies. The steps in the dissemination work package are: - Developing the web site of the project: This action will be a duty of the International Burch University and will be developed immediately after the kick-off of the project. The draft web site design will be presented to the 2nd coordination meeting to the SC and PM. - Each involved institution will elect one member that will have access to the web site and will be responsible for updating information regarding the project. However, in order to filter information given by the representative of each institution, the SC and PM will elect one member among all representatives that will approve new posts and news. - The representative of each institution for the Dissemination WP will make contact with Industry representatives, Academic staff from other universities, students from other universities, and high-schools, and inform them about the project and its goals. - In order to make the draft version of the study program, an introductory survey will take a place within a workshop, where industry representatives, students, academic staff, and other stakeholders will answer questions regarding courses required to be in the program. Results of the survey and workshop will be presented to the SC and PM on 2nd meeting. After that, every 4 months, until the M22, Workshops will be held at partner countries' universities and target population will participate in order to prepare quality program.	

	- National Polytechnical University of Armenia Foundation – NPUA assigned by the Grant Applicant will develop an interactive portal that will be updated by different working groups during the project and according the activities done. This portal will be opened for involved parties in the project where they can follow the progress and experiences of other institutions. - The National Polytechnical University of Armenia Foundation – NPUA assigned by the Grant Applicant will develop another portal for sponsors, which will contain offers and will be important part of the project progress and finance. - In the M18, the pilot program will be given to the stakeholders and the target population to study it and to give their feedback by the representatives of each institution. - The final version of the program will be finalized in the M24 and will be signed on the SC and PM coordination meeting. The final version will be announced on a press conference that will be held at IBU and the conference later will be translated to all local languages of institutions involved. After the main conference, set of individual conferences will be held by each institution to introduce the media to the program agreed on. - During the final month of the project, another set of press conferences will be held in partner countries to introduce the lab, working place, first outcomes and results achieved after one year of running the program. - A brochure with promotion material in digital and printed version will be distributed to the target population when the program is adopted and finalized. The dissemination plans will be developed, coordinated and presented by the team formed with a representative of each institution involved and representatives from the industry and target populations. Plans will be analysed, discussed and finalized by the SC and PM at the coordination meetings.		
Tasks	DISS 7.1 Establishing the dissemination plan DISS 7.2. Setting up and maintaining the project Web site DISS 7.3 Dissemination activities within partner country universities DISS 7.4 Dissemination events with stakeholders, labour market and local authorities (workshops, info days, etc.) DISS 7.5 Organizing Final Conference EXP 7.6 Creation of Financial and institutional sustainability plan EXP 7.7 Sustainable cooperation with labour market		
Estimated Start Date (dd-mm-yyyy)	01-11-2020	**Estimated End Date (dd-mm-yyyy)**	01-09-2023
Lead Organisation	IBU Architecture, Sarajevo, BiH Co-Leader - National University of Architecture and Construction of Armenia Foundation, NUACA		
Participating Organisation	All institutions		
Costs *Please explain the necessary costs for this WP: What travels are necessary? If equipment is requested, explain why it is required. If subcontracting is necessary, explain why the task cannot be performed by the partner.*	**Total Costs (EUR): 72,135.00** 2. Travel Costs: 22,735.00 EUR Travels necessary for planned dissemination and exploitation activities. Among others, during the M36, there will be organized two final conferences, one in National University of Architecture and Construction of Armenia Foundation, NUACA in Yerevan and another at International Burch Univeristy in Sarajevo, where the achievements of the project will be presented, and the future steps are displayed. At the conferences, the representatives of institutions will be present and will take part in presenting the results at their university. 3. Costs of Stay: 44,400.00 EUR 5. Subcontracting Costs: 5,000.00 EUR External transfer for the final conference		

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**7.1.**	
	Title	Establishing the dissemination plan	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	The dissemination plan will be discussed in the 1st SC meeting, and conclusions of the meeting will be processed into concrete points of action. The dissemination plan will be distributed to all involved parties by their representative in the SC. The plan will contain the step-by-step guide of all actions, starting from preparing the Web site of the project, to the responsibilities of each partner institution. The way of adding news, controlling and approving them is part of the step-by-step guide that will be part of the plan.	
	Due date	M1 – M3	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☐ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**7.2.**	
	Title	Setting up and maintaining the project Web site	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	In the 2nd coordination meeting, the draft of the Web site design will be presented to the members of SC and to the PM. After the meeting, the final design will be approved, and the responsibilities of each Individual institution will be explained. Issues regarding maintaining of the Web site will be done by National Polytechnical University of Armenia Foundation – NPUA. Approval of news and information posted on the site is the responsibility of International Burch University.	
	Due date	M2 – M36	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☒ Administrative staff		

	☒ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☐ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☐ National ☐ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**7.3.**	
	Title	Dissemination activities within partner country universities	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	After the 1st coordination meeting, and the approval of the dissemination plan, activities of the plan will be divided in groups and shared among the partner country's universities. Each Partner Country University will have set of activities that they are responsible for, and their representative will present the progress and difficulties on the coordination meetings further.	
	Due date	M2	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☐ Department / Faculty ☒ Institution	☐ Local ☐ Regional	☒ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**7.4.**	
	Title	Dissemination events with stakeholders, labour market and local authorities organised (workshops, info days, etc.)	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	Starting from the M4, every 4 months until the M22, Workshops will be held at partner countries' universities and target population will participate in order to prepare quality program but also one member from EU. Within six workshops organized for target population at partner countries, two workshops will be attended by 4 members from program countries and representatives from industry sector.	

		One workshop will be organized at The Belarussian National Technical University (BNTU) in Minsk that will be attended by representatives from partner universities from Yerevan and Brest, 2 members from Pescara and 2 from Leipzig and respresentatives from industry from Yerevan and Minsk. Second workshops will be organized at International Burch Univeristy in Sarajevo that will be attended by representatives from University from Bihac and University of Mostar, 2 members from Malaga, 2 from Leipzig and industry representatives from Sarajevo and Bihac. In the M18, the pilot program will be given to the stakeholders and the target population to study it and to give their feedback by the representatives of each institution.
	Due date	M4, M8, M12, M16, M20, M22
	Languages	English - local languages
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☐ Department / Faculty ☐ Local ☐ National ☐ Institution ☐ Regional ☐ International	

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**7.5.**	
	Title	Final Conference organised	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☒ Event ☐ Report ☐ Service/Product
	Description	The final version of the program will be finalized in the M24 and will be signed on the SC and PM coordination meeting. The final version will be announced on a press conference that will be held at International Burch University, and the conference later will be translated to all local languages of institutions involved. After press conference, two main conferences will be held at Yerevan and Sarajevo to introduce the media to the program agreed on. During the M36, there will be organized two final conferences, one in National University of Architecture and Construction of Armenia Foundation, NUACA in Yerevan and another at International Burch Univeristy in Sarajevo, where the achievements of the project will be presented, and the future steps are displayed. At the conferences, the representatives of institutions will be present and will take part in presenting the results at their university.	

	Due date	M24, M36
	Languages	English – Local languages
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☐ Local ☒ National ☒ Institution ☒ Regional ☒ International	

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**7.6.**	
	Title	Financial and institutional sustainability strategic plan created	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☒ Service/Product
	Description	The strategic sustainability plan will contain two main parts: Financial and institutional strategic plan. The SC members will work on developing the plan during the first year of the project (M12). The plan will be presented after that to the members of partner countries at the end of the first year of the project. The plan will present the institutional sustainability of the Bachelor and Master programme, as both programmes will become part of the Universities' work. Labs will be further maintained by individual institutions at the partner countries. The adopted new teaching methods will be integrated in the Universities' teaching approach. Both programmes will be financed by the students' fees and will be self-financing.	
	Due date	M12	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☒ Department / Faculty ☐ Local ☒ National ☒ Institution ☐ Regional ☒ International		

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**7.7.**
	Title	Sustainable cooperation with labour market partners established

	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☐ Report ☐ Service/Product
	Description	Institutions from partner countries will sign an agreement with the representative of labour markets after finalizing the final version of both programmes and publishing them on the announced press conference on the M24. The agreement will ensure better employment chances for those that finishes the agreed study programmes. The agreement will also increase the interest of the labour market representatives to take part in adopting the study programmes that will improve the knowledge of students and will improve their qualities to match the market they will work at.	
	Due date	M26	
	Languages	English	
Target groups	☒ Teaching staff ☒ Students ☐ Trainees ☐ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other		
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*		
Dissemination level	☐ Department / Faculty ☒ Institution	☐ Local ☒ Regional	☒ National ☐ International

Work package type and ref.nr	**MANAGEMENT**	**8**
Title	**Project management**	
Related assumptions and risks	**Assumptions** Communication between partners are on time Meetings between partners are held without postponing Reports are gathered and delivered on time All partners show prominent level of commitment and engagement during the project **Risks** Financial problems (delay of money transfer) within the project	
Description	Università G.d'Annunzio – Pescara, Italy will be responsible for the project management but it will be assisted by the International Burch University (IBU).The **project coordinator – project manager (PM)** will be from the Pescara, **Italy**. PM will carry out top **managerial activities** related to coordination of project activities based on agreed timeline of activities and budget. The administrative officer will be appointed at the DDA Università G.d'Annunzio – Pescara and will carry out administrative tasks related with the project. As **Deputy of PM** one member from the International Burch University (IBU Architecture), Sarajevo, **Bosnia and Herzegovina**, will be chosen. Deputy of PM will be **assisting to PM in the managerial activities** but specifically in the **coordination of the all partner institutions** (Bosnia and Herzegovina, Armenia and Belarus). Deputy of PM is selected intentionally from one of participant partner countries (Bosnia and Herzegovina) since	

	Deputy has good understanding of economic, political and societal context of partner countries involved in the project and common practices at partner countries regarding to educational system. Deputy will act as mediator between PM, partner and EU countries and will significantly contribute to more efficient and constructive communication between all members in reaching out the project goals. Each partner will select one representative that will be part of the Steering Committee (SC) that will be coordinated by the Project Manager (PM). PM will be responsible for organization and harmonization works and tasks among partners. The SC will be receiving guidelines and help from the experienced experts with European Profiles. Financial management will be led by the Università G.d'Annunzio – Pescara and will be presented to all members of the SC on the first coordination meeting, where a contract between all partners regarding all financial issues and rules will be discussed and signed. A rulebook will be printed out where all administrative and financial rules and agreements are sorted clearly so each partner can follow up. Decisions regarding the project will be voted in the SC meetings, and will be adopted if majority agrees. Financial decisions also will also be voted on meetings. Quality control and assurance procedure will be established by another team that will be appointed by SC on the first meeting. The team will employ a member of each institution that will be responsible for the Quality Control and assurance procedure. The Quality Control and Assurance Team (QCAT) will have a task to determine and develop the procedure needed for controlling the quality and will develop another rulebook that clearly defines each procedure. The rulebook will be used by External Quality Control and Monitoring Team (EQCMT) that will have the control and monitoring activities. The first coordination meeting of the SC in M2 will be held in Pescara at Università G.d'Annunzio. Later, the members of the QCAT will be proposed by SC members. The Grant Applicant will choose the person responsible for the administrative tasks. The Administrative officer will be also appointed by the SC members. Finally, a draft version of the agreement that will be signed between all partners will be established and explained. The agreement will include the proposed WBS and OBS, as well as the Controlling and Monitoring systems and procedures. The list of deliverables and goals, the dynamic plan of works and the communication plan will also be included in the agreement. On the second meeting of the SC (M2) at IBU the Work Breakdown Structure (WBS) and Organisational Breakdown Structure (OBS) will be established. The Rulebook will be developed and agreed on by the SC. The Quality plan, Sustainability and Dissemination Plan, as well as the Mobility plan will be agreed on and signed by the SC members. After that, the rest of meetings (app. every 6 month) will be organized in order to review the project progress, analyse potential problems and issues that could threat the project progress. In total SC will have 7 meetings, first coordination meeting in M2, then in M7 (videoconference), M12, M18 (videoconference), M24, M30 (videoconference) and in M35. Project Manager, with deputy of PM will prepare meetings and their agenda and deliver it timely to all members of the SC, so they can be prepared for the discussions and meeting. In case of the need for urgent meeting due to a problem that cannot wait to be solved, a Skype Meeting can be held. The procedure for such meeting is like that: the representative of the institution that are facing the problem contacts the PM by email or a phone/Skype call, and explains the issue. The PM decides with whether there is a need for such meeting and in case that he approves it, PM will inform all the members of SC about the time and date for the Skype Meeting.

	WP leaders are responsible for all issues related to the WP, such as: deliverables' preparation, dynamic plan for each WP, risk management plan for each WP, problems solving, and implementing the conclusions agreed on the SC meetings. The reports related to the quality control system and auditing will be reviewed twice per year on the Meeting of the QCAT. Each partner institution will send the half-year report to their representative in the QCAT. All problems and issues that needs solution will be discussed, analysed and resolved.		
Tasks	MNGT 8.1 Overall project management and administration MNGT 8.2 Project coordination meetings MNGT 8.3 Periodical and final reports prepared		
Estimated Start Date (dd-mm-yyyy)	01-11-2020	**Estimated End Date (dd-mm-yyyy)**	01-09-2023
Lead Organisation	University G. D'Annunzio - Chieti-Pescara, Italy		
Participating Organisation	All institutions		
Costs *Please explain the necessary costs for this WP: What travels are necessary? If equipment is requested, explain why it is required. If subcontracting is necessary, explain why the task cannot be performed by the partner.*	**Total Costs (EUR): 178,530.00** 1. Staff Costs: 123, 735.00 2. Travel Costs: 21,055.00 EUR Travels are organized in order to hold the Project Coordination Meetings. From total 7 planned meetings 3 are video conferencing meetings and 4 of them are planned to be held at the following universities: **1st Meeting in M2 at the Università G.d'Annunzio, Pescara, Italy** 2nd meeting in M7 – video conferencing **3rd meeting in M12 at the University of Malaga, Spain** 4th meeting in M18 – video conferencing **5th meeting in M24 at the International Burch University (IBU Architecture), Sarajevo, BiH** 6th meeting in M30 – video conferencing **7th meeting in M36 at the LEIPZIG UNIVERSITY OF APPLIED SCIENCES – HTWK Leipzig, Germany** 3. Costs of Stay: 33,240.00 EUR 5. Subcontracting Costs: 500.00 EUR Bank charges		

Deliverables/results/outcomes

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**8.1.**	
	Title	Overall project management and administration	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☒ Service/Product
	Description	Overall project management will be led by the Project manager and SC. SC will be created at the first coordination meeting that will be held in M2 at University G. D'Annunzio - Chieti-Pescara, where each institution will have one representative in the SC. The administrative officer will be appointed by University G. D'Annunzio - Chieti-Pescara, and will carry out administrative tasks related with the project.	

		As Deputy of PM one member from the International Burch University (IBU Architecture), Sarajevo, Bosnia and Herzegovina, will be chosen. Deputy of PM will be assisting to PM in the managerial activities but specifically in the coordination of the all partner institutions (Bosnia and Herzegovina, Armenia and Belarus). Deputy of PM is selected intentionally from one of participant partner countries (Bosnia and Herzegovina) since Deputy has good understanding of economic, political and societal context of partner countries involved in the project and common practices at partner countries regarding to educational system. Deputy will act as mediator between PM, partner and EU countries and will significantly contribute to more efficient and constructive communication between all members in reaching out the project goals. The Steering Committee (SC) with the Project manager (PM) and the Team of External Quality Assurance (TEQA) will ensure effective and well-coordinated project management of the project. Meetings of the SC (in total 7 meetings) that will be held app. each 6 months will handle issues that occurs regarding the organization of the project and reports of the Quality Control and Assurance team. The main goal of these meetings will be discussion on the implementation of the activities that are planned, as well as the recording, controlling and monitoring of the project progress, and financial reports and issues.
	Due date	M1 – M36
	Languages	English
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☐ Local ☐ National ☒ Institution ☐ Regional ☒ International	

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**8.2.**	
	Title	Project Coordination Meetings	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☒ Service/Product
	Description	Total of 7 coordination meetings will be held during the project period, with one of them as the initial meeting (M2) for appointing the representatives of each institution and signing the agreement among partners. The first coordination meeting will be held in M2 in Pescara at Università G.d'Annunzio. The	

		suggested and elected member in front of each institution will participate. Additionally, 6 meetings more will be held, three of them being video conference meetings. The meetings' schedule is given below: 1st Meeting in M2 at the Università G.d'Annunzio, Pescara, Italy 2nd meeting in M7 – video conferencing 3rd meeting in M12 at the University of Malaga, Spain 4th meeting in M18 – video conferencing 5th meeting in M24 at the International Burch University (IBU Architecture), Sarajevo, BiH 6th meeting in M30 – video conferencing 7th meeting in M36 at the LEIPZIG UNIVERSITY OF APPLIED SCIENCES – HTWK Leipzig, Germany Once per year (M12, M24 and M36) the Team of the Quality Control and Monitoring will attend the meeting.
	Due date	M1 – M36
	Languages	English
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☒ Administrative staff ☒ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☒ Department / Faculty ☒ Institution	☐ Local ☐ Regional ☐ National ☒ International

Expected Deliverable/Results/ Outcomes	Work Package and Outcome ref.nr	**8.3.**	
	Title	Periodical and final reports prepared	
	Type	☐ Teaching material ☐ Learning material ☐ Training material	☐ Event ☒ Report ☒ Service/Product
	Description	Reports are divided into two main categories: periodical and final. Periodical reports are prepared individually by each partner institution on the base of half year progress where the deliverables are followed, and the progress is analysed. The representative of each partner institution will present the half-year report on the SC meetings. Each partner institution has to prepare its own periodical report that will be reviewed and presented by their representative on meetings. Reports about finance are also included in the periodical reports. Final report will be prepared by the Università G.d'Annunzio, Pescara, Italy and the International Burch University (IBU Architecture), Sarajevo, BiH. The PM will present the final report on the final coordinating meeting (M36) to all SC members.	

		The external audit for finance and quality will be scheduled during the third year of the project and its results will be also presented to the SC members on the final meeting.
	Due date	M1 – M36
	Languages	English
Target groups	☒ Teaching staff ☐ Students ☐ Trainees ☒ Administrative staff ☐ Technical staff ☐ Librarians ☐ Other	
	If you selected 'Other', please identify these target groups. *(Max. 250 words)*	
Dissemination level	☐ Department / Faculty ☒ Institution	☐ Local ☐ Regional ☐ National ☒ International

E.7 Consortium partners involved and human resources required to complete the work packages

Indicative input of consortium staff - *The total number of days per staff category should correspond with the information provided in the budget tables.*

Work Package Ref.nr	Partner nr	Partner acronym	Country	Number of staff days[1]					Exact Role and tasks of each person in the work package
				Category 1	Category 2	Category 3	Category 4	Total	
PREPARATION	P1	Ud'A	Italy		21			21	Analysis of related programmes/courses and practices at EU universities; Expertise in creation of matrix of competences based on market needs;
	P2	UM (FGPA)	Slovenia		21	10	10	41	Analysis of related programmes/courses and practices at EU universities; Expertise in creation of matrix of competences based on market needs;
	P3	UMA	Spain		21			21	Analysis of related programmes/courses and practices at EU universities; Expertise in creation of matrix of competences based on market needs;
	P4	HTWK Leipzig	Germany		21			21	Analysis of related programmes/courses and practices at EU universities; Expertise in creation of matrix of competences based on market needs;
	P5	IBU	BiH		21			21	Analysis of related programmes/courses and practices at partner universities; Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;

[1] *Please see Programme Guide, Part B for your action, Table A – Project Implementation (amounts in Euro per day) Programme Countries and Table B - Project Implementation (amounts in Euro per day) Partner Countries.*

	P6	UNBI	BiH		21			21	Analysis of related programmes/courses and practices at partner universities; Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P7	UNMO	BiH		21			21	Analysis of related programmes/courses and practices at partner universities; Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P8	NUACA	Armenia		26			26	Analysis of related programmes/courses and practices at partner universities; Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P9	NPUA	Armenia		26			26	Analysis of related programmes/courses and practices at partner universities; Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P10	BNTU	Belarus		26			26	Analysis of related programmes/courses and practices at partner universities; Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P11	BrSTU	Belarus		26			26	Analysis of related programmes/courses and practices at partner universities; Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P12	CD doo	BiH		15			15	Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;

	P13	KF Gradnja doo	BiH		15			15	Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P14	CARA	Armenia		17			17	Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P15	NIPTIS	Belarus		17			17	Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
	P16	BUA	Belarus		17			17	Analysis of labour market at partner countries; Creation of matrix of competences based on market needs;
SUBTOTAL					332	10	10	352	
DEVELOPMENT	P1	Ud'A	Italy		79	5	10	94	Expertise in design of new courses at partner countries (BSc and MSc level) in the field of architecture; Training of partner HEIs staff for current relevant topics in the field of architecture; Training of partner HEIs staff in new innovative teaching methods; Expertise in delivering new courses at BSc and MSc level at the partner universities;
	P2	UM (FGPA)	Slovenia		90	5	5	100	Expertise in design of new courses at partner countries (BSc and MSc level) in the field of architecture and civil engeenering; Training of partner HEIs staff for current relevant topics in the field of architecture; Training of partner HEIs staff in new innovative teaching methods; Expertise in delivering new courses at BSc and MSc level at the partner universities;
	P3	UMA	Spain		90	5	5	100	Expertise in design of new courses at partner countries (BSc and MSc level) in the field of architecture;

									Training of partner HEIs staff for current relevant topics in the field of architecture; Training of partner HEIs staff in new innovative teaching methods; Expertise in delivering new courses at BSc and MSc level at the partner universities;
	P4	HTWK Leipzig	Germany		78			78	Expertise in design of new courses at partner countries (BSc and MSc level) in the field of architecture and civil engineering; Training of partner HEIs staff for current relevant topics in the field of civil engineering; Expertise in delivering new courses at BSc and MSc level at the partner universities;
	P5	IBU	BiH		131	10		141	Preparation of documents for accreditation of the new courses by the national accreditation institutions; Design of new courses at partner countries (BSc and MSc level) in the field of architecture and civil engineering; Enrolment of new students at all 2 levels of study – administrative procedures; Delivering new courses at BSc and MSc level at the partner universities; Preparation of the report on new programs; Developing network between the industry and the partner universities;
	P6	UNBI	BiH		131	10		141	Preparation of documents for accreditation of the new courses by the national accreditation institutions; Design of new courses at partner countries (BSc and MSc level) in the field of civil engineering; Enrolment of new students at all 2 levels of study – administrative procedures;

								Delivering new courses at BSc and MSc level at the partner universities; Preparation of the report on new programs; Developing network between the industry and the partner universities;
	P7	UNMO	BiH		131	10	141	Preparation of documents for accreditation of the new courses by the national accreditation institutions; Design of new courses at partner countries (BSc and MSc level) in the field of civil engineering; Enrolment of new students at all 2 levels of study – administrative procedures; Delivering new courses at BSc and MSc level at the partner universities; Preparation of the report on new programs; Developing network between the industry and the partner universities;
	P8	NUACA	Armenia		159	10	169	Preparation of documents for accreditation of the new courses by the national accreditation institutions; Design of new courses at partner countries (BSc and MSc level) in the field of architecture; Enrolment of new students at all 2 levels of study – administrative procedures; Delivering new courses at BSc and MSc level at the partner universities; Preparation of the report on new programs; Developing network between the industry and the partner universities;
	P9	NPUA	Armenia		159	25	184	Training of partner HEIs staff in new innovative teaching methods; Developing on-line platform that will be used for teaching process;

	P10	BNTU	Belarus		159	10		169	Preparation of documents for accreditation of the new courses by the national accreditation institutions; Design of new courses at partner countries (BSc and MSc level) in the field of architecture and civil engineering; Enrolment of new students at all 2 levels of study – administrative procedures; Delivering new courses at BSc and MSc level at the partner universities; Preparation of the report on new programs; Developing network between the industry and the partner universities;
	P11	BrSTU	Belarus		159	10		169	Preparation of documents for accreditation of the new courses by the national accreditation institutions; Design of new courses at partner countries (BSc and MSc level) in the field of civil engineering and architecture; Enrolment of new students at all 2 levels of study – administrative procedures; Delivering new courses at BSc and MSc level at the partner universities; Preparation of the report on new programs; Developing network between the industry and the partner universities;
	P12	CD doo	BiH		7			7	Developing network between the industry and the partner universities; Creating internship program between partner universities; Creating joint projects between HEIs and industry;
	P13	KF Gradnja doo	BiH		7			7	Developing network between the industry and the partner universities; Creating internship program between partner universities;

									Creating joint projects between HEIs and industry;
	P14	CARA	Armenia		10			10	Developing network between the industry and the partner universities; Creating internship program between partner universities; Creating joint projects between HEIs and industry;
	P15	NIPTIS	Belarus		10			10	Developing network between the industry and the partner universities; Creating internship program between partner universities; Creating joint projects between HEIs and industry;
	P16	BUA	Belarus		10			10	Developing network between the industry and the partner universities; Creating internship program between partner universities; Creating joint projects between HEIs and industry;
SUBTOTAL					1410	100	20	1530	
QUALITY PLAN	P1	Ud'A	Italy		27			27	Creation of procedures for quality control and monitoring; Internal quality control activities; External quality assurance activities; External financial audit;
	P2	UM (FGPA)	Slovenia		32			32	Creation of procedures for quality control and monitoring; Internal quality control activities; External quality assurance activities;
	P3	UMA	Spain		32			32	Creation of procedures for quality control and monitoring; Internal quality control activities; External quality assurance activities;
	P4	HTWK Leipzig	Germany		27			27	Creation of procedures for quality control and monitoring; Internal quality control activities; External quality assurance activities;

	P5	IBU	BiH		37			37	Preparation of documents for internal and external quality control activities;
	P6	UNBI	BiH		37			37	Preparation of documents for internal and external quality control activities;
	P7	UNMO	BiH		37			37	Preparation of documents for internal and external quality control activities;
	P8	NUACA	Armenia		37			37	Preparation of documents for internal and external quality control activities;
	P9	NPUA	Armenia		37			37	Preparation of documents for internal and external quality control activities;
	P10	BNTU	Belarus		37			37	Preparation of documents for internal and external quality control activities;
	P11	BrSTU	Belarus		37			37	Preparation of documents for internal and external quality control activities;
SUBTOTAL					377			377	
DISSEMINATION & EXPLOITATION	P1	Ud'A	Italy		10			10	Participation on dissemination activities and events within partner country universities;
	P2	UM (FGPA)	Slovenia		10			10	Participation on dissemination activities and events within partner country universities;
	P3	UMA	Spain		10			10	Participation on dissemination activities and events within partner country universities;
	P4	HTWK Leipzig	Germany		10			10	Participation on dissemination activities and events within partner country universities;
	P5	IBU	BiH		20			20	Establishing the dissemination plan; Dissemination activities within partner country universities; Dissemination events with stakeholders, labour market and local authorities (workshops, info days, etc.); Organizing Final Conference; Creation of Financial and institutional sustainability plan; Sustainable cooperation with labour market;

	P6	UNBI	BiH		20			20	Dissemination activities within partner country universities; Dissemination events with stakeholders, labour market and local authorities (workshops, info days, etc.); Creation of Financial and institutional sustainability plan; Sustainable cooperation with labour market;
	P7	UNMO	BiH		20			20	Dissemination activities within partner country universities; Dissemination events with stakeholders, labour market and local authorities (workshops, info days, etc.); Creation of Financial and institutional sustainability plan; Sustainable cooperation with labour market;
	P8	NUACA	Armenia		20			20	Establishing the dissemination plan; Dissemination activities within partner country universities; Dissemination events with stakeholders, labour market and local authorities (workshops, info days, etc.); Organizing Final Conference; Creation of Financial and institutional sustainability plan; Sustainable cooperation with labour market;
	P9	NPUA	Armenia		20			20	Setting up and maintaining the project Web site
	P10	BNTU	Belarus		20			20	Participation on dissemination activities within partner country universities; Participation on dissemination events with stakeholders, labour market and local authorities (workshops, info days, etc.);

	P11	BrSTU	Belarus		20			20	Dissemination activities within partner country universities; Dissemination events with stakeholders, labour market and local authorities (workshops, info days, etc.); Creation of Financial and institutional sustainability plan; Sustainable cooperation with labour market;
SUBTOTAL					180			180	
MANAGEMENT	P1	Ud'A	Italy	100		50	90	240	Overall project management and administration; Project coordination meetings; Preparation of periodical and final reports;
	P2	UM (FGPA)	Slovenia	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;
	P3	UMA	Spain	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;
	P4	HTWK Leipzig	Germany	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;
	P5	IBU	BiH	60		30	50	135	Participation on project coordination meetings; Preparation of periodical and final reports;
	P6	UNBI	BiH	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;
	P7	UNMO	BiH	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;
	P8	NUACA	Armenia	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;
	P9	NPUA	Armenia	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;
	P10	BNTU	Belarus	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;
	P11	BrSTU	Belarus	35		20	45	100	Participation on project coordination meetings; Preparation of periodical and final reports;

SUBTOTAL	510		260	545	1315	
TOTAL	510	2299	370	575	3754	

Please insert rows as necessary

PART F – Quality of the Project Team and Cooperation Arrangements

F.1 Background of partnership and the proposal preparation

Please provide shortly the history of cooperation between partners (if any). How the idea of the project was developed and which/ who among partners contributed to the proposal development. (limit 3.000 characters)

In order to understand trajectories for future development of educational programs and overcome discrepancy between education and practice at partner countries, EU partners with extensive experience in curriculum development were involved from initial phase.

This project was built on main findings from the partner countries on architectural and civil engineering programs from an earlier researches, projects, and experiences shared between staff members. TACEESM outline reinforces architectural and engineering programs through realization of common interest of all partners.

More specifically, TACEESM was prepared based upon:
1.Research works - on existing educational system in partner countries
2.Common Practices at partner countries – Experience of partner countries that already started with the reform of curriculums. All those initiatives or unrealised/partially realized planes for curriculum changes were useful for project planning at the beginning. Shared experience was useful since all partner countries have similar economic, political and societal context.
3. Industry feedback – shared feedback from the industry partners among all participants from partner countries

If relevant, please explain how and to which extent the project benefits from the experience and participation of non–academic partners. (limit 3.000 characters)

In order to leverage knowledge, learning and innovation one of the goals of the TACEESM project was to foster university-industry partnership. Project will strongly benefit from experience and participation of non-academic partners from partner countries (architectural and civil engineering companies) that will provide clear image on current market demands and establish framework for understanding linkage between theory and practice on national level. By comprehending nature of future market needs, and in particular, technological development ventures, future collaboration between university and industry will result with strategic partnership development. Moreover, established network of a beneficial university- industry partnership will lead to effective joint strategic planning where will be addressed dynamic and multifaceted market reality.

The role of industry will be to make contribution in WP1 Current programmes in EU and partner HEIs - State of the Art, with valuable contribution on benchmark on market needs and defining learning outcomes. Moreover, how important is role of the industry in this project is shown through carefully designed WP4 entitled WP4 University Enterprise Collaboration. Through activities (4.1 Developed network between the industry and partner universities, 4.2 Internship program at partner HEIs, 4.3 5 Joint projects between HEIs and industry created) defined in WP4, partner HEIs will actively participate in local and regional economic development. The TACEESM project offer sustainable model of partner HEIs transformation from traditional educational environment to one that is entrepreneurial.

All of these could potentially decrease number of unemployment by increase in career opportunities for both faculty and students, first by implementation of sustainable education model (through newly modernized partner HEIs Curricula and Internship program) and then, by encouraging young professionals to become part of already established business or to start they own business with the help of industry start-up assistance. In addition, planned joint projects will broaden experience of all parties involved, increased productivity of researchers, create chance for future consulting opportunities, give

possibility of application of 'new knowledge' to the practical needs of society, facilitate commercialization of academic research, and enhance use of intellectual capital. All of these is points out that there are numerous social, economic and other mutual benefits that can be derived from university-industry cooperation.
Thus, suggested mechanisms of collaboration based on mutual interest entail beneficial outcomes for both, university and industry, and have potential to extend the frontiers of knowledge towards sustainable directions.

Please explain the role and the participation of the Programme Country partners and their support in the development of the different activities (e.g. in the development of the curricula) and (limit 3.000 characters)

Looking to foster "communities of innovation" would be impossible without participation of Program Country partners and they contribution to each segment of the Project development. Their role is seen as a vehicle for accelerating smart teaching, learning and practice environment for architectural and civil engineering education. The Program Country partners are key actors in this network of partnership in sharing knowledge and good practices and learning from the past experiences. Moreover, this constellation of partnership network with the enduring support of Program Countries will foster efficient communication and encourage desired change and transformation of existing HEIs Curricula towards sustainable model.

According to suggested model of partnership, it is argued that, the role of Program Country partners is inevitable, and that has potential to promote the formation of trusted relationships and build the ground for future collaboration.

Within the WP1 - Current programmes in EU and partner HEIs - State of the Art the Program Country partners, among others, will greatly contribute in 1.1 Report on existing EU programmes and practices. Through WP 2 - Development of new courses in the field of architecture and civil engineering, role of the Program Country partners will be crucial considering their experience, educational background and all the knowledge. Within the WP3 Capacity building for training of partner HEIs staff for current relevant topics in architecture and civil engineering, and training in new innovative teaching methods, Program Countries HEIs will take leading role. All the teaching materials that will be developed, together with unique on-line platform specialized for collection of architectural and civil engineering material , necessary literature, equipment and software, will be done in consultancy with the Program HEIs and their practical knowledge on the same matter. Moreover, the Program Country partners will also share their experience for WP4 University Enterprise Collaboration in order to create successful partnership and consider proactive steps that will help to recognize and mitigate potential risks of collaboration at the outset.

Additionally, vast experience of the Program Country partners on project management, project implementation, dissemination, quality control, etc. greatly improve project proposal and give additional value to the project, at the same sharing an overall infusion of enthusiasm within all partners involved.

F.2 Cooperation arrangements, management and communication

Please define the organisation of the implementation of the project and the division of tasks between the partners. Please explain the allocation of resources for each activity. Explain also how the tasks are distributed amongst the partners and how project "ownership" is ensured (limit 3.000 characters).

Steering Committee will be established at M2 where each institution should name one contact person. The total number of SC members is 11.

Decisions covered by SC are to:
-Resolve conflicts that might have impact on progress

-Project's direction of development and strategic development
-Develop and control dissemination actions, and best ways to use resources
-Process of reporting and following project, with controlling and auditing its phases
-Decide and approve changes in project's budget, work responsibilities and tasks, plans of work and mobility, quality and dissemination plan

WP Leader has following responsibilities:
-Develop a coordination plan for staff included from each institution in each WP
-Develop and prepare the deliverables of each WP on time
-Implement tasks and conclusions decided by team meetings
-Analyse and solve technical problems that are in WP

Professor Lorenzo Pignatti - Ud'A is Project Manager (PM) with main responsibility to lead SC and top managerial activities related to coordination of project activities. Administrative officer will be appointed at the Ud'A that will carry out administrative tasks.

Deputy of PM is Professor Erna Husukić – IBU that will be assisting PM in managerial activities but specifically in coordination of all institutions from partner countries. To Deputy of PM at IBU will be appointed administrative officer that will handle administrative works.

All decisions regarding project, including financial, will be voted in SC meetings, and will be adopted if majority agrees. Financial management will be led by Ud'A and will be presented to all members of SC on first coordination meeting, where a contract between all partners regarding all financial issues and rules will be discussed and signed.

List of leaders and co-leaders of WP is given below:
WP1 – Leader - UM (FGPA), Slovenia
Co-Leader - BrSTU, Belarus
WP2 – Leader - Ud'A, Italy
Co-Leader – UNBI,BiH
WP3 – Leader - UM (FGPA), Slovenia
Co – Leader - NPUA, Armenia
WP4 – Leader - UMA, Spain
Co – Leader - UNMO, BiH
WP5 – Leader – HTWK Leipzig, Germany
Co-Leader –BNTU, Belarus
WP6 – Leader - HTWK Leipzig, Germany
WP7 – Leader - IBU, BiH
Co-Leader - NUACA, Armenia
WP8 - Leader - Ud'A, Italy
Quality control and assurance procedure will be established by another team that will be appointed by SC on the first meeting. QCAT will have a task to determine and develop the procedure needed for controlling quality and will develop another rulebook that clearly defines each procedure.

Below is list of people working on project management:
1. Project Manager – half time work at Ud'A
2. Financial Officer – part time work at Ud'A
3. Administrative Officer – part time work at Ud'A
4. Deputy Project Manager - part time work at IBU
5. Administrative Officer – part time work at IBU
6. Project Coordinators - members of SC - one coordinator of each partner institutions

Please explain the overall project and partnership management making specific reference to the management plan and how decisions will be taken. Please describe how permanent and effective communication and reporting will be ensured as well as the measures put in place for conflict resolution (limit 2.000 characters).

The aims of Management structure are to coordinate work between all partners included in project and to control all steps, deliverables and achievements.

Total 7 meetings will be held by SC for coordination purposes (3 will be video conferencing). First meeting is a kick off meeting where SC will be elected and draft agreement between partners will be established. Second meeting will aim to control and monitor the development of projects. Third meeting will be for modifying the plans and development steps according to real progress of achievements. Fourth meeting will aim to handle and discuss problems occurred, and to resolve any conflicts that might affect dynamic progress of project. The final will aim to approve whether all deliverables were achieved or not. All other meetings in between will aim to control, discuss and resolve problems and obstacles facing progress.

Communication plan among SC will be achieved by:
- Emails on daily and weekly basis: among WP leaders and staff to follow up progress made and to resolve conflicts or anticipate any potential problems. They are used between SC representative and staff from his institution to give work tasks and information related to progress.
- Skype meetings on monthly basis: local communication within one institution, where problems and general issues are discussed, and internal decisions are made.
- Video conferences: used among partner institutions, where the progress is recorded, and difficulties are discussed.
- Website on daily basis: used between partner institution as they can publish documents and news. This way of communication is limited only to Institutions' representatives.

Local languages (between members of one institution) English language (between all partners) are used for communication.

All meetings held online will be recorded and followed by hard copies of meetings' minutes and proceeding of meetings. Reports on six-months base will be prepared by partner HEIs and will contain information about development and progress within their institution, and financial issues and state. Reports will be discussed and analysed by SC and conclusions will be made upon individual reports.

F.3 Organisations and activities

This part must be completed separately by each organisation participating in the project (applicant and partners with its affiliated entities (if any)).

Partner number		**P1**
Organisation name & acronym	Università G. d'Annunzio – Chieti, Pescara, Italy (Dipartimento di Architettura) - Ud'A	
F.3.1 - Aims and activities of the organisation *Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project* (limit 2000 characters).		

The Department of Architecture Università G.d'Annunzio – Pescara, Italy, was founded in 2012 by merging four departments present in the former Faculty of Architecture, that was established in the late 1960s. The Department affirms the value of unity and sharing of concepts, ideas, methods and instruments that come from different scientific cultures, including architectural design, industrial design, drawing, restoration of historical buildings and architectural history, urbanism and architectural technology.

The Department, located in an urban and regional environment conducive to quality of life and historical and landscape values, carries out training activities through the European five-year cycle Master's degree in Architecture and a Bachelor degree in Design. The DDA develops national and European interest research taking shape as a consulting business for public authorities and companies operating in the area. The DDA is added to a dense network of relationships with international centers of excellence for research, training and innovation. It promotes and organizes scientific and cultural activities including seminars, conferences, symposia, workshops such as the Summer School which is held every year in September.

The Department of Architecture of Pescara promotes research through various forms of post-graduate scholarships, PhD, research contracts and post-doctoral grants. Research fellows, graduate students and postdocs work with researchers and professors in the research laboratories of the Department (CESA)
The research interests are multiple, all related to the different scientific areas present within the Department, all brought together around the concept of "design project", and declined at different scales: local, urban, architectural, technological and industrial product. The European funding programs, in particular Horizon 2020, create the multidisciplinary research platforms of the Department dedicated to themes such as urban re-generation, re-use of abandoned sites and buildings, smart city, slow mobility, environmental sustainability, energy efficiency of buildings, digital representations, etc.

The Department of Architecture in Pescara has 15 Full Time Professors (Professori Ordinari), 12 Associate Professors (Professori Associati) and 23 Lecturers (Ricercatori), all tenured. It also offers temporary contracts for external professors. The Department has 17 permanent Administrative and Technical staff and approximately 1.500 students registered.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

The Università G.d'Annunzio – Pescara, Italy will be the applicant/coordinator of project on behalf of all project partners and therefore will represent project objectives towards the European Commission. With the extensive expertise and experience in architectural education it will contribute towards achieving objectives and the needs of partner institutions. Moreover, academic staff and administrative staff have extensive experience in managing EU funded projects and thus will be responsible for the financial and legal issues for the operational, administrative and financial implementation of the project. Further, the role of the Faculty will be to coordinate the project in cooperation with project partners.
The contribution of the Department of Architecture will be active involvement in modernization of existing BSc courses and creation of new group of BSc and MSc courses related with architectural education.

University G. D'Annunzio - Chieti-Pescara, Italy will lead WP 8 – Project management.

Also, it will lead WP2 - Development of new courses in the field of architecture and civil engineering together with Co-Leader - University of Bihać (UNBI), BiH.

University G. D'Annunzio - Chieti-Pescara will be working on all other activates set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***

Lorenzo Pignatti	Lorenzo Pignatti is Full Professor at Fdegli of the University G. D'Annunzio - Chieti-Pescara. Since November 2015 he has been appointed as President of the five-years Architectural Degree (Single Cycle - Lm-4). He teaches Architectural Design and is coordinator of the International and Erasmus Programs for the Department. In this role, he has established many Erasmus agreements and conventions with several foreign universities, mostly located in the Adriatic Region. He is responsible and is the coordinator of the Pescara Summer School, a structure of higher education in which the department of architecture intends to respond to the urban transformations of cities of the Adriatic region through a design and research experience directly involving students, young designers and teachers of different origin. He has organized and coordinated conferences, design workshops, teaching activities and experimental design work with various universities of the Adriatic Region, including the Faculty of Architecture in Ljubljana, Zagreb, Split, Sarajevo, Tirana and Patras. More recently his research is focussing on the Creative City and the best practices on how culture can activate processes of innovative and sustainable urban regeneration. He recently participated to the Italian PRIN Program (national research project) “Re-Cycle Italy” as part of the Research Unit in Pescara. The group developed studies for urban regeneration in the cities of the Adriatic. He has worked in competitions in Italy and abroad, receiving numerous awards and prizes. Among the competitions awarded: "50 Churches for Rome 2000", "100 Piazze per Roma", "Punti Verde Qualità" all in Rome and the competition for the recovery of Tabacchificio Centola in Pontecagnano. Following these competitions, he worked at the preliminary design for the parish church of Santa Maria Josefa in Ponte di Nona in Rome (Built. Vicariato of Rome - with Garofalo Miura Architetti) and was commissioned for the project of Piazza Fratelli Palma Ostia (Municipality of Rome) and for the design of a series of new public spaces in the historic centre of Custoza (Built. Municipality of Sommacampagna). He has also been commissioned for a public park with sports facilities at Serpentara (Built. Municipality of Rome) In more recent years he has won the first prize for a competition for new public spaces in Ponte San Giovanni (Perugia), third prize for a competition to Ittiri (Sassari) and the first prize for the redesign of Piazza San Cosimato, one of the most significant new public space in the historic centre of Rome (Built. Municipality of Rome). He has also been selected for the second stage of the competition for the redevelopment of Piazza Augusto Imperatore (with ABDR Architetti) in Rome. He also worked on projects of urban regeneration of former portal, railway and industrial zones and brownfields. These include a project for the area ex-Fim in Porto Sant'Elpidio (An), the port area of Porto San Giorgio (An), the recovery of the former Yale Factory in Pomezia (Lt). In 2014 he won, together with Renato Benedetti (MacDowell Benedetti, London), the competition for a pedestrian bridge in Terni crossing over a vast abandoned railway site (Built. Municipality of Terni). In the east countries of the Adriatic, he was selected for the second phase of the international competition "Revitalization of Liria Square" in Durres (Albania) and he participated to the international competition for the redevelopment of the Porto Baros and Delta Area in Rijeka. Recent pertinent publications: - L. Pignatti, S. Gruosso (2017) (a cura di), “Crossing Sightlines. Traguardare l’Adriatico” Collana Re-Cycle Italy, Aracne Editrice ISBN 9788825502688 - L. Pignatti, (2017), “Sguardi Incrociati” in L. Pignatti, S. Gruosso (2017) (a cura di), “Crossing Sightlines. Traguardare l’Adriatico” Collana Re-Cycle Italy, Aracne Editrice ISBN 9788825502688 (pag. 22-35) - L. Pignatti, (2017), “Architettura e Città della regione Balcanica” in L. Pignatti, S. Gruosso (2017) (a cura di), “Crossing Sightlines. Traguardare l’Adriatico” Aracne Editrice ISBN 9788825502688 (pag. 39- 61)

	- L. Pignatti, (2017), "Un ricordo di Predrag Matvejevic'" in Domus n.1012, Aprile 2017 - L. Pignatti, (2016) "Pescara Summer School" in "Verso Pescara 2027 – Vision e Summer School" Gangemi Editore Vol. 1, ISBN 9788849232776 (pag. 28 – 35) - L. Pignatti, (2016) "Pescara Città Adriatica Creativa" in "Verso Pescara 2027 – Dossier di ricerca", Gangemi Editore Vol. 2, ISBN 9788849232783 (pag. 136 – 147). - L. Pignatti, (2016) "Senso Etico ed Architettura" in DomusWeb 05.12.2016 - L. Pignatti, (2014) "Dall'Iglo ad Internet" (Canadian Pavillon at Venice Biennale 2014), in DomusWeb 28. Editrice10.2014
Massimo Angrilli	Architect and Phd, graduated at the Architecture Faculty of Pescara, he received a PhD in Urbanism at the Inter-University Doctorate of Rome-Pescara in 1999, with a thesis entitled "Green Urban Network", with landscape architect Michael Hough (University of Toronto) as external tutor. He is Associate Professor at the Architecture Department of Pescara and visiting professor in the International Master's Degree "Landscape Intervention and Heritage Management", Universitat Autonoma de Barcelona; member (2013-2016) of the teaching Body of the PhD "Earth Systems and Built Environments", Scuola Superiore d'Annunzio. Member (2005-2014) of the teaching body of the International Phd QuoD "Quality of Design" (with the seats of: ETSAB Barcellona, U-Moderna Lisboa, IUAV Venezia, Università della Calabria). Invited by the Directorate of Cultural and Natural Heritage, Council of Europe, in the V and XVI Meeting of the Workshops for the implementation of the European Landscape Convention (Girona and Andorra La Vella). Invited as member of the jury for the Prix du Paysage 2006 by the Ministere de l'Ecologie et du Développement Durable, Paris, France. Invited as member of the jury for the Pays Med – Mediterranean Landscape Prize 2010 by the Emilia Romagna Region, Bologna. Invited as member of the jury for the "Osumi Island Competition", Berat, Albania (2015). Member of the jury panel of Bee Breeders Competitions (2017). Landscape consultant and planner/designer in many projects some of them being: Landscape Rehabilitation Pilot Projects (Italian Ministry of Cultural Heritage); Advanced Campus "Le Venezie", Jolanda di Savoia (Ferrara); Landscape design of the "Green Ring" (Chieti); Landscape Quality Assessment of 7 Masterplans After L'Aquila Earthquake. He was scientific coordinator of many project some of them are: Calabria Region Government Landscape Rehabilitation Pilot Projects (POAT), Italian Ministry of Cultural Heritage and Activities and Tourism / Calabria Region Government (2014-2015); Scientific coordinator (with C. Forlani) of the Department of Architecture G. d'Annunzio, University Chieti-Pescara team in the research "Atlante dei contratti di fiume in Abruzzo", for Abruzzo Region, (2016/17); Scientific coordinator, in the "Landscape & Heritage preservation POAT for the Italian Ministry of Cultural Heritage and Activities and Tourism / Calabria Region Government (2010-2012); Member of the research group Ecocity, Abruzzo Eco-Districts, Abruzzo Region with Research Center SCUT G. d'Annunzio University Chieti-Pescara, prof. A. Clementi, 2012. He has extensive experience as academician and researcher and actively participate in magazine editorial committees; Member of the Director Committee of the Architecture Department Magazine "Piano Progetto Città", (since 2016); Editor in chief of the Editorial Board of the EcoWebTown Journal of Sustainable Design www.ecowebtown.it, Spin-Off SUT Edition, G. d'Annunzio University Chieti - Pescara, (2011-2017). Recent pertinent publications:

	- Petaccia N., Angrilli, M., (2017), Global Dwelling: Approaches to Sustainability, Design and Participation, WIT Transactions on State of the Art in Science and Engineering, Vol. 91, ISBN: 978-1-78466-219-6 ISSN: 1755-8336 - Angrilli, M., (2016), "La Grecia dopo la crisi. Paesaggio con rovine", in Urbanistica, n. 157, gennaio-giugno 2016, Milano, pp. 68-74, ISSN: 0042-1022 - Angrilli, M., (2016), "Dispositivi ecologici per la resilienza urbana", in Sentieri urbani, n. 20, Bi Quattro Editrice, Trento, pp. 41-43, ISSN: 2036-3109. - Angrilli, M., Zoppi, C., (2017), "Per città più resilienti: dimensione comunitaria e progetto urbano per l'efficienza energetica e i cambiamenti climatici", in Carta M., La Greca P. (a cura di), Cambiamenti dell'urbanistica. Responsabilità e strumenti al servizio del paese, Donzelli Editore, Roma, pp. 217-223, ISBN 978-88-6843-633-9 - Angrilli, M., (2017), "Strategie di resilienza urbana. Il progetto di corolla verde a Chieti", in Favargiotti, S., Staniscia S., (a cura di), Monograph RESEARCH, R.E.D.S. 03 Flowing Knowledge. Trento, IT: LISt Lab, 2017, ISBN 9788899854317 - Angrilli M., (2016), "Definizioni e ruoli delle infrastrutture verdi e blu", in Moccia F. D., Sepe M. (a cura di), Reti e infrastrutture dei territori contemporanei, INU Edizioni, Roma, pp. 176-186 ISBN 978-88-7603-147-2 - Angrilli M., Boschi F., Corrado R., Dattilo A., (a cura di, 2016) "Il recupero dei paesaggi degradati. Cinque progetti pilota in Calabria", Gangemi Editore, Roma (ISBN 978-88-492-3268-8)
Stefania Gruosso	Stefania Gruosso is a research fellow at the G. d'Annunzio University of Chieti-Pescara with a project entitled " Projects of urban regeneration projects in the Adriatic cities" (2018). Since April 2014 is PhD in Architecture and Urban Planning, title earned with a thesis with a thesis in architectural and urban design entitled "Cultural Creative Condensr. Cultural and creative production for re-generation of urban residual sites". She is member of the BikeFlu cycle networks/river networksresearch group, Abruzzo Region with Department of Architecture G. d'Annunzio University Chieti-Pescara, Prof. L.Pignatti, 2016/17; member of of the research group for the PRIN" Recycle Italy", with Department of Architecture G. d'Annunzio University Chieti-Pescara, Prof. L.Pignatti, 2013-2016; member of of the research group for "The isthmus of Corinth-Greece", with Department of Architecture G. d'Annunzio University Chieti-Pescara and the municipality of Corinth, prof. L.Zazzara, 2014. The theoretical research path was flanked by applied research projects with experimental activities on the subject of urban design. This was carried out in particular as a Tutor in international design workshops and as a consultant to number of public municipalities both in Italy and abroad. Since October 2016 until December 2016 was visiting professor and researcher at the International BURCH University of Sarajevo- Bosnia Herzegovina. Since 2008 has been design tutor in courses of Architectural Design at the University of Pescara. She has participated in all aspects of teaching including presentations, seminars individual critiques at desk, design reviews and grading. In the 2012, 2013, 2015, 2017 she has been a Design Tutor and Adjunct Lecturer for the University of Waterloo (Canada) - Rome Program. Her contribution has been related to the relationship between project and context, innovative techniques and materials, with particular attention to the technological aspects and sustainability choices. Most of the work has been centered in creating urban re-generation through cultural projects and the development of cultural districts. Recent pertinent publications: - S. Gruosso, L. Odobašić, ARS AEVI: LA CULTURA COME ARMA | ARS AEVI: THE WEAPON OF CULTURE, italian and english version, magazine title "Domus" n°1018, curated by Nicola Di Battista, November 2017

	- S. Gruosso, L. Pignatti, Crossing sighlines|Traguardare l'Adriatico, published by Aracne, May 2017 - Lo spazio pubblico nella città della cultura| the public space in the city of culture, book title "PROGETTI PER IL FUTURO DELLA CITTA'", curated by Alberto Clementi, Carlo Pozzi, published by Quodlibet studio, May,2016 - ARCODOTTO: THE ARC OF CULTURE, book title "KULTUR FABRIC PERUGIA" curated by Paolo Belardi, Valeria Menchelli, published by Il Formichiere, 2015 - MANCHESTER. Produzione culturale e creativa per il rilancio della città, magazine title "AR. Architetti Roma" n°112, curated by Livio Sacchi, published by Conti Tipocolor Spa, May 2015
Claudia Di Girolamo	Claudia Di Girolamo, Degree in Architecture at the G. d'Annunzio University of Chieti-Pescara with a thesis in architectural and urban design - Green networks, sustainability, evolution. Claudia Di Girolamo has Ph.D in Architecture and Urban Planning, qualification obtained within the European Doctorate "QUOD. Quality of Design" at IUAV - Universitary Institute of Architecture Venice - with a thesis on role of infrastructure as driving for Urban Regeneration and sustainable Development, entitled "Innogenetic Infrastructures. Catalytic Spaces for sustainable Urban Development" (2013). Her main research interest is on the theme of infrastructures and urban projects, investigating the role of urban and environmental networks within the existing city. More recently she has dealt with the topic of post-earthquake reconstruction, declining the theme of infrastructures in their relations with the emergency territories and abandoned urban centers. She is member of REBUS® REnovation of public buildings and Urban Spaces/European project Republic-Med, Game-simulation laboratory for urban regeneration and the mitigation and adaptation of the existing city to climate change, Emilia-Romagna Region with CNR Ibimet Bologna, DATSU Polytechnic of Milan, PROAmbiente, ANCI Emilia-Romagna, 2017; member of the BikeFlu cycle networks/river networks research group, Abruzzo Region with Department of Architecture G. d'Annunzio University Chieti-Pescara, prof. M. Di Sivo, 2016/17. Among many teaching activities she was visiting lecturer for Environmental Design teaching, University of Pescara, prof. F. Angelucci, 2016-17 and Lecturer for Urban Design teaching, University of Pescara, prof. A. Clementi, 2009-15. Recent pertinent publications: - Angelucci F., Di Girolamo C., Zazzero E., (2018) "New Designing Codes for Urban Infrastructures. A Hypothesis of a Transdisciplinary Approach", in Carlone G., Martinelli N., Rotondo F. (a cura di), Designing Grid Cities for Optimized Urban Development and Planning, IGI Global - Di Girolamo C. (2017), "Greening Rijeka / Link Up Split. Infrastrutture innogenetiche per la trasformazione della città" in Pignatti L., Gruosso S. (a cura di), Crossing Sightlines Traguardare l'Adriatico, Re-Cycle Italy PRIN 2013/2016, Aracne, Ariccia, pp 202-213 - Di Girolamo C. (2016), "Infrastrutture di contesto", in Clementi A., Pozzi C. (a cura di), Progettare per il futuro della città. Un laboratorio per Chieti, Quodlibet, Macerata, pp 41-43 - Di Girolamo C. (2017), "Per una nuova iconografia metropolitana: sostenibilità e cultura nella forma della città", in EcoWebTown Journal of Sustainable Design #15, edizione SUT, www.ecowebtown.it - Di Girolamo C. (2017), "Infrastrutture multilivello", in AA. VV. Atti della XIX Conferenza nazionale SIU, Italia '45-'45. Radici, condizioni, prospettive, Catania 16-18 giugno 2016, Planum Publisher, Roma-Milano, pp 1443-48 - Di Girolamo C. (2016), "Multilevel Infrastructures" in Colombo G., Lombardi P., Mondini G. (a cura di), e-agorà|e-αγορά for the transition toward resilient communities, Input, 9th International Conference on Innovation in Urban and Regional Planning, Torino

Federico Bilò	Federico Bilò has segree in Architecture from the "La Sapienza" University of Rome, 1990. Research Doctorate in Architectural Design (VII Cycle) and Contract Professor with the Faculties of Architecture in Pescara and the "Roma Tre" University of Rome. Since 2003 he holds a Research position in Architectural and Urban Design with the Faculty of Architecture of Pescara, IDEA Department, where he teaches Architectural Design and holds the position of Associate Professor. His primary fields of research are: Team X and the notion of urban structure; the hybrid contemporary landscape; contemporary Dutch architecture. In 1999 he was an IN/Arch delegate to the Landscape Think-tank developed by the Italian Ministry for Cultural Heritage and Activities preparing the "1st National Landscape Conference". In 2001 he served as a consultant to the Municipality of Eboli during the design of interventions developed under the PIT Integrated Territorial Project for the Piana del Sele. Recent pertinent publications: - Federico Bilò, Il progetto nello sguardo. Il paesaggio ibrido e la composizione architettonica, Sala Editori, Pescara 2001. - Federico Bilò, Mecanoo, Edilstampa, Rome 2003. - Federico Bilò (ed.), Rem Koolhaas – Bigness, progetto e complessità artificiale, edizioni Kappa, Rome 2004. - Federico Bilò (ed.), A partire da Giancarlo De Carlo, Gangemi editore, Rome 2007. - Federico Bilò, Tessiture dello spazio. Tre progetti di Giancarlo De Carlo del 1961, Quodlibet, Macerata 2014.
Federico di Lallo	September 2005 - July 2012, Master in Architecture, University of Studies "G. D'Annunzio", Chieti - Pescara, IT. In 2014 he received qualifications to practice as an architect. From November 2014 to present, Phd with scholarship in Earth Systems and Built Environments – curriculum Architecture, University of Studies "G. d'Annunzio" di Chieti - Pescara, IT. From May 2017 to July 2017, Visiting Student, University of Toronto UFT, Faculty of Architecture. He was collaborator on many academic research teams, workhops and seminars and he is member, among many others, of "Slow Mobility. Guidelines for the design of cycle networks" (Protocollo Regione Abruzzo), scientific coordination: Matteo di Venosa, Lorenzo Pignatti (2017). From 2005 to 2017 he was collaborator for different architectural design offices dealing with urban regeneration theme, design of public spaces, residential units and commercial spaces. Recent pertinent publications: - 2016, "Il rilancio dell'esistente", Federico di Lallo. In "Progettare per il futuro della città. Un laboratorio per Chieti", Alberto Clementi, Carlo Pozzi (a cura di) Quodlibet Studio publisher, . ISBN 978-88-746-2774-5 - 2017, "Ponti della conoscenza. Le rotte dell'informazione attraversano l'Adriatico", Federico di Lallo. In "Crossing Sightlines. Traguardare l'Adriatico " ("Re-cycle Italy", XXXV. Project of national interest, PRIN), Lorenzo Pignatti, Stefania Gruosso (a cura di) Aracne publisher, ISBN 978-88-255-0268-8 - 2017, "MappaMonti. Mappatura come intelligenza competitive: rigenerazione urbana 2.0", Federico di Lallo.In "Pianificare l'innovazione locale. Strategie e progetti per lo sviluppo locale creativo: l'esperienza del SicaniLab", Maurizio Carta, Annalisa Contato, Marilena Orlando (a cura di) Franco Angeli publisher, ISBN 978-88-917-4311-4 - 2017, "Open Cultural Cities. Rigenerazione urbana multi scalare", Federico di Lallo. In "Atti della XIX Conferenza Nazionale SIU. Cambiamenti. Responsabilità e strumenti per l'urbanistica a servizio del paese. Catania, 16-18 giugno 2016", AA.VV., Planum publisher, ISBN 978-88-992-3708-0

Camillo Frattari	Camillo Frattari is licensed Architect (2013); Graduated in Architecture in 2012. His project thesis in architectural and urban design titled "Città/Isolato: design of an urban expansion over the Delta area in Rijeka (Hr)" was presented at the "Biennale Sessions: La Città Adriatica"- 13a Mostra Internazionale di Architettura in Venice, and at the "Eurau 2014: Composite Cities, European Symposium on Research in Architecture and Urban Design" at the ITU in Istanbul. Nov 2014 – present Phd in Earth Systems and Built Environments – architecture "G. d'Annunzio" University of Chieti - Pescara, Department of Architecture. His research focus on relationships between city and human condition, architecture and public space, urbanism and media. He is member of CNAPPC / Consiglio Nazionale degli Architetti, Paesaggisti, Pianificatori e Conservatori - Italy (May 2013 – present); Register of the Association of Architects, Landscape Architects, Town Planners and Environmental Planners of the Province of Teramo, subscription n° 812. He published essays such as "Geographies of the Adriatic City" (2017) on the identity of the adriatic cities as a pattern of satellite images; "In/Tra: contemporary public space in the historical city" (2016) on the public space as a temporal and spatial connection inside the city and between the historical buildings; "Città/Isolato: morphing Rijeka" (2014) on the project of a new urban form based on context, identity and experience. He collaborates with the Department of Architecture in Pescara as tutor in architectural and urban design studios, workshops and summer schools. Recent pertinent publications: - Geografie della Città Adriatica, C. Frattari, Crossing Sightlines/Traguardare l'Adriatico, L. Pignatti – S. Gruosso, Aracne, ISBN 9788825502688, May 2017. - IN/TRA: lo spazio pubblico contemporaneo nella città storica, C. Frattari Progettare per il futuro della Città, A. Clementi - C. Pozzi, Quodlibet Studio. Città e paesaggio. Album, ISBN 9788874627745, 2016. - Città/Isola_to: morphing Rijeka, C. Frattari, Eurau 2014 Composite Cities - Proceedings, edited by G. Saglamer, P. Dursun, F. Erkök, N. Paker, M. Aksoy, O. Avcı, N. Korucu Gümügoglu, M. Baslo, ISBN: 9789755614526, November 2014. - Città/Isola_to, C. Frattari, Progetti lungo la linea di costa: Identità Adriatiche, L. Pignatti, LISt Lab Laboratorio Internazionale Editoriale, ISBN 9788898774135, April 2014.

Partner number		**P2**
Organisation name & acronym	UNIVERSITY OF MARIBOR (Faculty of Civil Engineering, Transportation Engineering and Architecture) - UM (FGPA)	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

The activities of the Faculty of Civil Engineering, Transportation Engineering and Architecture (FCTA UM) established in 1995 at the University of Maribor, are focusing on higher education and research. The FCTA established the university study programmes at Bachelor- and Master's levels in Civil Engineering, Transportation Engineering and Architecture, as well as the interdisciplinary programme Industrial Engineering. In collaboration with a range of related institutions, companies and clients, the FCTA performs activities in international, national, and regional scientific and research programmes. The efforts for the highest quality of teaching, learning and research are based on the principles of consistency, integrity, open-mindedness and international compatibility.

The FCTA creates, develops and expands engineering expertise by transferring it in the best possible way to the knowledge, competences and creativity of the graduate while reflecting innovative learning and teaching methods based on sustainability paradigm.

The FCTA is recognized as one of best faculties in specific civil engineering areas at national and international level. Teaching, learning and research are performed in line with the highest standards of technical, technological and societal values, in close cooperation with professional disciplines and related institutions. Based on responsible mentor-student relationship they strive to activate the motivation, as well as to develop knowledge, understanding, creativity, and competence potentials.

With approximately 300 students enrolled yearly, the Department of Architecture (DA) acts as one of the three FCTA's departments. In accordance with Bologna Declaration, The Bachelor's Architecture Study Programme introduced in 2007, was accomplished by Master's Architecture Study Programme in 2010. The consecutive full-time five years' study of Architecture enables the graduates to achieve the EU- qualification of regulated profession as an Architect. The DA includes two chairs –Chair of Architecture and Chair of Spatial Planning as basic organizational units – and two parallel institutions, Research Group for Architecture and Urban Development, registered by the Ministry of Higher Education that is focused on research, and The Institute for Architecture and Spatial Planning, which is registered by the University which is focused on professional practice and collaboration with the economy.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project

Please describe also the role of your organisation in the project (limit 1000 characters).

DA Department of Architecture, FCTA UM is closely linked with international academic community, promoting the international exchange of students and staff, and supporting active participation in programmes and networks basically as an integral part of the curriculum. After ten years of experience, the department developed efficient institutional model at both study levels, which integrates monitoring system oriented towards the efficient integration of professional practice in teaching and learning processes. According to the EU Diploma quality standards, it aims at achieving relevant competencies of graduates as a precondition for them to obtain the EU professional qualification in architectural practice.

Beside advisory and consultancy role in the project, DA expect also to share the lessons learned, as well as successful practices to support transfer of knowledge and skills based on diverse backgrounds. In this view, it also aims at upgrading the existing on-line knowledge-based platform as an efficient dissemination tool for students, teachers, researchers, and practitioners. We expect that the project will address the challenges identified by shared experience, values and skills among the institutions involved that are related to the development of Architecture programmes as a base for a long-term collaboration.

University of Maribor (Faculty of Civil Engineering, Transportation Engineering and Architecture) - UM (FGPA), Slovenia will lead WP1 - Current programmes in EU and partner HEIs - State of the Art
together with Co - Leader - Brest State Technical University, Belarus.

Also, it will lead WP3 - Capacity building together with co – Leader - National Polytechnical University of Armenia Foundation – NPUA, and will be working on other activates set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)	
List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	
F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)* *Please fill in if you are applying for this type of project and define clear the activities to be held in your institution* (limit 2000 characters)	
F.3.6 – Expected results and impact *(only for Partner Country institutions)*	
What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	
F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project *Please add lines as necessary.*	

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Metka Sitar	Metka Sitar FCTA UM is Associate Professor in Architecture and Spatial Planning, Head of Architecture Chair, Head of The Bachelor's Architecture Study Programme, Head of The Research Group of Architecture and Urban Development. She graduated in Architecture, Faculty of Architecture, University of Ljubljana; post-graduate studies The Institute of Town- and Landscape Planning, Academy of Fine Arts, Copenhagen; PhD at the Institute of Urban and Environmental Planning,

	Technical University of Graz, Austria ; 2000-2002 Advisor to the Government in Spatial Planning, Ministry of Environment and Spatial Planning of Slovenia; professional practice in several architectural offices, since 2001 teaching and research; project leader/expert in research projects at national and the EU level (ESPON, Interreg, CADSES), national coordinator/delegate in several COST Actions, 2010-2014 representative of Slovenia in the COST Transport and Urban Development Domain Committee; author and editor of several scientific publications. Her research interest includes sustainable housing development, energy efficient refurbishment, smart strategies for urban regions. She is member of The Council for Sustainability and Social Responsibility; Commission for Study Affairs, Commission for Habilitation and Human Resources; 2015-2017 coordinator of the EU-Professional Qualification Notification process according to the Directive 2013/55/EU on the recognition of professional qualifications and the Regulation No 1024/2012 on administrative cooperation; 2016-2020 National coordinator of the EC COST Action "Advancing effective institutional models towards cohesive teaching, learning, research and writing development". Recent pertinent publications: - ROZMAN CAFUTA, Melita, SITAR, Metka. Rethinking the city spatial identity through the eyes of the observer = Promišljanja o prostornom identitetu grada iz perspektive promatrača. Prostor: znanstveni časopis za arhitekturu i urbanizam, ISSN 1330-0652, 2017, vol. 25, no. 2 (54), str. 316-327, ilustr. [COBISS.SI-ID 21109526] - SITAR, Metka, ŠPRAH, Nataša. Vrednotenje uporabne vrednosti stanovanj za dvig bivalne kakovosti = Use value assessment for raising the quality of housing. AR: arhitektura, raziskave, ISSN 1580-5573. [Tiskana izd.], 2016, 1, str. 6-25, ilustr., fotograf. http://www.fa.uni-lj.si/filelib/9_ar/2016-1/ar1-2016-01-sitar.pdf. [COBISS.SI-ID 20593174] - SITAR, Metka, KRMELJ, Vlasta. Energy efficiency management of public buildings: a challenge for local communities. V: KORONEOS, Christopher J. (ur.). Proceedings of ELCAS 2013, 3rd International Exergy, Life Cycle Assessment and Sustainability Workshop & Symposium, ELCAS 3, 7-9 July 2013, Nisyros Island, Greece. Nisyros: ELCAS. 2013, str. 779-787. [COBISS.SI-ID 17042454] - SITAR, Metka, ŽEGARAC LESKOVAR, Vesna, KRMELJ, Vlasta. Stimulating integral refurbishment principles in social housing as a challenge for sustainable development: case study: energy saving strategies of the Municipality of Maribor, Slovenia. V: Changing housing markets: integration and segmentation. Prague: ENHR. 2009, 19 str. http://www.enhr2009.com/enhr/download/982/paper_sitar,zegarac, krmelj1_W09.pdf. [COBISS.SI-ID 13675030] - CIRMAN, Andreja, MANDIČ, Srna, SITAR, Metka. Slovenia: do energy efficiency policies influence the quality of housing? V: NIEBOER, Nico (ur.), et al. Energy efficiency in housing management: policies and practice in eleven countries. London; New York: Routledge. 2012, str. 195-208. [COBISS.SI-ID 20805606]
Uroš Lobnik	Uroš Lobnik FCTA UM is Associate Professor in Architecture and Spatial Planning, Head of the Architectural Department, Head of the Chair for Spatial Planning, Head of the master's Architecture Study Programme. He graduated in Architecture, Faculty of Architecture, University of Ljubljana; professional practice in architectural design and spatial planning in Maribor and Graz ; since 2000 co-founder of the architectural office AU arhitekti Maribor; Architectural Awards: The Plečnik medal 1997 and 2011, European Urbanistic Association Acknowledgement, National Award Zlati Svinčnik 2012; engaged in architectural theory, cofounder end editor of Arhitekturna beseda, pages on architecture in the daily regional newspaper Večer 1996 -2012, member of the editorial board of Architect's Bulletin, International Magazine for Theory and Architecture, of the journal Piranesi as the 1st Central European Architectural

	Magazine for the Culture and the Environment; curator of architectural exhibitions Maribor-Overload 2002, Maribor -Marburg: A City Panorama of the European Capital of Culture 2012 (Vienna, Maribor), 2x2: Five Years of Slovene Architecture, 2012; since 1998 teaching and research; 2011-2016University Architect; since 2012 chairing the regional architectural center House of Architecture Maribor HAM; author and editor of several scientific publications. His research interest includes architectural and urban theory, sustainable architecture and city, urban experiments. From 2011 to 2016 he is a member of The Council for Sustainability and Social Responsibility; 2012 coordinator of the project RAZUM-EPK 2012 (University project's for the city of Maribor, the European Capital of Culture 2012). Recent pertinent publications: - LOBNIK, Uroš. Strnjeni razvoj - ranljivost urbanega? = Compact development - vulnerability of the urban? Urbani izziv, ISSN 0353-6483. [Tiskana izd.], 2002, let. 13, št. 2, str. 11-19, 116-119, ilustr. [COBISS.SI-ID 1957571] - LOBNIK, Uroš. Urbanistična zasnova mesta Maribor = The master plan for Maribor. Urbani izziv, ISSN 0353-6483. [Tiskana izd.], 1999, let. 10, št. 2, str. 41-47 (slov.) in 175-179 (angl.). [COBISS.SI-ID 1630659] - LOBNIK, Uroš. Die Kulturhauptstadt Europas: suche nach einer neuen Rolle für das Stadtzentrum = The European Capital of Culture: the search for a new role for the city centre. ISG Magazin, ISSN 2309-1215, 2012, 1, str. 7-9, ilustr. [COBISS.SI-ID 17054486] - LOBNIK, Uroš. Die Kulturhauptstadt Europas: suche nach einer neuen Rolle für das Stadtzentrum = The European Capital of Culture: the search for a new role for the city centre. ISG Magazin, ISSN 2309-1215, 2012, 1, str. 7-9, ilustr. [COBISS.SI-ID 17054486] - LOBNIK, Uroš. Umgestaltung der Stadt (1992-2012) = Reorganization of the city (1992-2012). V: STILLER, Adolph (ur.), et al. Marburg: ein Stadtpanorama zur europäischen Kulturhauptstadt 2012 = Maribor: a city panorama of the European capital of culture 2012, (Architektur im Ringturm, 29). Salzburg; Wien: M. Salzmann. cop. 2012, str. 43-112 (nem.), 140-143 (angl.), ilustr., fotograf. [COBISS.SI-ID 17057302]
Nande Korpnik	Nande Korpnik FCTA UM is Assistant Professor in Architecture and Spatial Planning. He graduated in Architecture at the Faculty of Architecture, University of Ljubljana; active freelance architect since 1990; founder and head of the architecture office; author of numerous realized projects in architectural design and spatial planning. Selected projects: 1992 urban development concept for Velenje city centre; 1994 office building in Arkhangelsk, Russia; 1995 Design of the Dotikajmo se predmetov (Please Touch the Artifacts) antiquities exhibition for the visually impaired - Valvasor Recognition; 1998 Integra Car Showroom, Maribor - 1998 Mies van der Rohe Award Nomination; 2000 Acman House, Griže - 2000 Plečnik Award, 2000 Mies van der Rohe Award Nomination, 2005 Golden Pencil for Outstanding Realization; 2004 Office Building Menerga, Maribor, Slovenia - 2004 Mies van der Rohe Award Nomination, 2008 GreenBuilding Programme Award; 2005 Maksimilijan Office and Residential Building, Celje; Reja and Scania Lorry Service Centre, Kozina, Slovenia, 2006; 2006 Diamant Commercial Building, Ljubljana; 2007 Multi-Family Residential Building, Celje, Slovenia; 2014 Monting Industrial Buildings, Laško; 2016 Pavilion and Tourist Information Centre, Celje; published several articles national and international journals, chaired workshops etc. In 2012 he received the Recognition of the Valuable Opus of Art in the Field of Architecture from the University of Ljubljana. His research interest include smart architecture, architectural education system in relation to the economy, building industry, public and private sector clients. He is Member of the Architecture Programme Council established in 2016 for the

	coordination of the study programme in relation to the professional profile in terms of the job market demands. Recent pertinent publications: - KORPNIK, Nande, ROVAN, Alojz, GABRIJELČIČ, Peter, CIPOT, Gregor, GABRIJELČIČ, Boštjan. S druge strane = On the other side. Oris: časopis za arhitekturu i kulturu, ISSN 1331-7571, 2014, leto 16, št. 89, str. 100-115, ilustr. [COBISS.SI-ID 21090326] - KORPNIK, Nande. Oblikovna izraznost betona = Design Expression in Concrete. V: KUHTA, Milan (ur.). Beton Maribor 2017: zbornik. Ljubljana: ZBS Združenje za beton Slovenije. 2017, str. 20-25, ilustr. [COBISS.SI-ID 20556310] - KORPNIK, Nande. Prezentacijski paviljon in zaščita mozaika na Glavnem trgu 17 v Celju = Presentation pavilion and mosaic's protection at Glavni trg 17 in Celje. V: VOLARIČ, Zdenka (ur.), FRLAN, Nina (ur.), KLOPČIČ, Luka (ur.). Zbornik. Ljubljana: Svetovni slovenski kongres: = Slovenian World Congress. 2017, str. 97-100, ilustr. [COBISS.SI-ID 21078550] - KORPNIK, Nande. Predstavitev arhitekturne ureditve območja Glavni trg 17 in 17a v Celju in razlaga arhitekturnega oblikovanja razstavnega paviljona arheologije = Presentation of architectural organization of Glavni trg 17 and 17a in Celje with the outline of the architectural design of the exhibition pavilion of archaeology. V: LUX, Judita (ur.), - KIKELJ, Martina L. (ur.), KRAMAR, Sabina (ur.). Zaščita in vzdrževanje mozaikov in situ: zbornik povzetkov = Protection and maintenance of mosaics in situ: book of abstracts. Ljubljana: Zavod za varstvo kulturne dediščine Slovenije: = Institute for the Protection of Cultural Heritage of Slovenia. 2015, str. 25. [COBISS.SI-ID 21109782]
Peter Šenk	Peter Šenk FCTA UM is Assistant Professor in Architecture and Spatial Planning. He graduated in Architecture at the Faculty of Architecture, University of Ljubljana; post-graduate studies at The Berlage Institute, Laboratory of Architecture, Rotterdam; PhD in Humanities - Philosophy and Theory of Visual Culture, University of Primorska; since 2003 collaboration with The Berlage Institute, Rotterdam and The Institute for Postgraduate Studies and Research of the Willem de Kooning Academy, Hogeschool Rotterdam; professional practice in architectural design and spatial planning. Since 2003 co-founder of the architectural practice office Studio Stratum; engaged in art and social criticism over the FWC - First World Camp platform; since 2012 curator and programme coordinator at The House of Architecture Maribor HAM; organisation of national and international workshops, round tables and conferences; author, editor, member of the editorial board of the Theoretical Practice of Architecture Book Series, Research Centre of the Slovenian Academy of Sciences and Arts. His main research interest focus on architectural and urban theory, experimental architecture, urban studies, sustainable city. Since 2012 promotion of contemporary architecture in the regional architectural centre HAM (House of Architecture Maribor) with over 80 events, 40 exhibitions, local, national and international exhibitors and speakers, incl. web page platform ham.raz.um.si; editor of The Department of Architecture web platform www.fgpa.um.si/arhitektura as a tool for a comparative overview of objectives, goals and achievements within the educational process as well as promotion of architecture as a discipline with social and (trans)cultural impact. Recent pertinent publications: - ŠENK, Peter. Capsules: typology of other architecture. London; New York: Routledge, cop. 2018. XV, 195 str., ilustr. ISBN 978-1-138-28034-2. ISBN 978-1-138-28035-9. ISBN 978-1-315-27217-7. http://www.tandfebooks.com/isbn/9781315272177. [COBISS.SI-ID 20904214]

	- ŠENK, Peter, LOBNIK, Uroš. Urbanistično-arhitekturna delavnica kot priložnost za teoretsko refleksijo: primer mednarodne urbanistično-arhitekturne delavnice Maribor-jug = Urban-architectural workshop as an opportunity for theoretical reflection: example of the international urban-architectural workshop Maribor-South. Igra ustvarjalnosti: teorija in praksa urejanja prostora, ISSN 2350-3637, 2013, št. 1, pp. 78-84, ilustr. http://iu-cg.org/paper/2013/IU_st01_senk.pdf. [COBISS.SI-ID 17300502] - ŠENK, Peter. The plug-in concept: technology and aesthetics of change = Koncept plug-in: tehnologija in estetika spremembe. AR: arhitektura, raziskave, ISSN 1580-5573. [Tiskana izd.], 2013, [Št.] 1, pp. 42-51, ilustr. [COBISS.SI-ID 17332502] - ŠENK, Peter. The concept of capsule architecture as experiment: origins and manifestaions with selected examples from Slovenia and Croatia = Koncept arhitektonske kapsule kao eksperiment: podrijetlo i manifestacije s odavranim primjerima u Sloveniji i Hrvatskoj. Prostor: znanstveni časopis za arhitekturu i urbanizam, ISSN 1330-0652, 2013, vol. 21, no. 2 (46), pp. 350-361, ilustr. [COBISS.SI-ID 17508630] - ŠENK, Peter. Mobilnost, kraj, mesto in njegovi robovi = Mobility, place, city and its edges. V: LOBNIK, Uroš (ed.), ŠENK, Peter (ed.). Mesto: rob = City: edge, (HAM publikacije). Maribor: Pivec. 2014, pp. 20-23, str. 24-27. [COBISS.SI-ID 17867798]

Partner number		**P3**
Organisation name & acronym	The University of Malaga (School of Architecture and of Engineering) - UMA	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

The University of Malaga (UMA) is one of Spain's premiere institutions of higher learning (world ranking: 736) [2016]. Since its foundation back in 1972, UMA has rapidly expanded its international presence and prestige. Currently, UMA has 2 campuses (1.797.247 m2), +35,000 students, +2,400 professors, 23 faculties and schools, 82 departments, 200 educational programmes (incl. 68 undergraduate, 75 master and 34 phd), 200 phd thesis/year, 278 research groups, research projects (425 national / 150 EU [2007-2016]), and +1,800 business contacts.

Regarding international relations, UMA has bilateral agreements with +550 universities from all over the world (Europe, Iberoamerica, North Africa, Asia, USA/Canada, Australia, New Zealand, Japan, South Korea, etc.) with +1,000/+1,000 exchange students (in/out)/year and +100/+100 exchange researchers (in/out)/year. UMA participates actively in a number of international programmes (LLP, Erasmus Mundus, Tempus, Erasmus+, ISEP, Fulbright, AUIP, etc.), national/regional programmes (Spanish Ministry of Education, Regional Gov, Talentia, ICEX, etc.), and privately-funded programmes (Santander, Unversia, Caixa, Caja Madrid, etc.), all of them managed by the Unit of International Affairs & Cooperation (UIAC). UMA is member of +100 networks/associations.

UMA stimulates educational innovation and research by boosting the quality of its professors and research groups through their participation in international research projects - managed by OTRI (Research Results Transference Office) - with the support and sponsorship of enterprises from local TechPark (PTA). The university has a dedicated career center which fosters the employability of students and young researchers by offering a wide services portfolio including academic/professional counselling, paid internships/fellowships, etc. UMA meets the following quality standards: EFQM 200, EFQM 300, ISO 9001, ISO 14001, etc. UMA is also part of the “Andalucia Tech” campus of excellence.

The School of Architecture of Malaga currently have 2 Degrees: The Degree of “Graduate in Architecture” (5 years + Final Project; accredited by European accreditation institution) and the “Masters in Architectural Projects, Environmental Design and New Technologies” (both accredited by the national accreditation institution). The School has bet for the internationalization of education, and it offers the possibility of studying different subjects of the degree in 2 languages: English and Spanish. This is a pioneering proposal in Spain to consolidate a bilingual line throughout all the courses in the future. This initiative has had a direct influence in the increase of the mobility of

foreign students who demand the School of Malaga as university of destination, as well as the increase of Spanish students going abroad.

The different research groups of the School have carried out a satisfactory work throughout different research projects and prizes that have been obtained (see merits attached). One of the main research line is focused on the study of "Tourism, Heritage and Landscape". The proximity to "Costa del Sol", one of the biggest tourist destinations of the world, has given a key role to the School of Architecture as new laboratory and research center in the Spanish coast. Another important research lines are related to "Environmental Design in Architecture" and "Healthy Cities and Urban Regeneration".

The School has a specific department of "International Programs and Enterpreneurship" for promoting cooperation with Industry. There is also a program of specific actions for the students' professional promotion. At present, a considerable number of agreements have been signed between the School and different companies in the field of Architecture to collaborate in academic, research and professional activities.

The School of Engineering has a large tradition in this University. It's the fusion of two huge schools; the Higher Polytechnic School and the School of Industrial Engineering. The Higher Polytechnic School founded in 1927, and after various stages of development, finally became part of the UMA in 1973. The degree's courses currently offered are in: Industrial Design and Product Development; Industrial Electronics and Mechanical Engineering; Double Degrees in Electrical and Mechanical Engineering; Double Degrees in Electrical and Industrial Electronics Engineering and Double Degrees in Mechanical Engineering and Industrial Design and Product Development. It offers also a four Master's programme; Master's in Intelligent Systems in Energy and Transport, Master's degree in Representation and Design in Engineering and Architecture, Master's degree in Occupational Risk Prevention, Master's degree in Technology of Solar Photovoltaic Systems. The School of Industrial Engineering founded in 1990. In the current structure of teaching, within the framework of the European Higher Education Area, training in industrial engineering is offered with the degree in Industrial Technology Engineering, which trains generalist engineers in the field of industry. It also gives direct access to the Master's in Industrial Engineering, allowing access to the regulated profession of Industrial Engineering. In addition, there are offered also three Master's Degrees; Master's in Mechatronic Engineering, Master's in Industrial Engineering and Master's in Environmental Hydraulics. Three PhD Programs are the current offer: Mechanical engineering and energetic efficiency, Mechatronic Engineering and Electric Power systems.

The Office for Research Results Transfer (OTRI) at the University of Malaga is responsible for relations between the scientific and business worlds, thus helping apply and commercialize R&D findings at UMA.
Moreover, the school promotes our graduates' entrance into the labour market, while also stimulating an entrepreneurial culture and the development of innovative companies, which result from projects, originated in the academic domain.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

The main contributions of the University of Malaga will be related with:
- Innovative teaching methods (based on the high experience of the staff on innovative teaching projects)
- Implementation of new programmes at BSc level and MSc level (staff participants have sustained experience on teaching and they have been selected from all areas of knowledge of the Degree and they could offer different programmes: Architectural Project, Urban and Regional Planning, Construction, Architectural Graphical Expression and History of Architecture).
- University - Enterprise collaboration (as the School has a specific department of "International Programs and Entrepreneurship" for promoting cooperation with Industry).

According to the staff skills, the role of organisation in the project will be related with development of interactive digital teaching material, development of an innovative academic environment for architecture and civil engineering programs throughout the cooperation with industry and training in Project Based Learning and Collaborative Learning.

University of Malaga (School of Architecture and School of Engineering), Spain will lead WP4 - University Enterprise Collaboration together with Co – Leader - UNMO, Mostar, BiH, and will be working on other activates set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	

Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	

How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Carlos Rosa- Jiménez	Carlos Rosa- Jiménez holds a PhD in Architecture (2003) and an MSc on Heritage & Architecture (1997) from the University of Seville (Spain). He earned a scientist career fellowship financed by the Andalusia Government to star his PhD in Territory & Heritage (1999-2003) in the University of Seville. In 2007 he joined the University of Malaga where he is currently Associate Professor, Director of the School of Architecture, Chief of the Research Group Urbanism, Tourism, Landscape & Architectonic Innovation (UTOPIA). He is also deputy director of Habitat, Tourism & Territory Institute, in collaboration with Catalonian Polytechnic University. He teaches Urbanism & Regional Planning in the Higher Technical School of Architecture in degrees and Master's degree. He has been visiting professor at the Polytechnic University of Catalonia (Spain), University of Faro (Portugal). He was leader of the Educational Innovation Project of the University of Málaga "Actions of educational and collaborative innovation in the final degree project" (2015-2017); Researcher in other Educational Innovation Projects such as " Sharing and Learning teaching experiences for the consolidation of teaching Architecture in English through a network of teachers, professionals and students " (2013-2015) or "Geospatial Collaborative Learning" (2011-2013). His educational innovation research work has been recognized with "III Educational Innovation Research Award 2010" by University of Málaga. Recent pertinent publications: - Boned-Purkiss, J. & Rosa-Jimenez, C. (2009). Teaching experiences. Malaga: Boned-Purkiss, ISBN: 978-84-612-6512-1 - Rosa-Jimenez, C. (coord.) (2010). Interactions. Educational Innovation in Achitectonic Projects, Theory and Urbanism. Málaga. ISBN: 978-84-614-3967-6 - Rosa-Jimenez, C. (2014). Public Participation in Urban Planning Teaching. In: Nebot, N.; Fernández -Contreras, R.; González -Vera, V (Coors). Thinking the City, New Tools for Urban Regeneration. Malaga: La Térmica, Diputación De Malaga. - Rosa-Jimenez, C., Boned-Purkiss, J., & Gavilanes, J. (2014). Transveral Learning in Urbanism, Projects & Theory. In: Muñoz-Sanchez, A. (Coor). Resources and experiences of Educational Innovation in the university context: III Award for Educational Innovation of the University of Málaga. Call for 2008-2010. Malaga: University of Malaga. ISBN: 978-84-974-7727-7 - Rosa-Jiménez, C.; Nebot, N.; Márquez, M.; "La gestión de la complejidad mediante el uso del hipertexto en entorno colaborativos y cooperativos de la enseñanza. Una aproximación al problema de los sistemas complejos y dinámicos en la docencia del urbanismo". Proceedings of I Ibero American Seminar of Educational Innovation, University Pablo Olvide, Sevillle, Spain. (Seville November 2014). - Rosa-Jiménez, C.; Nebot, N. "E-network of teachers for sharing experiences and methodological resources for the internationalization of education", International Congress on Education, Innovation and Learning Technologies. Granada, Spain, September 2015
Nuria Nebot Gómez de Salazar	Nuria Nebot Gómez de Salazar is architect (2003; Polytechnic University of Madrid), Master Degree of Graphic Representation and Design (2008; University of Malaga) and PhD in Architecture (2012; University of Malaga). She obtained a scientific

	research grant funded by the Spanish Tourism Ministry for the development of her doctoral thesis. In 2008 she joined the University of Malaga where she is currently Assistant Professor, deputy director of the department of International Relationships and entrepreneurship and member of the research group Urbanism, Tourism, Landscape & Architectonic Innovation (UTOPIA). She is also member of Habitat, Tourism & Territory Institute, from Catalonian Polytechnic University and University of Malaga. She teaches Urban and Regional Planning in the School of Architecture in Bachelor's and Master's degrees. She has been visiting professor at the University of Southampton, UK. She was leader of the Educational Innovation Project of the University of Málaga "Sharing and Learning teaching experiences for the consolidation of teaching Architecture in English through a network of teachers, professionals and students" (2013-2015); Researcher in other Educational Innovation Projects such as "Actions of educational and collaborative innovation in the final degree project" (2015-2017) or "Geospatial Collaborative Learning" (2011-2013). She has completed different teacher training courses related to educational innovation, such as: "Educational Innovation and Virtual Teaching "(2009), "Energizing the virtual campus" (2013), "Training for teaching in English in Architecture and Urbanism" (2015), "Teaching, training, research and technology transfer in Architecture and Urbanism" (2015), among others. She was also researcher in several projects related to new tools and methods in Architecture, Tourism and Landscape, among which stand out: "Tourism Minimum Pieces" (2006-2009), "Atlas Costa del Sol" (2008-2010). She has published in various indexed journals, specialized publications, national and international conferences and seminars. She has several publications in books and conferences related to innovative education and experiences: - Sánchez, J.; Nebot, N.; García Bujalance, S. "Rehearsals of urban recycling as teaching experience by students of Architecture. Learning from the artisan neighborhood of Funtanalla". Proceedings International Congress GreenCities and Sustainability 2013. Málaga, October 2013. - Nebot,N.; Fernández R.; González V. "Why Thinking the city?" in Nebot,N.; Fernández R.; González V. (Coors.) Thinking the city. New Tools for Urban Regeneration. Ayuntamiento de Málaga, December 2014. ISBN. 978-84-697-1951-0. - Rosa-Jiménez, C.; Nebot, N.; Márquez, M.; "La gestión de la complejidad mediante el uso del hipertexto en entorno colaborativos y cooperativos de la enseñanza. Una aproximación al problema de los sistemas complejos y dinámicos en la docencia del urbanismo". Proceedings of I Ibero American Seminar of Educational Innovation, University Pablo Olvide, Sevillle, Spain. (Seville November 2014). - Rosa-Jiménez, C.; Nebot, N. "E-network of teachers for sharing experiences and methodological resources for the internationalization of education", International Congress on Education, Innovation and Learning Technologies. Granada, Spain, September 2015
Alberto García Moreno	Architect, Master Degree of Architecture and Heritage (University of Seville, Spain) and PhD (University of Malaga, Spain). Alberto García Moreno is Assistant Professor, teaches Theory and History of Architecture since 2009 in the Higher Technical School of Architecture of Malaga (Spain) in degrees and Master's degree. He has been visiting professor at the University of Seville (Spain), University of Applied Arts of Vienna (Austria) and the Center for Social Studies of the University of Coimbra (Portugal). Member of several research groups, currently member of UTOPIA (Urbanism, Tourism, Landscape and Architectural Innovation) in the University of Málaga.

	Much of his university training is related to educational innovation, including the following courses: "The evaluation of learning and skills in the university, supported by ICT", "Teaching coordination in university education", "Educational innovation for university professors" or "Educational innovation and virtual teaching at the University of Málaga". Leader of the Educational Innovation Project of the University of Málaga "Activation and re-qualification of didactic, physical and virtual spaces, as a support for teaching, learning and evaluating processes in the Higher Technical School of Architecture of Malaga". Researcher in other Educational Innovation Projects such as "Actions of educational and collaborative innovation in the final degree project" or "Geospatial Collaborative Learning. Collaborative learning through the introduction of geospatial methodologies in the teaching of the subjects of Projects, Urbanism and Theory-History of Architecture". Researcher in several projects related to architectural experimentation, among which stand out "Experimental Laboratory of Industrialized Architecture and Integrated Energy Efficiency Systems", "Laboratory of experimental actions on industrialized and constructive energy efficiency systems" or "Research on earthquake-resistant, energy efficient and intelligent buildings during their life cycle". His research work has been recognized with several national and international research awards, such as "Malaga Research Awards 2015", "International Research Award in Spanish Cinema 2015", or "Research Award XIII Biennial Spanish Architecture and Urbanism 2016 ". Among other publications, the following ones stand out: - Carlos Rosa-Jimenez, Nuria Nebot, Alberto Garcia-Moreno, María José Márquez Ballesteros. Near Zero Consumption Building as an Urban Acupuncture for a Vertical Slum. A Case Study in the City of Malaga, Spain, October 2017, DOI10.1088/1757-899X/245/5/052028 - Carlos Rosa-Jimenez, Nuria Nebot, Alberto Garcia-Moreno. An innovative cooperative model for Master Degree Project of Architecture. Overcoming the traditional system. Third International Conference on Higher Education Advances. June 2017. DOI10.4995/HEAD17.2017.5590 - Alberto García Moreno, Carlos Rosa Jiménez, María José Márquez Ballesteros, "The cinema as a heritage archive of the Costa del Sol (1959-1979)", PASOS. Revista de Turismo y Patrimonio Cultural. Vol. 14 N.o 1. Págs. 253-273. 2016 - Lourdes Royo Naranjo, Alberto E. García Moreno "Tourism on the Costa del Sol. A heritage under review". PASOS. Revista de Turismo y Patrimonio Cultural. Vol. 12 N.o 4. Págs. 847-857. 2014
Juan Gavilanes Vélaz de Medrano	Juan Gavilanes Vélaz de Medrano has degree in architecture in ETSA Madrid / UPM (1992). He received his Ph.D. degree in Architecture from the Polytechnic University of Madrid (UPM) in 2012. Grant Tourism Spain 2008. Prize of Architectural Dissertation, Málaga Association of Architects 2013. He is currently a researcher and an Assistant Professor in Architectural Design at School of Architecture of the University of Málaga (UMA). He teaches Architectural Projects since 2005. He has been professor of Architectural Projects at the University of Wales / EADE (2000-05). He has been visiting researcher at the University Polytechnic of Madrid-UPM (Spain). He has been Visiting Profesor at the UNAM (México DF, 2008), and also in several international workshops, Quito (2009) and San Salvador (2010). Member of several research groups, currently member of HUM-969: UTOPIA (Urbanism, Tourism, Landscape and Architectural Innovation) in the University of Málaga. Leader of the Educational Innovation Project of the University of Málaga: “New didactic strategies and Information and Communication Technologies (ICTs) tools for the teaching of Architecture” (2013-15). Researcher in other Educational Innovation Projects such as “Pilot project for the expansion and consolidation of new learning systems for the adaptation of the subjects of Urbanism, Theory-History and

	Architectural Projects in the degree of architecture. Málaga, city and tourism." (2008-10). Researcher in several projects related to architectural experimentation, among which stand out: "Artificial intelligence techniques for sustainable architectural design" (2016-19), Intelligent learning and decision-making techniques in sustainable architecture projects" (2015), "Laboratory of Experimental Actions on Industrialized and Energy Efficient Construction Systems in the Solar House Prototype" (2013-16). He is a member of the Board of trustees of the Foundation for Contemporary Architecture since 2014. He has received numerous Spanish prestigious industry awards in recognition of his works in architecture and urban landscaping. He is the author of the two books about History of Architecture and Urbanism of the 20th century, Collection History of Art in Malaga. His research interest includes relationships between architecture and tourism, applications of artificial intelligence to architectural sesign problems and about the refurbishment and landscaping in European historic Centers. He is the co-author of the books History of Architecture and Urbanism in Málaga (1950-2000). Recent pertinent publications: - J. Gavilanes Vélaz de Medrano. Faculty of Health Sciences of The University of Málaga. XIII Spanish Biennial of Architecture and Urbanism – Alternatives. Volume 1, Pages 475, ARQUIA FOUNDATION (2016) - Millan, E., Belmonte, M.-V., Ruiz-Montiel, M., Gavilanes, J., & Perez-de-la-Cruz, J.-L. (2016). BH-ShaDe: A Software Tool that Assists Architecture Students in the Ill-Structured Task of Housing Design. IEEE Transactions on Learning Technologies, 9(3), 244–257. DOI: 10.1109/TLT.2016.2556667 - De Medrano, J. G. V. (2015). Acciones contra la estacionalidad del turismo en la Costa del Sol a finales de los 60. Fundación y reconocimiento de otro fenómeno urbano. Revista Márgenes Espacio Arte Y Sociedad, 12(16), 79–94. - Ruiz-Montiel, M., Boned, J., Gavilanes, J., Jiménez, E., Mandow, L., & Pérez-de-la-Cruz, J.-L. (2014). Proyecto arquitectónico mediante gramáticas de formas sencillas y aprendizaje. Inteligencia Artificial. Revista Iberoamericana de Inteligencia Artificial, 17(54).
Javier Castellano Pulido	Javier Castellano Pulido architect (Granada, Spain, 2001) and PhD degree (University of Granada, Spain, 2015). Professor since 2010, he teaches Architectural Design in the Higher Technical School of Architecture of Malaga (Spain). Associate Professor, Department of Art and Architecture, (Accredited Professor), University of Málaga. Architect by E.T.S.A. of Seville University, year 2001. Associated Partner in the architecture office "Luis Machuca y Asociados". Among the various University management positions held, he is currently deputy head of Postgraduate Studies and Quality of the E.T.S. of Malaga Architecture and he has been coordinator of the Master in «Architectural Design, Environmental Design and new technologies». Researcher at Institute of Tourism Heritage (Central University of Chile in 2011. He also has been invited as critic and lecturer in several countries: Germany (Technische Universität Berlin); Spain (Higher Technical School of Architecture in Madrid, Valencia, Alicante); Switzerland (Academia di Architectura di Mendrissio), among others. He is currently member of UTOPIA in the University of Málaga. Leader of the Educational Innovation Project of the University of Málaga "Geospatial Collaborative Learning. Researcher in other Educational Innovation Projects such as "University of readers, city of lectures (Innovation in teaching methodologies for theoretical classes and practices of Hispanic American Literature, Language and Architecture)" or "Sharing and learning teaching experiences. Researcher in several other projects related to architectural experimentation and sustainability, among which stand out "Integration of agricultural production activity in the soils of tourism growth of the Mediterranean coast", or more recently "Instruments for

	assessing urban scenarios in the face of climate change". Other lines of research are related to his work as architect in his own office CUAC Architecture. His research, projects and built works has been exhibited in many national and international events, he has won many prizes in national and international competitions and his works have been awarded in many national and international events. He has published works and research articles in the main journals and books subject to the highest impact rates in Architecture and Urbanism: A10 Magazine (new european architecture review), Arquitectura Viva, Av proyectos, Future Architecture, Arquitectos, Review: bba (Bau, Beratung, Architektur), Rum Magazine (Sweden) among many others. Recent pertinent publications: - Castellano Pulido, J., & García Píriz, T. (2017). Los tiempos de San Jerónimo 17: inserciones, continuidades y desplazamientos en un paisaje interior. - Castellano Pulido, J., García Píriz T.G., Serrano Garcia J.A., Baquero Masats P., Alvarez García S. Runner-up – Feldafing (DE). The Magic Park of Feldafing In: The adaptable city 2: Europan 13 by Rebois, D., & Europan (Organization) (2016). Paris: Europan Europe. - Castellano Pulido, F. J. (2015). INFRAESTRUCTURA Y MEMORIA: DE LAS TERRAZAS AGRÍCOLAS DE GEDDES A LOS PAISAJES SUPERPUESTOS DE BEIGEL. Proyecto, Progreso, Arquitectura, (13), 74–89. https://doi.org/10.12795/ppa.2015.i13.05
Susana García Bujalance	Susana García Bujalance architect by the University of Seville and PhD from the University of Málaga. Associate Professor in the Department of Art and Architecture of the University of Málaga, Area of Urbanism and Urban Planning. Invited professor at the University of Palermo. Member of the research group Urbanism, Tourism, Landscape & Architectonic Innovation (UTOPIA). Her reserch intesrt focus on territory, urban planning, landscape, tourism. She also investigates and works on the application of the gender perspective to urban planning and planning. She has participated in many educational innovation projects some of them are: Educational Innovation Project of the University of Málaga "Geospatial Collaborative Learning. Collaborative learning through the introduction of geospatial methodologies in the teaching of the subjects of Projects, Urbanism and Theory-History of Architecture"; "Analysis of the gender perspective in the transfer of research results", from the Equality Area of the University of Seville in 2011; Educational Innovation Project of the University of Málaga "Teaching methodology in the landscape integration of the urban and the industrial areas", PIE 13-126 (2013). She is the coordinator of the International Educational Innovation Project of the University of Malaga "Teaching methodologies related to the territory, landscape and tourism" (PIE-143, 2015-2017), in collaboration with the Universities of Seville and Palermo. She has presented the following works related to educational innovation: - "Planning and teaching experience in urban planning and gender perspective in the degree of Architecture" at the III National University Congress "Research and Gender" held at the University of Seville in 2011. - "Tests of urban recycling as a teaching experience carried out by students of architecture. Learning from the artisan neighborhood of La Funtanalla", at the Congress Greencities & Sustainability, organized by the City of Malaga in 2013.
Jonathan Ruíz Jaramillo	Jonathan Ruíz Jaramillo is architect (University of Seville, Spain, 2004). Since 2011, he is Assistant Professor in subjects related to Building Structures and Construction, in the Architectural Construction Area, Department of Art and Architecture of the School of Architecture of the University of Malaga. He has participated as invited professor in the Universities of Concepción (Chile, 2007), San Nicolas de Hidalgo University (Mexico, 2008) and University of Seville (2010). His main reserch interst

	include building design, construction, structures and systems for buildings. Additionally, obtained the Focus-Abengoa Award (2013). He has developed the following educational innovation projects at the University of Málaga: "New teaching frameworks: ICTs applied to problem-based learning for teaching in technical bachelors" (PIE 15-166) and "Application of new Information and Communication Technologies (ICT) for teaching and learning in technical subjects in Architecture and Engineering" (PIE 13-130). He also participated as a researcher in the project "Application and evaluation of new ICT in the development of teaching and learning in technical subjects in architecture" developed at the University of Seville (2016). Since 2004, he has collaborated with various architectural offices. It could be emphasized his participation in the technical team who supported the works for restoration of El Salvador's Church in Seville (National Restoration Prize in 2010) and 2º Sika Building Trust Award (2015) for the Rehabilitation of the residential complex Doña Amparo at Chipiona (Cádiz). Since 2007 he has participated in several research projects such as "Seismic behavior of buildings built with traditional techniques. Evaluation of structural safety and non-destructive rehabilitation techniques"; "Obtaining a method to guarantee and optimize the use of wood elements on exterior resisting environmental agents"; "Seismic standard. Prior analysis and rehabilitation of damaged buildings and existing infrastructures". Additionally, he has developed research stay periods at Berner Fachhochschule für Architektur, Holz und Bau (AHB), Biel (Switzerland) (2009) and University of Chile (2015). Recent pertinent publications: - Ruiz-Jaramillo, J., Alba-Dorado, M. I., Cimadomo, G., Jiménez-Morales, E., & Joyanes-Díaz, M. D. (2016). Innovation and communication technologies+ Problem based learning: a new approach for teaching architecture. - Ruiz-Jaramillo, J., Mascort-Albea, E., & Jaramillo-Morilla, A. (2016). Proposed methodology for measurement, survey and assessment of vertical deformation of structures. Structural Survey, 34(3), 276–296. DOI: 10.1108/SS-02-2016-0006 - Ruiz-Jaramillo, J., Mascort-Albea, E., & Vargas-Yáñez, A. (2015). ANALOGUE-DIGITAL TEACHING: APPLICATION OF NEW TECHNOLOGIES TO LEARNING AND CONTINUOUS EVALUATION IN TECHNICAL SUBJECTS IN ENGINEERING AND ARCHITECTURE HIGHER EDUCATION. - Mascort-Albea, E. J., Ruiz-Jaramillo, J., López Larrínaga, F., & Peña Bernal, A. de la. (2016). Sevilla, Patrimonio Mundial: guía cultural interactiva para dispositivos móviles. PH, (90), 152–168. - Ruiz-Jaramillo, J., (2014) In Science, technology and cultural heritage: proceedings of the second International Congress on Science and Technology for the Conserva. by Rogerio-Candelera, M. A., & International Congress on Science and Technology for the Conservation of Cultural Heritage.
Carlos López Taboada	Carlos López Taboada architect (year 1998 – University of La Coruña, Spain). and Assistant Professor teaching since 2006 in many subjects such as Mehanics of rigid bodies, Mechanics of deformable bodies, Structures design and calculations, Structural design of furniture. Collaboration in Educative Innovation Project [PIE15-61] "Elaboración de material docente interactivo, en formato CDF, para Elasticidad t Resistencia de Materiales" Collaboration in Educative Innovation Project [GCL-RESMAT] "Aprendizaje activo de Resistencia de Materiales mediante la utilización combinada de software de simulación y herramientas de c.v.". Collaboration in the starting of the Open Course Ware "OCW-UMA-0035 – Resistencia de materiales" Collaboration in Educative Innovation Project [PIE10-096] "Diseño y cálculo estructural: software educacional interactivo".

Partner number		**P4**
Organisation name & acronym	LEIPZIG UNIVERSITY OF APPLIED SCIENCES (Faculty of Architecture and Social Sciences, Faculty of Civil Engineering) - HTWK	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

Leipzig University of Applied Sciences (HTWK Leipzig) offers a combination of practically oriented teaching and application-oriented research. Univeristy regionally unique selling point is the wide range of engineering programmes. Together with the areas of economics and cultural studies it offers a wide variety of degree programmes and research opportunities at seven faculties. HTWK Leipzig is strongly interested in education especially with respect towards a sustainable model of education. The lifelong learning profession begins with a focussed practice-oriented education. The education at the HTWK is based on current profiles of the European architectural and civil engineering professions. Aesthetic, technical, economic, social and communicative core competencies are imparted and trained. The related working method corresponds to international practices. Sustainability as the working ethic for future generations of architecture and civil engineering is dealt with on all levels: environment, building and material technology, and recycling.

Experience gained abroad through study trips and excursions supports the necessary global orientation of teaching as well as the integration of foreign languages into the curriculum. Regular activities with partner universities worldwide enable students to develop also the soft skills required for the future global practice. The curriculums are fully accredited, and the Degree enables entry into any European professional body.

Faculty of Civil Engineering is one of the largest of its kind in Germany. With roots that go as far back as 1764, it is a place where 'tradition meets innovation' (the Faculty motto) on the basis of applied research. The Faculty's collaborations with numerous regional companies enable students to start working on real-world projects from day one of their studies. All courses at the Faculty of Civil Engineering take place in lecture halls and seminar rooms equipped with cutting-edge technology. The Laboratory Building, named after August Föppl (mechanic, engineer and university teacher), boasts a diverse array of laboratories with state-of-the-art equipment. High-quality testing instruments are used not only in the materials, soil mechanics, and water engineering labs, but also in the experiment hall when courses are in session. Moreover, students work hands-on with the latest computer technology and most current software.

With the creation of the **Faculty of Architecture and Social Sciences** on January 1, 2014, the two teaching and research profiles in the field of planning and architecture as well as social work at the HTWK Leipzig were united. Since then, the departments have been developing synergistically, in an interdisciplinary manner, with various activities that take place regularly at the university location in Leipzig. These activities reflect topics of the city, the specificity of Leipzig-, and themes to display new approaches in teaching and research, thus making important content contributions to the profile of the HTWK Leipzig. Societal change, architecture, urban society, and social work are topics that are reflected on all levels of teaching at the faculty. FAS offers Bachelor's and Master's degree programs in Architecture and in Social Sciences. The latter, with its focus on sociological studies in the urban context, is the only such program in Saxony. Both departments maintain close and continuous contacts to the city of Leipzig in both teaching and research. In addition, FAS works intensively on the exchange with national and international cooperation partners.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project

Please describe also the role of your organisation in the project (limit 1000 characters).

The major contributions of HTWK Leipzig (Faculty of Architecture and Social Sciences and Faculty of Civil Engineering) to this project will focus on providing expertise in design of courses in architecture and civil engeenering. HTWK is closely connected with other international academic institutions, both in Europe as well as worldwide. Moreover, for research work, this is a way of exchanging content with other international universities in order to ensure cutting edge research and talent recruit.

In the existing partnerships, in particular in China and South East Asia, HTWK experienced how to establish a basis for varying cultures to enable knowledge transfer on both student and teaching level, with special attention to cultural differences. HTWK will pursue the given project with the same intent of knowledge transfer, look for synergetic affinities and deal with respect with each other's cultural backgrounds. HTWK advisory role will be complemented working together to find shared values upon which to build skills and knowledge exchange, establish common methods and tools to be then disseminated. Finally, the endeavour will build long lasting academic collaborations.

LEIPZIG UNIVERSITY OF APPLIED SCIENCES – HTWK, Germany will lead WP5 - Implementation of new programmes together with co-Leader – The Belarussian National Technical University (BNTU).

Also, it will lead WP6 - Quality Control and Monitoring, and will be working on other activates set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*

Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	

Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions) Please fill in if you are applying for this type of project and define clear the activities to be held in your institution* (limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	

Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution (limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Marina Stankovic	Prof. B. Arch. Marina Stankovic is Professor at Faculty of Architecture and Social Sciences, HTWK Leipzig; chair in Architecture, Interior and Product Design; international coordinator FAS Arch.; head and chairman of research group LINE_A Leipzig Institute for Sustainable Development in Architecture; Alumni coordinator. Studied Architecture at the University of Toronto, School of Architecture, Canada 5-year professional degree and worked with world-know architects such as Aurelio Galfetti, Lugano, CH. She set up own practice in Toronto in 1985 and in Berlin in 1986. She is member of Bund Deutsche Architekten in 1988; Guest Professor at the School of Architecture Fh Dessau from 1997 until 2001; appointed Loeb Fellow at the Graduate School of Design, Harvard University in 2001. She is Professor of Architectural Design, Interior and product Design at the HTWK since 2005; set up Line Studio Architecture Unlimited in Hong Kong and Shanghai in 2008; founding member of the Green Building Institute at Nanjing University of Technology in Naning, China. From 2010 until 2012 Co-Director of the AEDES Network Campus in Berlin; Expert of the Bund Deutsche Architekten for international Markets from 2012 until 2015. Own firm Marina Stankovic Architekten BDA is an award-winning firm with projects in Germany with realized projects in Switzerland, Italy, Canada, China, South Korea, Laos, etc. Her main research interests include architectural and urban design, interior and product design, green building, research in practices in library buildings, university buildings and campuses and strategic planning. Recent pertinent publications: - „Frau Architekt – Seit mehr als 100 Jahren Frauen im Architekturberuf“, Deutsches Architekturmuseum, 2017(S.34)

	- „Bibliothek als architektonische Aufgabe, Von der Entwicklung der Gebäudetypologie und der Verschiebung der Schwerpunkte in der Bibliotheksarchitektur“ (S3 -16), Praxishandbuch Bibliotheksbau, 2016 - „The Library is dead, long live the Library”, and “From rare book to Media Literacy”, WA Magazine, European Libraries Now _Issue 03.2013 - “Sechs Architektinnen schildern ihren weiblichen Berufsweg“, Deutsches Architektenblatt _ Issue 04.2013 - „Die Verantwortung nicht der Industrie und der Politik überlassen“, The green library IFLA Publications 161, The Hague 2013
Ingo Andreas Wolf	Prof. Dipl. Ing. Ingo Andreas Wolf is Professor at Faculty of Architecture and Social Sciences, HTWK Leipzig; chair in Architecture and Urban Design; member of various departmental commissions; member of the ai: L research group (Institute for Advanced Architectural and Urban Studies). He studied Architecture and Urban Design at the University Cologne and the University of Art (UdK)) Berlin and then worked for the International Building Exhibition 1987 Program (IBA) in Berlin. Was lecturer at the Architectural Department of the Technical University Berlin and Academic Councilor at the Technical University Munich. Since 1992, has been Professor for Architectural and Urban Design at the University of applied sciences HTWK-Leipzig. Has own studio for architecture and planning. Has been awarded various prizes for competition entries and projects, and has realized public and private commissions in Germany, Italy and Burundi, Africa. Is a member of the German Academy of Urban and Landscape Planning DASL, the Saxony Academy of Fine Arts SADK and is on the Advisory Boards of the Cities of Halle, Erfurt and Erlangen. Appointed Loeb-Fellow at the Graduated School of Design GSD, Harvard. His main research interest focuses on urban and architectural design, sustainable urban development, landscape design, process design and mediation. Recent pertinent publications: - “Leipzig – open city”, in : “Leipzig im Umbruch”, published by Ralf Schuhmann, Verlag der Kunst, Amsterdam / Dresden ISBN 90-5705-142-7 - “J wie Jury”, in “Architektur von A-Z”, editors Rettich and Hohmann, published by König, Cologne ISBN 3-88375-852-3 - “La Città in Europa - Lipsia”, in “Regenerazione urbana” exhibition catalogue, Genova, European Capital of Culture ISBN 88-8125-873-0 - Less is the future_19 cities-19 themes, IBA Stadtumbau Sachsen-Anhalt, Jovis-Verlag ISBN 978-3-86859-101-9 - Facebooks company housing – a speculation, in: Werkbericht 4 , Deutscher Werkbund Sachsen, ISBN 978-3-95415-060
Frank Hülsmeier	Prof. Dipl. Ing. Frank Hülsmeier is Professor at Faculty of Architecture and Social Sciences, HTWK Leipzig; chair of Building Services, Energy Concepts and Building Physics; member of Faculty Council and Studies Commission; head of ai: L research group (Institute for Advanced Architectural and Urban Studies). Studies in Architecture at Technical University of Berlin (TUB) and Istituto Universitario di Architettura di Venezia (IUAV); 1992 graduated at Faculty of Architecture TUB; professional practice in architectural offices i.a. project leader at gmp - Gerkan, Marg and Partner. Since 1997 assistant professor at Technical University Darmstadt and lectureship at Hildesheim University of Applied Sciences. Since 2002 professor at Leipzig University of Applied Sciences, since 2009 head of ai: L research group; project leader in several research projects at national level. Since 1999 realization of several buildings as independent architect. He has expertises and publications on sustainable architecture and ecological energy concepts. His area of reserch focus on sustainable architecture, energy concepts, building envelope, multifunctional facade, vacuum-insulated facade, facade energy source.

	Recent pertinent publications: - SOLARshell - Parametrically Optimized Facades as Energy Source, Research Initiative "Future Building" of Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR), F. Hülsmeier et al., Berlin 2017 - C³ Basic Project #4, Multifunctional Construction Parts of Carbon Concrete Composites, Ed. ai:L Institute for Advanced Architectural and Urban Studies, F. Hülsmeier et al., Leipzig 2016, ISBN: 978-3-9818495-0-7 - Staff Quarters Nouakchott, in: Container- und Modulbauten, C. Dörries und S. Zahradnik, p. 148-159, Berlin 2016, ISBN 978-3-86922-512-8 19th International Passiv House Conference 2015, Resource-Optimized Slender Sandwich Facades in: Conference Proceedings, p. 255-258, Darmstadt 2015, ISBN 978-3-00-048604-3 - Vakutex - Vacuum-Insulated Textile Concrete Facade Elements, in: Proceedings of the 2nd Annual International Conference on Architecture and Civil - Engineering (ACE 2014), Global Science and Technology Forum (GSTF), p. 235-241, Singapore 2014, ISSN 2301-394x
Ulrich Vetter	Prof. Dipl. Ing. Ulrich Vetter is Professor at Faculty of Architecture and Social Sciences, HTWK Leipzig; chair of Project Management chair, vice-chairman of LINE_A Leipzig Institute for Sustainable Development in Architecture, member of the committee on Quality Management, member of the committee of study affairs, member of the examination board, commissioner for evaluation. He graduated in Architecture, Faculty of Architecture, Technische Hochschule Nürnberg Georg Simon Ohm; post-graduate masterstudies in Real Estate Management, Technische Universität Berlin. From 2001 to 2014 he was Associate at Léon Wohlhage Wernik architects, Berlin; 1999-2001 Project manager in Design at Nicholas Grimshaw & partners architects, London/Berlin; 1992-1999 Project manager on site at Michael Weiss and partners architects, Aachen, Berlin, Nürnberg. His area of reserch involved project management and controlling, project development, building economics, building technologies, architectural design. Recent pertinent publications: - Türme im Park, Olympisches Dorf und Mediendorf der Winterspiele 2018 in München, Bauwelt 4/2011 - Lärmschutz zwischen den Zeilen, Wohnen am Mittleren Ring München in Wo verkehrt die Baukultur? Basel 2010 - Die Kraft orthogonaler Geometrie, Hochschulbibliothek und Medienzentrum in Leipzig, DBZ 2/2010 - Beton ist nicht genug, Bibliothek und Medienzentrum der HTWK Leipzig, Baumeister 2/2010 - Ludwig-Erhard-Haus Berlin in Equilibrium, Nicholas Grimshaw & Partners Bauten und Projekte, Berlin 2000
Al-Ghanem	Prof. Dr. Ing. Al-Ghanem is Professor in Construction Technolgy, Faculty of Civil Engineering, HTWK Leipzig; chair in civil engineering; Vice Dean Faculty of Civil Engineering; faculty coordinator for International affairs; member of Institute of Building and Project Managent; formwork construction work group. Studies in Civil Engineering at University of Tishreen in Latakia, Syria in 1982 and Technical University of Dresden, Germany in 1992 (Dr. Ing.). He has professional practice in Syria, Afganistan, Doha Katar, United Arab Emirates, Dubai, Abudabi and Germany. Since 2003 lecturer at the HTWK Leipzig; since 2008 professor at HTWK Leipzig University of Applied Sciences; since 2008 member of research Institute for Building and Project Management; since 2014 member of formwork working group, since 2014 faculty coordinator for international relations.

	His reserch interest is focused on concrete formwork, water tight concrete, precast concrete, earthworks, building site managent, scheduling and project management. Recent pertinent publications: - « Baubetrieb Praxis Kompakt », 2015, Beuth Verlag GmbH/ Al Ghanem, Rossbach - « Assessment of Facility Management Candidates by Applying Game Theory Jolanta Tamosaitiene »; Friedel Peldschus; Yaarob Al Ghanem - « Anforderungen an Sichtbetonflächen am Beispiel des Beyerischen Bahnhofs » Al Ghanem; Reichelt - « Zustandsanalyse und notwendige Sanierungsmaßnahmen von Gemeindestraßen » Al Ghanem; Reichelt - « Bauen in der arabischen Golfregion » Doppelhofer; Reichelt; Al Ghanem
Elke Reuschel	Prof. Dr. Ing. Elke Reuschel is Professor in Construction Technolgy, Faculty of Civil Engineering, HTWK Leipzig; Role; chair Reinforced Concrete and Prestressed Concrete; head of Structures and Construction Unit at the Materials Research and Testing Institute for Construction in Leipzig; cooperating member w German Committee for Reinforced Concrete; cooperating member VDI / VDE-GMA FA 2.12 Structure analysis and monitoring in construction technology; expert group municipal streets. Studied at the TH Leipzig with Doctorate in 1989; guest Professor at the FH Potsdam, Department of Civil Engineering from 2001-2004; honorary professor at the FH Potsdam, Department of Civil Engineering; appointed Professor at the HTWK Leipzig University of Applied Sciences. Previously employed as engineer in various public organisations and private consultant firm such as the Materials Research and Testing Institute for Construction in Leipzig, IBR Engineers with commissions of bridges and conservation ; since 2009 head of Structures and Construction Unit at the Materials Research and Testing Institute for Construction in Leipzig for experimental endurance assessments in situ, for mechanical component tests and approval tests, for vibration and vibration measurements, for monitoring of bridges and industrial and structural engineering objects, for evaluations of stress corrosion cracking and more on behalf of business and the public sector. Her area of interest includes concrete reinforced, prestressed concrete, material research, stress corrosion, bridge construction, intervention in preservation objects. Recent pertinent publications: - Herold, R., Reuschel, E., Bauer, P.: Sportstätten mit weitge-spannten Hallendächern – Sicherstellung der Tragfähigkeit unter Schneelast durch baudiagnostische Untersuchungen, Nachrechnung, Belastungsuntersuchung und Monitoring, 9. Symposium Experimentelle Untersuchungen von Baukon-struktionen, TU Dresden, 2017 - Reuschel, E.: BELFA – ein Belastungsfahrzeug für kommu-nale Straßenbrücken? Auftaktkolloquium des FK Kommunale Straßenbrücken, MFPA Leipzig, 2016 - S. Käseberg, K. Holschemacher, E. Reuschel, M. B. Schaller, Thiel: Smart FRP-Systems with embedded FBG for Structural Health Monitoring and Retrofitting. - SMART Konferenz, Turin 2013 - Reuschel, E.: Spannungsrisskorrosion an Schaschlikträgern am Beispiel der Elsterflutbrücke Lochau? VSVI-Seminar „Brückenbau“, Magdeburg, 2007 - Reuschel, E.: Untersuchungen zum Schwingungsverhalten einer Spannbetonbrücke mit spezifischen Rissbildern, VSVI-Seminar „Brückenbau“, Magdeburg, 2007

Partner number		**P5**
Organisation name & acronym	INTERNATIONAL BURCH UNIVERSITY - IBU	

F.3.1 - Aims and activities of the organisation

Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

International Burch University (IBU) was established in 2008 in Sarajevo, capital of Bosnia and Herzegovina, with the goal of presenting a unique opportunity to rethink the very idea of a modern university and formulate a blueprint for the future. Upon the Sarajevo Canton Ministry of Education decision, teaching process at IBU was started according to Bologna System of Education (3+2+3) entirely in English language within three faculties: Faculty of Education and Humanities, Faculty of Economics and Social Sciences and Faculty of Engineering and Natural Sciences. The International Burch University has approximately 1.200 students.

International Burch University has, since its establishment, set itself demanding targets for excellent quality in all area of education. Strategy development programs based on innovative methods, high-profile academic staff and good environment is reflected through the joint work of academic staff and students. University pursues to adapt successfully to the needs of students by investing in world-class facilities for teaching, learning, research and recreation.

The Faculty of Engineering and Natural Sciences consist of four departments (Information Technologies, Genetics and Bioengineering, Electrical and Electronics Engineering, Architecture and Civil Engeneering). The key objective of the IBU Architecture is to provide students with a professional, intellectual and diverse education resulting in a wide range of opportunities within architecture. The study program provides continuity in the education throughout all levels of study: undergraduate, graduate and postgraduate studies.

The Architectural Department intends to stimulate artistic sensitivity and creativity, to achieve a prominent level of communication in written, graphic and verbal forms, to encourage and help all students to gain an individual approach and professionalism in Architecture.

A special advantage of the Faculty is its international character, which offers different possibilities for international co - operation with related European and International Institutions in terms of Erasmus programmes, International Summer Schools, Design Studio International Workshops, Joint Research Projects, etc.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	36
Number of students	1200
Number of Bachelor degrees offered	12
Number of Master degrees offered	8
Number of PhD degrees offered	8
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	Electrical Energy Markets and Engineering Education (ELEMEND) 585681-EPP-1-2017-1- EL-EPPKA2-CBHE-JP

F.3.2 – Role of your organisation in the project

Please describe also the role of your organisation in the project (limit 1000 characters).

IBU Architecture will contribute actively to the achievement of the project objectives. It will be working with other project partners on modernisation of existing BSc courses, development of new BSc and Master courses, implementation of new teaching methods and practical trainings, creation of new learning environment, upgrading physical resources necessary to implementation of relevant and innovative practices in the field of architecture. Also, IBU Architecture will not change currently ongoing Bologna based educational program 3+2. Moreover, it will work efficiently in creation of university – enterprise cooperation through network between industry and internship programs.

IBU (Deputy of PM) will be managing and leading the project team at the partner institutions (BiH, Armenia and Belarus).

IBU Architecture, Sarajevo, BiH will lead WP7 - Dissemination & Sustainability together with co-Leader - National University of Architecture and Construction of Armenia.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI. **I CONFIRM**	Choose an item.

For new courses

What new courses will the project implement in your HEI?	1. Professional Practice 2. Studies in light and material 3. Techno-Sensation Architecture 5. Ornamnet Theory and Design 6. Contemporary Architectural Discourse 7. Green Design and Interior 8. Structural Stability 9. Advanced Structural Analysis 10. Construction Machinery and Equipment

For each course please fill the following nested table:

Title	**Professional Practice**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	6 ECTS (simulation of real life ctivities, detail design, cooperation with other professions)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	Equipment for design studio

Title	**Studies in light and material**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 ECTS (basic of lighting, light perception, aesthetic of light, light and color, light as a form)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	10
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Literature, softwer

Title	**Techno-Sensation Architecture**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 ECTS (Information technologies, new media, sensory experience of space,internet of things)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	10
Number of teaching staff to be trained	1
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	Literature

Title	**Ornamnet Theory and Design**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 ECTS(identities of and distinctions between ornament and decoration in architecture, architectural ornament,design,historical perspective of ornament, future perspectives of design)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	10
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Literature

Title	**Contemporary Architectural Discourse**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	6 ECTS (history and theory, visual and experiential understanding of the context, architect's design processes, philosophy, decision making, choice of materials, observations of the cultural and social change)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	Literature

Title	**Green Design and Interior**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS (Green Building Principles and Practices Overview, Green Operations and Maintenance, Introduction to Green and the Green Market)
Estimated date of accreditation and accreditation body	2020

Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	10
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Literature

Title	**Structural Stability**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	1.Loads on Structures (0.5 ECTS) 2. Support Reactions and Equilibrium (0.5 ECTS) 3. Plane and 3D trusses (0.5 ECTS) 4. Shear and bending moment in Beams and Frames (1 ECTS) 5. Deflection of Beams (0.5 ECTS) 6. Influence lines and their application (0.5 ECTS) 7. Analysis of Symmetric Structures (0.5 ECTS) 8. Analysis of statically indeterminate structures (1 ECTS)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	- SOFiSTiK software (licenses for computer lab)

Title	**Advanced Structural Analysis**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	1. Kinematical Analysis of Structures (0.5 ECTS) 2. General Theory of Influence Lines (0.5 ECTS) 3. Multispan Beams and Trusses (0.5 ECTS) 4. Three-hinged Arches (0.5 ECTS) 5. Cables (0.5 ECTS) 6. Deflection of Elastic Structures (0.5 ECTS) 7. The Force Method (0.5 ECTS) 8. The Displacement Method (0.5 ECTS) 9. Influenced lines method and Matrix Stiffness method (0.5 ECTS) 10. Plastic Behavior of Structures and Stability of Elastic systems (0.5 ECTS)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	- STAAD.Pro Advanced (Bentley Software) for compute lab

Title	**Construction Machinery and Equipment**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	1. Classification and function of construction machineries (0.25 ECTS) 2. Classification and function of construction equipment (0.25 ECTS) 3. Heavy construction equipment (0.25 ECTS) 4. Cost of owning construction equipment (0.25 ECTS) 5. Cost of operating construction equipment (0.25 ECTS) 6. Methods of calculating ownership and operating cost (1 ECTS) 7. Equipment life and replacement procedures (0.25 ECTS) 8. Earthmoving, Excavating, and lifting equipment selection (0.5 ECTS) 9. Methods in estimating and optimizing construction equipment system productivity (0.5 ECTS) 10. Stochastic methods for estimating productivity (0.5 ECTS) 11. Scheduling equipment (0.25 ECTS) 12. Construction equipment maintenance (0.25 ECTS) 13. Construction equipment site safety (0.25 ECTS) 14. Construction equipment security (0.25 ECTS)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Buildertrend Web-Based Construction Software (licenses for computer lab)

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	1. Computer Literacy in Architecture 2. Architectural Structures

For each course please fill the following nested table:

Title	**Computer Literacy in Architecture**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	4 ECTS (CAD Tools, Drawings)
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	20
Number of teaching staff to be trained	1
Internship /placements (if applicable)	-

List of equipment to be purchased for this course? (if applicable)	Lab (software and Lab equipment)

Title	**Architectural Structures**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 (Construction System, Walls, Roofs, Staricases, Foundations)
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	20
Number of teaching staff to be trained	2
Internship /placements (if applicable)	4
List of equipment to be purchased for this course? (if applicable)	Models of Architectural Details

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	Modernized and new courses at BSc and MSc Level, new educational environment established (Literature, equipment and software's purchased), online platform, Internship program at partner HEIs.
How will the impact of these results be measured in your HEI?	Number of enrolled students in new program. Survey that will measure student and staff satisfaction. Also, student academic performance will be followed, and it is expected to be higher.
What financial means and human and other resources will be provided to sustain these results after the project ends?	Valuable physical and human resources set up by project will remain to function after the project implementation. On line platform, established network of industry partners, trained academicians, graduated students, will perform just as driving force towards long-term project goals. After the project completion, content will be integral part of teaching process of newly designed courses and will be frequently updated. New educational environment will become integral part of teaching process and each partner HEIs will continue to maintain it.

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Erna Husukić	Graduated from the Faculty of Architecture, University of Sarajevo in 2011, Bosnia and Herzegovina. PhD Degree obtained at International Burch University at the Faculty of Engineering and IT, Department of Architecture in Sarajevo, BiH with the topic The Role of Interstitial Urbanism in the City Regeneration, September 2015. From 2011 employed at International Burch University, as Senior Teaching Assistant. In 2015 appointed as Assistant Professor Doctor, teaching courses in urban planning and design, landscape design, environmental design and public building design. Currently, she is coordinator of the Project office at International Burch Univeristy with the extensive experinece in preparation and coordination of scientific and professional projects. For the past years in academia at International Burch University she has taught in the undergraduate and graduate programs through which she gained experience in organizing courses, conferences and various workshops. Her teaching experience displays wide range of teaching capabilities that demonstrates her dedication in education process and professional practice. Erna's research interests revolved around contemporary urban milieu and urban studies with a particular interest on urban transformations, city regeneration and urban memory. Her current research work is focused on marginal spaces, urban ruins and cultural dimensions of globalization. Most recently, she is developing a

	research on cityscape of Sarajevo and the role of urban ruins in the midst of globalization flows. So far published papers in local and international journals and conferences, some of them being: - Husukić, E. i Zejnilović, E. (2018). Re-conceptualizing Common Ground of the Cultural Landscape; Testing the Reality of Sarajevoscape. Prostor, 26 (2 (56)), 268-281. https://doi.org/10.31522/p.26.2(56).5 - Emina Zejnilovic, Erna Husukic; Culture and Architecture in Distress – Sarajevo Experiment, International Journal of Architectural Research: ArchNet-IJAR, Volume 12, Issue 1, March 2018 - Gegic, A., Husukic, E. (2017). Evaluation of the brownfield regeneration process: Case study of Sarajevo, Bosnia and Herzegovina. Journal of Urban Regeneration & Renewal, 10(3), 276–285. - Husukić, E., Zejnilović, E. (2017). The environmental aesthetics of Sarajevo: A city shaped by memory. Urbani Izziv, 28, 96–106. https://doi.org/10.5379/urbani-izziv-en-2017-28-01-002 - Zejnilovic E., Husukic E. (2016). Cultural Reflections on Architectural Space: The Case of Single Residential Unit. ARCHTHEO '16 / X. International Theory of Architecture Conference, Istanbul, Turkey, ISBN: 978-605-9207-51-5. - Husukic, E. Terrain Vague in Sarajevo, Architectural Design Conference, Istanbul, Turkey, Jul. 2015, ISBN: 978-605-9207-06-5
Emina Zejnilović	Graduated from Eastern Mediterranean University, Famagusta, North Cyprus, at the Faculty of Architecture, Department of Architecture, February 2004 PhD Degree obtained at International Burch University, Sarajevo, BiH, at the Faculty of Engineering and IT, Department of Architecture, in the field Architectural Design, Topic Cultural Reflections in Architectural Aesthetics – Comparative Analysis of East and West, September 2015. Worked in Sarajevo local and international companies as designer and collaborator on numerous projects; residential design, public building design, retail and hospitality design, urban design and many interior design projects. Involved in all phases of design from conceptual design to budgeting, execution and project monitoring. From 2011 employed at International Burch University, as Senior Teaching Assistant. In 2015 appointed as Assistant Professor Doctor, teaching courses in interior design, furniture design, architectural theory, architectural lighting, and public building design. From December 2016 appointed as the Head of Department of Architecture. So far published many papers in local and international journals and conferences, some of them being: - Husukić, E. i Zejnilović, E. (2018). Re-conceptualizing Common Ground of the Cultural Landscape; Testing the Reality of Sarajevoscape. Prostor, 26 (2 (56)), 268-281. https://doi.org/10.31522/p.26.2(56).5 - Emina Zejnilovic, Erna Husukic; Culture and Architecture in Distress – Sarajevo Experiment, International Journal of Architectural Research: ArchNet-IJAR, Volume 12, Issue 1, March 2018 - Husukić, E., Zejnilović, E. (2017). The environmental aesthetics of Sarajevo: A city shaped by memory. Urbani Izziv, 28, 96–106. https://doi.org/10.5379/urbani-izziv-en-2017-28-01-002 - Lejla Kargic, Emina Zejnilovic; Application of Fractal Geometry Principles in Architectural Ornaments and the Use of Fractal Analysis Softwares For Reconstruction Of Architectural Ornaments, Belgrade, Serbia, ZBORNIK NOVA NAUČNA EDUKATIVNA MISAO, Vol. 5/2015, Page 117-126 - Emina Zejnilovic, Erna Husukic; Cultural Reflections on Architectural Space: The Case of Single Residential Unit, ARCHTHEO '16 / X. International Theory of Architecture Conference, Istanbul, Turkey, Oct. 2016

	- Zejnilovic E., Catovic F., Glass Based Composite Materials – Laminated Glass Proceedings, EIS 2013 NT, 26 International Symposium 'New Technologies', Sibenik, Croatia, May 2013., ISSN 1848-0772 - Zejnilovic E. Aesthetics and Place – The Cross-cultural Study, ARCDESIGN '15, Architetcural Design Conference, 25-27 Jun 2015, Istanbul, Turkey
Adnan Novalić	Graduated from the Faculty of Architecture, University of Fine Arts Mimar Sinan in Istanbul, Department of Architecture in 2009. Masters degree obtained in the frame of study track of Buildign Desing, Theory and Methodology at the Department of Architecture, Faculty of Architecture, University of Fine Arts Mimar Sinan in Istanbul (2012) with the topic „Evaluation of Student Rooms in Istanbul, in the Context of Planning Principles". PhD Degree obtained at International Burch University, Faculty of Engineering and Natural Sciences, Department of Architecture (in Sarajevo, 2017) with the topic „Evaluation of Collective Housing in Sarajevo: Recognition of Individual within the Collective". From 2013 employed at the Faculty of Engineering and Natural Sciences, International Burch University, and until 2017 was enrolled at the Department of Architecture as Senior Teaching Assistant. In 2017 was appointed as Assistant Professor Doctor, teaching courses mainly from the field of architectural design and architectural structures. During the years of study (undergraduate and master) worked in numerous architectural companies in Turkey (Istanbul) and in Bosnia and Hercegovina (Mostar), enrolled as an architect who worked on various projects in the field of architectural desing & planning, interior desing, restoration & restitution and architectural aspects in archeology (in Bodrum Peninsula, Turkey). During academic career at International Burch University has taught in the undergraduate and graduate programs, through which he developed exact academic experiences in handling the educational and administrative responsibilities. His teaching experience displays the broad spectrum of teaching skills that were emerged from the consistent amount of enthusiasm and passion about all what is related to architecture, architectural education and practice. In a broad sense Adnan's research interest is directed towards the configurational theories of space in architecture, with the specific focuses on residential architecture and contemporary challenges that human beings face as individuals and collectives in their never-ending attempts to satisfy their dwelling needs. He published papers in local and international journals and conferences, such as: - Novalić, A., Zejnilović, E. (2019). Spatial configuration of dwelling units in multi-storey residential buildings: The case of apartments built in Sarajevo 2008-2018, Spatium 41, 32-40 http://www.doiserbia.nb.rs/img/doi/1450-569X/2019/1450-569X1941032N.pdf - El Sayed, A., Špago, S., Ćatović, F., Novalić, A. (2019). The lack of techniques used in management as a factor causing delays in construction projects in B&H and other delay factors detected, International Conference on New Technologies, Development and Applications, Springer – Cham, 736-745 - Novalić, A. (2017). Evaluation of student rooms of dormitories in Istanbul according to the planning principles, Eastern Mediterranina Academic Research Center DAKAM, IV International Architectural Design Conference, Istanbul
Lejla Odobašić - Novo	Lejla Odobašić Novo is a licensed architect by the Ontario Association of Architects in Canada and currently holds the positon of Assistant Professor at the IBU Department of Architecture. She has obtained her BArch and March at the University of Waterloo in Canada and her Phd at the International Burch University. Lejla has also taught at the University of Waterloo and has participated in numerus international workshops thus gaining diverse teaching experience. She conducts research on the role of culture within architecture, looking at how culture could be used as a regenerative tool through architecture in addressing conflicted and contentious places. Within this field, she has carried out projects,

	exhibitions, publications and other cultural initiatives. This includes work on Jerusalem-Sarajevo: In-between Cities in 2006/7 (Cambridge, ON, Sarajevo, London, Opatija) as well as DAAR Decolonizing Architecture residency in the West Bank in 2007. More recently she has completed her PhD thesis looking at how culture can activate processes of urban regeneration in the city of Sarajevo. Her more recent work has been published in Domus magazine (November 2017). In addition, Lejla has also worked in a number of architectural practices both in Canada and internationally including Toronto, London, Madrid, Rome and Istanbul. She has managed projects of various scales and types through different phases of work starting from schematic design into design development followed by tender process and construction management. She has also had the role of a contract administrator in the execution phase of construction. This included project monitoring, issuing payment, contract changes and liaising between different parties involved. Recent pertinent publications: - Sarajevo: Un luogo di resistenza culturale. L. Odobasic and S. Gruosso. Domus. ISSN 0012-5377 Accepted April 2017, yet to be published - Migration and Identity. L. Odobasic. OnSIte Review. Issue 25, August 2011. - Sarajevo: Crossing a Divide. L. Odobasic. OnSIte Review. Issue 22, April 2010. - Early Museums as Symbol of National Identity. International Journal of Engineering Research and Development. Volume 13, Issue 4 (April 2017). p. 67-75. ISSN 2278-800x - Crossing Sitelines / Traguardare L'Adriatico. Curated by L. Pignatti and S. Gruosso. 04 Sarajevo Bridging the in-between. L. Odobasic. Aracne editrice intl. le. S.r.l. Ariccia Italy. May 2017, ISBN 978-88-255-0268-8 - Verso Pescara 2017. Gangemi Editore, Italy. December 2016 ISBN: 978884929058
Ahmed El Sayed	Appointed at International Burch University as Assistant Professor Doctor on the field of Structural Architecture, where is teaching courses like: Statics, Materials Science, Building Technology, and Construction Management and Economics. Worked as Associate Designer at IPSA Institute in Hydro Engineering Office and worked on preparing Hydrological analysis, Hydraulic calculations, Internal and External Drainage systems, and Water supply and waste water systems. Worked as Project Manager of several water supply and waste water projects. Worked as Investor representative for Red Crescent UAE at several construction and reconstruction projects in B&H, where he was responsible for coordinating, reporting and following the projects' progress and quality. Gained teaching and academic skills related to organizing seminars, holding lectures and practical session, and organizing visits to construction sites. Published several journal and conference papers and one book, and here are some of them: - Ahmed El Sayed, Ismail Hakki Demir (2016). Motivation of Engineers in Construction Industry. International Journal of Engineering Research and Development (IJERD). ISSN 2278-067X. - Ahmed El Sayed, Ismail Hakki Demir (2016). The Effect of Behavioural Characteristics on Decision Making in Construction Site. International Journal of Scientific Research. ISSN:2277-8179. - Ahmed El Sayed, Indira Murtic. Amra Galijašević (2016): Sediment transport in rivers and streams – comparative analysis using empirical methods, Prvi BiH Kongres o Vodama, Sarajevo - Ahmed El Sayed, Hanka Ohranović-Cocalić, Semir Durić (2016): Pressure drop in pipelines carrying sedimental loads – comparative analysis, Prvi BiH Kongres o Vodama, Sarajevo - Adnan Habibović, Jasmina Marić, Ahmed El Sayed (2016): The ability of water accumulation modrac to be source for drinking water, Prvi BiH Kongres o Vodama, Sarajevo

	- Ismail Zejnilović, Fuad Ćatović, Ahmed El Sayed (2017): Realna primjenljivost ekološki prihvatljivih materijala i tehnologija u izgradnji energetski efikasnih zgrada u BiH, Savjetovanje o novim tehnologijama „Sont 2017- Dani Josipa Lončara“, Šibenik - Ahmed El Sayed i Fuad Ćatović (2017): Porozni asfalt, Savjetovanje o novim tehnologijama „Sont 2017- Dani Josipa Lončara“, Šibenik - Ahmed El Sayed (2017): The effect of Motivation on the Productivity of Construction Engineers – Case study: Bosnia and Herzegovina and surrounding region. AV Akademikerverlag – OmniScriptum Publishing Group. ISBN: 978-620-2-20574-0
Mirza Ponjavić	Mirza Ponjavić Associate Professor at the International Burch University Sarajevo – Department of Architecture and at the University of Tuzla - Mining, Geology and Civil Engineering Faculty; Managing Director of company Gauss, Bosnia and Herzegovina. He has 25 years of professional experience. His main reserch interest include Spatial Database Analysis and Development, Geoinformation System development and technical standards development for producing data for Land Information System. Moreover, he has extensive experience in technical analysis of existing documentation and available digital and analogue data of interest for the creation of spatial databases, estimation of human, technical and financial resources needed to complete the data production, technical analysis of existing documents including analog and digital cadastral maps, real estate cadaster, Geoinformation System analysis and design, WebGIS analysis and design, studies of estimation for spatial development and validation, preparation of 3D model and geomorphologic analysis, multicriterial data model for geospatial analysis and land classification. Recent pertinent publications: - Hukic, M., Ahmetagic, S., Tihic, N., Mehic N., Tulumovic D., Ponjavic, M. and Heyman, P.: Recognizing the possibility of bioterrorism in the face of emerging and reemerging zoonotic pathogens in Bosnia and Herzegovina during the war (1992-1995), Virology: Research & Reviews, Volume 1(3): 1-7, 2017 - Ponjavic, M., Celebicanin and S., Stanojevic, S.: Geospatial multicriteria optimization of sites for animal waste management infrastructure facilities, “5. juni - Svjetski dan zaštite okoliša", Conference Proceedings (indexed in CAB), Bihac, 2017 - Ponjavic, M., Celebicanin, S., Stanojevic, S. and Gazdic, M.: Defining optimal locations of establishments and transportation routes for treatment and storage of animal waste, AGROSYM 2017, Conference Proceedings (International Journal AGROFOR, Volume 3, Issue 1 / indexed in CAB and CABI), Jahorina, 2017
Zerina Mašetić	Zerina Mašetić obtained a Doctorate degree from the Department of Information Technologies in January 2018, from the field of Network Security, at International Burch University, Bosnia and Herzegovina. She has been appointed as Assist. Prof. Dr. from February 2018. She obtained a Master degree from the Department of Information Technologies in June 2014, International Burch University, Bosnia and Herzegovina. From 2014, employed at International Burch University, as Senior Teaching Assistant. During her engagement, as Senior Teaching Assistant, she has been co-supervisor of several senior design projects. Zerina’s teaching and research interest include networking, information security, and machine learning. Her research work on the Ph.D. was focused on the cloud computing security. She has published several journal papers, some of them being: - Zerina Mašetić, Dino Kečo, Nejdet Dogru, Kemal Hajdarevic, SYN flood attack detection in cloud computing using support vector machine, TEM Journal, Vol. 6, No. 4, November 2017

	- Kemal Hajdarevic; Adna Kozic; Indira Avdagic; Zerina Masetic; Nejdet Dogru, Training network managers in ethical hacking techniques to manage resource starvation attacks using GNS3 simulator, XXVI International Conference on Information, Communication and Automation Technologies (ICAT), 2017 - Z. Masetic, K. Hajdarevic, N. Dogru, Cloud computing threats classification model based on the detection feasibility of machine learning algorithms, 40th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO), 2017 - Z. Masetic, A. Subasi; Congestive heart failure detection using random forest classifier, Computer Methods and Programs in Biomedicine, Vol. 130, Jul. 2016 - Z. Masetic, A. Subasi, J. Azemovic; Malicious Web Sites Detection using C4.5 Decision Tree, Southeast Europe Journal of Soft Computing, Vol. 5, No. 1, Mar. 2016
Ajdin Mekić	Ajdin Mekić is a master student of Business Administration at the International Burch University. He has Bachelor's Degree- Marketing Management, International Burch University A combination of a Quality Manager with diverse accreditation experience and finance analytics geek who's always on the lookout for new challenges. Working on the accreditation by domestic and internationally (UK) recognized accreditation agencies, he gained set of quality assurance skills and experiences. In the meantime, as a Budget Execution Associate, he has an opportunity to work on internal financial activities at International Burch University focused on wide array of tasks, from budget planning to execution and reporting. In addition to that, he is focused on constantly finding and overcoming new challenges, developing current and gaining new skills, creative thinking, problem solving and having fun. Currently he is Quality Manager & Budget Execution Associate | INTERNATIONAL BURCH UNIVERSITY. He works on collection, analysis and presentation of statistical information for the purpose of domestic and international accreditation of the University. Provide data when requested to the senior leadership team and outside agencies. Writing annual self-evaluation reports and performing the internal audit. Ensuring that the university's business meets the criteria at national and international level. Contributing to quality development activities through the identification of good practices. Communication with the government officials, accreditation agency reps, and internal management detailing accreditation processes and quality assurance. He assists in the preparation of the Office's budgetary and financial reports for internal governance and oversight bodies. Data analysis using mathematical models and statistical techniques. Preparation and analysis of the budget, as well as periodic reports that compare the actual situation with the planned budget. Support the planning for financial requirements, assist the Supervisor in providing useful analysis of of past year trends and future projections, in relation to the strategic directions and planned activities.

Partner number		**P6**
Organisation name & acronym	University of Bihać - UNBI	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

University of Bihać is a public higher education institution operating as an accredited integrated university with 6 organizational units and one associate member: Pedagogical faculty, Biotechnical faculty, Technical faculty, Faculty of Economy, Faculty of Law, College of nursing studies, Islamic pedagogical faculty – associate member.

The University has implemented a quality assurance system, which along with the institutionalized quality assessment program of study and teaching process, continuously monitors and improves the quality. European dimensions in higher education are promoted through the international cooperation (study visits, student

exchanges, thesis development, joint projects, etc.). In the previous year the University has received valuable equipment (5.000.000 EUR) through the project "Modernisation of University of Bihać" financed through the cantonal and federal government. The University has participated in several projects related to modernization of curricula and qualifications, such as Centre for Curricula Modernisation and Lifelong Learning – Tempus project, B&H Qualification Framework for Higher Education – Tempus project, Joint EU/CoE Project Strategic Development of Higher Education and Qualification Standards, IT qualification framework for higher education in Bosnia and Herzegovina – Tempus project, etc. The projects have resulted in adaptation and modernization of curricula, training of academic staff for teaching and assessment of frameworks, as well as in introduction of new educational approaches based on the skills and competencies.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	Over 100 including Inter-institutional agreements of different mobility programs
Number of students	3500
Number of Bachelor degrees offered	29
Number of Master degrees offered	17
Number of PhD degrees offered	2
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	Yes. - Tempus Joint project - Curriculum reform 530423 "Studies in Bioengineering and Medical Informatics » - Erasmus+ KA project 561688-EPP-1-2015-1-XK-EPPKA2-CBHE-JP « Implementation of the study program – Digital Broadcasting and Broadband Technologies (Master studies) [DBBT-MS] » - Completely new DBBT master study program developed and adopted at the Technical Faculty of UNBI - Erasmus+ KA project 574076-EPP-1-2016-1-BA-EPPKA2-CBHE-JP «TEACHER: Introducing competence-based preschool teacher education curricula in Bosnia and Herzegovina » - Modernized curriculum of the Preschool Department at the Faculty of Pedagogy - UNBI -Erasmus+ KA project 598963-EPP-1-2018-AL-EPPKA2-CBHE-JP «MSc in Sustainable Food Production » Systems Completely new MSc in Sustaianble Food Production will be developed at the Biotechnical Faculty of UNBI (starting in March 2019)

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

Technical faculty of University of Bihać (Department of Civil Engineering) will remain its 4+1 study program according to Bologna system, but it is planned to introduce new subjects at BSc and MSc level. In addition, UNBI Civil Engineering will modernize subjects at BSc and MSc level. UNBI will be working actively on the project goals which includes implantation of innovative teaching methods, online platform, network with industry in order to upgrade existing system of civil engineering education.

University of Bihać (UNBI), BiH will be co-leader on WP2 - Development of new courses in the field of architecture and civil engineering together with leader - University G. D'Annunzio - Chieti-Pescara, Italy, and will be working on other activities set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI. **I CONFIRM**	Choose an item.

For new courses

What new courses will the project implement in your HEI?	1. Road maintenance and repair 2. Construction plant and equipment 3. Waste management 4. Operations Research and Linear Programming 5. Computer-Aided Design for Construction

For each course please fill the following nested table:

Title	**Road maintenance and repair**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 (Roads I, Roads II, Traffic Economics, City traffic planning)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	2
Internship /placements (if applicable)	2
List of equipment to be purchased for this course? (if applicable)	SRT pendulum (examination of the finish of the pavement structure on sliding and friction)

Title	**Construction plant and equipment**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 (Earth works)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	20 full-time students 15 extraordinary students
Number of teaching staff to be trained	2
Internship /placements (if applicable)	2
List of equipment to be purchased for this course? (if applicable)	Dynamic panel for testing the soil compressibility module

Title	**Waste management**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 (Environmental protection, sewage disposal, water protection)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Digital soil testing kit (device, tube, reagent, pipette, table)

Title	**Operations Research and Linear Programming**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 (Organization and technology of construction and Earth works MSc)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Laptop and computer

Title	**Computer-Aided Design for Construction**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 Statics construction II
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Software tower and arm cad

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	1.Construction materials 2. Introduction to engineering informatics 3. Statics in civil engineering 4. Planning and construction of specific road facilities 5. Construction modelling

For each course please fill the following nested table:

Title	**Construction materials**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 (Building Materials)
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20 %
Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	- Sound analyzer / noise meter (4 in 1): noise, light, temperature and humidity. - Jaws for the reinforcing iron kid

Title	**Introduction to engineering informatics**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	1 (Introduction to engineering informatics)
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20 %
Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Laptop and computer

Title	**Statics in civil engineering**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 Building Mechanics I and II Statics of construction I and II
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20 %
Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Lap top , Software tower

Title	**Planning and construction of specific road facilities**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	4 (Planning and construction of special transport facilities)
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20 %
Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	“Plateia” Software for Road Design and Reconstruction

Title	**Construction modelling**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 Statics of construction I and II
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20 %

Number of students to be accepted in the first year/ second year	20 full-time students 15 part-time students
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Softwer "ADINA"

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	Modernized and new courses at BSc and MSc Level, new educational environment established (Literature, equipment and software's purchased), online platform, Internship program at partner HEIs.
How will the impact of these results be measured in your HEI?	Number of enrolled students in new program. Survey that will measure student and staff satisfaction. Also,

	student academic performance will be followed, and it is expected to be higher.
What financial means and human and other resources will be provided to sustain these results after the project ends?	Valuable physical and human resources set up by project will remain to function after the project implementation. On line platform, established network of industry partners, trained academicians, graduated students, will perform just as driving force towards long-term project goals. After the project completion, content will be integral part of teaching process of newly designed courses and will be frequently updated. New educational environment will become integral part of teaching process and each partner HEIs will continue to maintain it.

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Fadil Islamović	Fadil Islamović is a Rector of University of Bihać and full professor at the Technical Faculty, University of Bihać, Bosnia and Herzegovina. He is former Vice rector for Academic and Student Affairs (2010-2015) and former Prime Minister for the Una Sana Canton. So far published 68 scientific and professional papers, published two academic books, mentored more than 100 undergraduate and 4 master candidates. He participated in numerous projects, such as: “Centres for Curricula Modernization and Lifelong Learning”; “Reform of Higher Education Financing Project”; “Strategic development plan for Bihać Municipality”; EUREKA – međunarodni projekat ("Tehnologija presovanja AA6026 legure i projektovanje osobina u procesu jednostepenog i sekundarnog termičkog starenja"), 2016.; DBBT ("Digital Broadcasting and Broadband Technologies" – Master studies), 2016 - 2018. Recent pertinent publications: - Esad Bajramović, Fadil Islamović, Atif Hodžić,, Introduction and implementation of bas EN ISO 22301:2016 in the organizations, 6th International Professional and Scientific Conference ,,Zaštita na radu i zaštita zdravlja,, 21.-24. 9. 2016., Zadar, Hrvatska/Croatia - Bahrudin Hrnjica, Fadil Islamović, Dženana Gačo, Esad Bajramović "NUMERICAL CALCULATION OF J-INTEGRAL USING FINITE ELEMENT METHOD", 7th INTERNATIONAL SCIENTIFIC CONFERENCE ON DEFENSIVE TECHNOLOGIES - OTEH 2016., Beograd - R Srbija - Fadil Islamović, Mirzet Beganović, Zijah Burzić, Dženana Gačo “EKSPERIMENTALNA ISPITIVANJA MEHAHIČKIH SVOJSTAVA KOMPOZITNIH - MATERIJALA SAVIJANJEM”, 10th International Scientific Conference on Production Engineering „DEVELOPMENT AND MODERNIZATION OF PRODUCTION “, October 2015. Dubrovnik – Croatia. - F. Islamović, E. Bajramović, S. Klarić, R. Šahinović, B. Bajrić “POTEŠKOĆE INSTITUCINALNE AKREDITACIJE JAVNIH VISOKOŠKOLSKIH USTANOVA U BOSNI I HERCEGOVINI” 10th International Scientific Conference on Production Engineering „DEVELOPMENT AND MODERNIZATION OF PRODUCTION “, October 2015. Dubrovnik – Croatia -Bahrudin Hrnjica, Zijah Burzić, Fadil Islamović, Dženana Gačo “Modeliranje J integrala korištenjem umjetnih neuronskih mreža” 10th International Scientific Conference on Production Engineering „DEVELOPMENT AND MODERNIZATION OF PRODUCTION “, October 2015.Dubrovnik – Croatia.

Atif Hodžić	Atif Hodžić is an Associate Professor at the Technical Faculty, University of Bihać; Head of Quality Assurance at Technical Faculty University of Bihać; Expert witness in Quality Assurance; Certificate TUV CERT Auditor; Quality Management; Technical expert in EA-scopes 17/2,18,29/2,37; Auditor in TÜV, SYCON i SMP; Certificate for quality management TÜV Rheinland Group and Auditor ISO 14001:2004. He participated in numerous project some of them being: „Studies in Bioengineering and Medical Informatics “, Tempus projekat br. 530423- TEMPUS-1-2012-1-UKTEMPUS-JPCR; „Developing Information Literacy for lifelong learning and knowledge economy in Western Balkan countries“ No. 517117 ; „Laboratory equipment for testing of wood and wood products“ – financed by Tika, Turkey; Author and co-author of more than 60 papers in QA of HE and SMEs, participated in more than 10 national and international projects. Recent pertinent publications: - E. Bajramović, F. Islamović, A. Hodžić: „Osiguranje kvaliteta internim ausitom u proizvodnji zaštitne odjeće”, 4. Međunarodni stručno - znanstveni skup „ZAŠTITA NA RADU I ZAŠTITA ZDRAVLJA“, 19-22. septembar, Zadar – Hrvatska. - I. Bašić, A. Galić, A. Hodžić: “Ein Simulationsmodell des Trocknungsprozesses von Kollmann”, Zbornik radova sa Konferencije Sprungbrett, Biel, Švicarska, 2012. - S. Klarić, E. Bajramović, F. Islamović, A. Hodžić: “TOTAL QUALITY MANAGEMENT IN HIGHER EDUCATION”, 2nd International Scientific Conference on Engineering” Manufacturing and Advanced Technologies” – MAT 2012, Antalya Turkey, 22- 24 November 2012. - M. Beganović, F. Islamović, A. Hodžić, E. Bajramović: “EXPERIMENTAL TESTING OF THE CRITICAL PRESSURE OF THE PRESSURE VESSELS MADE OF COMPOSITE MATERIALS”, 2nd International Scientific Conference on Engineering” Manufacturing and Advanced Technologies” – MAT 2012, Antalya Turkey, 22-24 November 2012. - E. Nezirević, A. Hodžić, D, Hodžić: “EXPERIMENTAL MEASURMENTS OF FRIKTION IN DESIGNING AXISYMMETRIC WORKPIECES OF LAMINATED WOOD”, The 23 nd DAAAM World, Zadar, 2012.
Edvin Bolić	Edvin Bolić is Civil Engineer, assistant at Department of Civil Engineering at Technical Faculty, Univeristy of Bihać since 2008. He is former Director of Pakistan Branch – 2005-2008. He has extensive pratical experinec and he was involved in many professional projects some of them being: Project Lahore Ring Road (P-12); Project Dualisation of Lahore Kasur Road (Kasur – Ghanda Sing border); Project Nowshera Peshavar (N-5) 60km; Project Manager 2002-2005; Project Nowshera Peshavar (N-5) 60km; Project Lahor-Sahival ECW 40km; Project DHA Phase 6; RH 5002; PM 5402; MC-01; MC-21. Among distinct roles within project execution he worked also as site Engineer on Project Lahor-Okara ECW 30km and MC-92. Azra Kajtazović is assistant at Department of Civil Engineering at Technical Faculty, Univeristy of Bihać. Experienced lead supervisor with a demonstrated history of working in the civil engineering industry. Skilled in AutoCAD, Construction, Engineering, Civil Engineering, and Project Planning. Strong operations professional with a Master's degree focused in Construction Engineering from University in Sarajevo, Faculty of Civil Engineering. So far published five papers in the field of Civil Engineering. Recent pertinent publications: - Jahić M., Kajtazović A.,Bajramović E. Selection of Location for Plant Cleaning Sewage.

Elma Đuzelić	Graduated at Civil Engineering Department at Technical Faculty of University of Bihać. From the academic 2017/2018, appointed assistant in the Field of Roads as an external associate. Got enrolled at the Master studies- Civil Engineering (University of Bihać). Excellent computer skills. Speaks English, German and Turkish.
Edis Softić	Edis Softić is an Assistant Professor at Department of Civil Engineering at Technical faculty, Univeristy of Bihać. He is former Head of Construction Site, d.o.o Luciana Lukavac – 2005 and CEO in d.d.Tuzlaputevi – 2007. He implemented many construction projects which include e.g. reconstruction of road infrastructure and buildings in Una-Sana Canton. Published more than 20 papers in the field of civil engineering and higher education. Recent pertinent publications: - Marko Subotić, Vladan Tubić, Edis Softić: „BSLZ“ Road safety in local communities 2017: ANALYSIS OF TRAFFIC FLOW SPEED AND SAFE SPEED IN FUNCTION OF LONGITUDINAL GRADIENT OF TWO-LANE ROADS IN THE REPUBLIC OF SRPSKA - Muamer Dubravac, Edis Softić, Zlatan Talić: THE INTERNATIONAL SYMPOSIUM ON CIVIL ENGINEERING – ISCE 2017: Analysis of economic feasibility and usefulness of asphalt mixtures of recycled asphalt in relation to the new ones - Edis Softić, Muamer Dubravac: Oblici organizovanja zaštite na radu u svijetu i kod nas. 11 th International scientific conference on production engineering “Developement and modernization of production“RIM 2017, Hotel Hills, Ilidža/Sarajevo, Bosna i Hercegovina, - Ervina Bekanović, Edis Softić: Ispitivanje dubine hrapavosti lokalne saobraćajnica u velikoj Kladuši. 11 th International scientific conference on production engineering“Developement and modernization of production“ RIM 2017 Hotel Hills, Ilidža/Sarajevo, Bosna i Hercegovina. - Dejan Simić, Marko Subotić, Edis Softić, Veljko Radičević: COMPARATIVE ANALYSIS OF TECHNICAL CHARACTERISTICS OF FILLING STATIONS IN THE MUNICIPALITY OF TESLIC VI International Symposium New Horizons 2017 of Transport and Communications Project officer at University of Bihać, with experience on several EU projects such as “B&H Qualification Framework for Higher Education”, “Strategic Management of Higher Education Institutions Based on Integrated Quality Assurance System”, “Developing Information Literacy for LLL and knowledge economy in Western Balkan countries”, Erasmus and CEEPUS coordinator.
Džalila Muharemagić	Project officer at University of Bihać, with experience on several EU projects such as “B&H Qualification Framework for Higher Education”, “Strategic Management of Higher Education Institutions Based on Integrated Quality Assurance System”, “Developing Information Literacy for LLL and knowledge economy in Western Balkan countries”, Erasmus and CEEPUS coordinator.

Partner number		**P7**
Organisation name & acronym	**Dzemal Bijedic University of Mostar - UNMO**	
F.3.1 - Aims and activities of the organisation *Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project* (limit 2000 characters).		

Dzemal Bijedic University of Mostar was founded in 1977 as one of the pillars of the development of the Herzegovina region. Research interests and capacities include civil, mechanical engineering, renewable energy, law, business, marketing, agriculture and food production, history, languages, sociology, biology and chemistry and IT. UNMO mission is to organize a wide spectre of different educational processes and conduct theoretical, applied and development scientific and research and become one of the leaders in the education of young experts necessary for the development of the economy and society and to improve cultural and social development of the region and the country.

The University development vision anticipates striving to become a flexible, functional and socially responsible higher education institution in the region recognized by its modern study programmes in all study cycles, opened to cooperation, internationalisation and oriented towards quality. As project oriented higher education institution aiming at wide scope of goals, from scientific to socially oriented, at this moment, UNMO is implementing 9 CBHE Erasmus+ projects and 25 ICMs. We are also active in DAAD, USAID, IPA, FP, CEEPUS and Mevlana exchange programme, H2020, COST, EUREKA. These projects have increased the international dimension of the University and raised awareness in participation in different programme schemes. UNMO goal is to establish relations based on trust that will be basis for upgrading and improving the existing cooperation to reach the broad objective of increasing the number of our international ties and creating the network of academic excellence.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	Erasmus+ CBHE – 9 Erasmus+ ICM – 25 Cooperation agreements - 32
Number of students	5000
Number of Bachelor degrees offered	31
Number of Master degrees offered	28
Number of PhD degrees offered	4
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	Yes - Promoting academiaindustry alliances For R&D through collaborative and open innovation, 598719-EPP-1-2018-1MKEPPKA2-CBHE-JP - Strengthening of master curricula in water resources management for the Western Balkans HEIs and stakeholders , 597888-EPP-1-2018-1RSEPPKA2 -Healthy URBanEnvironment: Developing Higher Education in Architecture and Construction in Bosnia and Herzegovina, 598503-EPP-1-2018-1ITEPPKA2-CBHE-JP - Western Balkans Urban Agriculture Initiative, 586304-EPP-1-2017-1-BAEPPKA2- CBHE-JP -Next Destination Balkans: Agritourism Landscapes Development, 585833-EPP-1- 2017-1-RSEPPKA2- CBHE-JP -Strengthening Capacities for Tourism Changes in WB – Building Competences for Quality Management of Heritage and Cultural Tourism, 574193-EPP-1-2016-1-RS-EPPKA2-CBHE-JP -Modernising geodesy education in Western Balkan with focus on competences and learning outcome, 561902-EPP-1-2015-1SE-EPPKA2-CBHE-JP -Creating the Network of Knowledge Labs for Sustainable and Resilient Environments, 561675-EPP-1-2015-1XK-EPPKA2-CBHE-JP -Strengthening of Internationalisation in B&H Higher Education, 561874-EPP-1-2015-1BE-EPPKA2-CBHE-SP

F.3.2 – Role of your organisation in the project

Please describe also the role of your organisation in the project (limit 1000 characters).

Dzemal Bijedic University of Mostar will contribute to implantation of the project by undertaking all activities necessary to reach both objective and specific goals of the project.

Dzemal Bijedic University of Mostar – UNMO, will remain in current systems of study programes (3+2) for both faculties that are ste subject of this project: Civil Engineerinf Faculty (BSc – General, Geodesia; Msc – General, Construction, Urban infrastructure) and Design of interiors (BSc and MSc). Within these programes, we will modernize 5 architectural and 5 civil engineernig courses in BSc and in MSc level. Further on, we will introduce and design 6 new architectural BSc and Msc courses and 3 new BSc and MSc civil engineering courses.

Dzemal Bijedic University of Mostar – UNMO, BiH, will be Co – Leader of WP4 - University Enterprise Collaboration together with Leader - University of Malaga (School of Architecture and School of Engineering), Spain.

Also, UNMO will participate in all other activities in accordince to the project proposal.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI. **I CONFIRM**	Choose an item.

For new courses

What new courses will the project implement in your HEI?	1. Sustainable architecture 2. Project management for architects 3. Green Design and Interior 4. Contemporary methods of preservation of historical environment 5. Actions on Structures 6. Applied Hydraulics

For each course please fill the following nested table:

Title	**Sustainable architecture**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Studio equipment

Title	**Project management for architects**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	3 ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1

List of equipment to be purchased for this course? (if applicable)	Literature and equipment

Title	**Green Design and Interior**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Literature and equipment

Title	**Contemporary methods of preservation of historical environment**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	2
List of equipment to be purchased for this course? (if applicable)	Literature and equipment

Title	**Actions on Structures**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	3ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Literature and equipment

Title	**Applied Hydraulics**
Level of study	MSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5 ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021

Number of students to be accepted in the first year/ second year	15
Number of teaching staff to be trained	1
Internship /placements (if applicable)	1
List of equipment to be purchased for this course? (if applicable)	Literature

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	**Computer Literacy in Architecture**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	3ECTS
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	20
Number of teaching staff to be trained	1
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	Lab equipment

Title	**Construction Materials**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	20
Number of teaching staff to be trained	1
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	Lab equipment

Title	**Critical Theory/ Culture and Architecture**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	20

Number of teaching staff to be trained	1
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	Books

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Maja Popovac	Maja Popovac is an Associate Professor at University "Dzemal Bijedic" Mostar, Faculty of Civil Engineering. She received her undergraduate degree (1995-1998), master's degree (1998-2000) and doctorate (2001 – 2007) from the Faculty of Architecture, Czech Technical University, Prague, Czech Republic. She gained professional experience working in different contexts, in professional practice and in academia: 2000: General Engineering, Florence, Italy Old Bridge Reconstruction Project, UNESCO; 2000 –2002: Aga Khan Trust For Culture / World Monument Fund, Mostar; 2002–2003: ER-BU, Mostar, BiH, Old Bridge ReconstructionUNESCO project, Site Manager Deputy; 2003- 2008: GD „Arhitekt" Mostar, BiH, Designer, Project Manager; 2007- 2009: University (Sveučilište) Mostar, Faculty of Civil Engineering, External associate; 2008: World Bank, Expert adviser; 2008: University "Dzemal Bijedic" Mostar, Faculty of Civil Engineering, Assistant prof; 2009-2010: University "Dzemal Bijedic" Mostar, Vice Rector for International Affairs. Since 2008: International conference Days Of Passive House "Faculty of Architecture Zagreb, Croatia, Lecturer; Since 2011: Fargfabriken, Stockholm, Expert advisor, NUT project; Since 2014: Ministry of Culture, Czech Republic, Projects NAKI I and NAKI II, Independent external evaluator; 2015-2016: Visiting Professor at the Department of Architecture, IBU in Sarajevo ; Since 2015: Visiting Professor Polytechnic Faculty in Zenica; Since 2015: Lecturer at International Summer School of Architecture at the University of Zagreb, Faculty of Architecture, Study Centre Motovun in Istria, Croatia. Her areas of interest focus on monument protection, energy efficiency, architectural design, natural materials in building industry, passive and passive solar house design, reuse of building materials, sustainable and resilient architecture and environment, green buildings and cities. She participated in many research and professional projects some of them being: 2014-2015: CULTURAL HERITAGE WITHOUT BORDERS – Make it Yours project; Since 2016: Green Design Pavilion, BAMB, Horizon 2020 project, Sarajevo Green Design Foundation; 2016-2018 Creating the Network of Knowledge Labs for Sustainable and Resilient Environments (KLABS), Erasmus+ project; Since 2017: ECC 2024, FENOMEN, Team Member for European Centre of Culture 2024. She is member of ICOMOS National Committee, CICOP National Committee, Green Building Council B&H, Sarajevo Green Design Foundation. Her work is published widely in journals, magazines and conference proceedings. Recent pertinent publications: - Roso Popovac, Maja: "One-span Ottoman bridges in Bosnia and Herzegovina", publisher: University "Džemal Bijedić", Civil Engineering Faculty, 2015. ISBN 978-9958-9170-8-0 - Trapara B., Roso Popovac M., Klarić S.: Lukomir – sinonim bosanskohercegovačke vernakularne arhitekture (SYNONYMOUS FOR B&H VERNACULAR ARCHITECTURE), 6th International Scientific Conference, GNP 2012, Žabljak, Montenegro, 2016. ISBN 978-86-82707-21-9, - Popovac. M., Šarančić- Logo A., Trapara B.: GOAT'S BRIDGE IN SARAJEVO BOSNIA AND HERZEGOVINA, 2nd International SCIENTIFIC Conference BASA'2017; Sofia, Bulgaria, pp. 375-383, ISBN:978-954-8931-52-6 - Roso Popovac. M., Šahinagić – Isović M. Šarančić- Logo A., Ćećez M.: SUSTAINABILITY AND RESILIENCE IN TRADITIONAL BOSNIAN AND HERZEGOVINIAN

	ARCHITECTURE - LEARNING FROM TRADITION FOR BETTER FUTURE, 4th International Academic Conference on Places and Technologies - PT2017, Sarajevo, June 08th-09th, 2017 - Popovac. M., Šarančić- Logo A., Đulović M.: ZELENI GRADOVI – GRADOVI BUDUĆNOSTI, VI Savjetovanje o energetici u BIH sa međunarodnim učešćem „Energijska efikasnost i obnovljivi izvori energije – put ka energetskom zaokretu“, Neum 2017, pp 66-73, ISSN 2233 – 0127 - Popovac. M., Šarančić- Logo A., Trapara B., Đulović M.: REVIEW ON CIRCULAR DESIGN, GDC 2017, 3rd Green Design Conference “Vital Cities and Reversible Buildings”, Mostar, 04 October – 07 October 2017, ISBN: 978-90-821-6983-6 - Popovac. M., Šarančić- Logo A., Trapara B., Šahinagić – Isović M.: RURAL CULTURAL LANDSCAPES OF POPOVO POLJE – VALORISATION AND SUSTAINABLE CONSERVATION, 4th International conference “Importance of place, CICOP, Sarajevo 2017
Merima Šahinagić Isović	Merima Šahinagić Isović is an Associated Professor at “Dzemal Bijedic University of Mostar, Faculty of Civil Engineering; since 2015 Vice Dean of Faculty of Civil Engineering, University Dzemal Bijedic Mostar. In 1999 she finished undergraduate studies at University of Mostar, Faculty of Civil Engineering; 1999 -2000 Assistant chief designer, Project office “Wulle & partners”; 2002 Specialization course in the field of concrete structures, Ruhr-University, Bochum (Germany); 2004 finished the Postgraduate Studies at Dzemal Bijedic University of Mostar, Faculty of Civil Engineering and obtained the Masters of Science Degree; 2005 Seminar on rehabilitation of landslides in the Canton of Sarajevo, organized by USAID; 2007 Specialization course in the field of concrete structures, Ruhr-University, Bochum (Germany); 2010 Defended the doctoral thesis and obtained Doctor Degree at University "Sv.Kiril and Methodius" - Skopje (R.Macedonia) Faculty of Civil Engineering . From 2004 to 2010 she completed SEEFORM programme for PhD studies in engineering, Certificate acquired 2014. from Ruhr University, Bochum, Germany. In 2013 she received certificate for specialist in expert committees to review the action plans and studies on environmental impact assessment, Bosnia & Herzegovina. Her reserch focuses on building materials, special types of concrete, material durability. She participated in many projects such as: 2014 – 2017 Towards the Next Generation of Standards for Service Life of Cement-Based Materials and Structures, COST Action TU 1404; 2013 – 2017 Next Generation Design Guidelines for Composites in Construction, COST Action TU 1207; 2016 – 2018 Creating the Network of Knowledge Labs for Sustainable and Resilient Environments (KLABS), Erasmus+ project. Recent pertinent publications: - Šahinagić-Isović, M., Markovski, G., & Ćećez, M. (2012). Shrinkage strain of concrete-causes and types. Gra\d Jevinar, 64(09.), 727–734. - Sahinagic-Isovic, M., & Cecez, M. (2017). Crack width analysis of steel fibers reinforced concrete beams. Gradjevinski Materijali I Konstrukcije, 60(4), 53–66. https://doi.org/10.5937/GRMK1704053S - Šahinagić-Isović, M., Ćećez, M. STRESS-STRAIN STATE ANALYSIS OF REINFORCED CONCRETE BEAMS WITH STEEL FIBERS. 7th International Conference, FIBRE CONCRETE 2013, 12-13 September 2013, Prague, Czech Republic - Causevic, A., Rustempašić Nerman, Popovac, M., Idrizbegovic-Zgonic, A., Kuljuh, N., Klarić, S., & Šahinagić-Isović, M. (2015). Conference Importance of Place _Prezentacija 2015 (p.). Unpublished. https://doi.org/10.13140/RG.2.1.1596.7766
Marko Ćećez	Marko Ćećez is a Senior Assistant for scientific field “Building materials” at “Džemal Bijedić” University of Mostar (from 2015). He is teching courses: Building materials I, Building materials II, Concrete technology, Durability and maintenance of structures,

	Materials for energy efficient buildings. He is also PhD student - Polytechnic doctoral studies at "Džemal Bijedić" University of Mostar. His research interests focus on building materials, concrete, concrete with waste products, sustainable construction etc. He completed several training programmes some of them being: Training programme – Energy efficiency and management in industry and Buildings, Ankara, Turkey (2016). As a team member actively participated in 7 national research projects, 1 COST Action and 1 Erasmus+ project. He published 24 research paper in international conferences and 4 papers published in journals. Recent pertinent publications: - Šahinagić-Isović, M., Markovski, G., & Ćećez, M. (2012). Shrinkage strain of concrete-causes and types. Gra\d Jevinar, 64(09.), 727–734. - Žujo, V., Car-Pušić, D., Žileska-Pančovska, V., & Ćećez, M. (2017). Time and cost interdependence in water supply system construction projects. Technological and Economic Development of Economy, 23(6), 895–914. DOI : 10.3846/20294913.2015.1071292 - Sahinagic-Isovic, M., & Cecez, M. (2017). Crack width analysis of steel fibers reinforced concrete beams. Gradjevinski Materijali I Konstrukcije, 60(4), 53–66. https://doi.org/10.5937/GRMK1704053S - Šahinagić-Isović, M., Ćećez, M. STRESS-STRAIN STATE ANALYSIS OF REINFORCED CONCRETE BEAMS WITH STEEL FIBERS. 7th International Conference, FIBRE CONCRETE 2013, 12-13 September 2013, Prague, Czech Republic
Azra Špago	Dr. Azra Špago is a researcher, Project manager and the Head of the doctoral polytechnic study at the Dzemal Bijedic University of Mostar. She is a member of the International Society for Rock Mechanics, International Society for Soil Mechanics and Geotechnical Engineering and Geotechnical Society of Bosnia and Herzegovina. She is an active researcher in the fields of soil mechanics and foundations, rock mechanics and engineering geology. She completed her undergraduate and MS studies in Civil Engineering at the Dzemal Bijedic University of Mostar and obtained her PhD in Civil Engineering at the University "Sv. Kiril and Methodius" Faculty of Civil Engineering (Skopje, R. Macedonia). She is a co-author and author of several textbooks in Bosnian and English and numerous research papers. Recent pertinents publications: - Milorad Jovanovski, Azra Špago, Igor Peševski. Range of engineering-geological properties for some carbonate rock complexes from Balkan Peninsula Vol 24 No 1/2 (2010): Geologica Macedonica - Articles. p. 23–30 - Spago Azra, Jovanovski M., Ackar A, KORELATIVNE ZAVISNOSTI IZMEĐU KVALITETA STIJENSKOG MASIVA I DINAMIČKIH I STATIČKIHKARAKTERISTIKA KARBONATNIH STIJENSKI MASIVASA LOKACIJA BRANA "SALAKOVAC" I "GRABOVICA", Geotehnika – e časopis Društva za geotehniku u Bosni i Hercegovini, ISSN Broj 1, 2015 - Nikolić, T., Špago, A., Huseinbašić, S. ESTABLISH THE SYSTEM FOR EARLY WARNING FROM NATURAL DISASTER WHICH INITIALIZE FLOOD AND LANDSLIDE. SEVENTH INTERNATIONAL CONFERENCE GEOTECHNICS IN CIVIL ENGINEERING CONFERENCE PROCEEDINGS. Šabac, 14 - 17 November 2017, p. 557 – 564. - Špago, A., Jovanovski, M., & Ačkar, A. (n.d.). ANALITIČKI MODELI ZA PROGNOZU MEHANIČKIH PARAMETARA KARBONATNIH STIJENSKIH MASIVA.

Partner number		**P8**
Organisation name & acronym	National University of Architecture and Construction of Armenia Foundation - NUACA	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

The history of the Armenian school of Architecture and Construction started in 1921, with opening of a Technical School in the newly established Yerevan State University. In 1930, based on the Technical Department, the Armenian Construction Institute was founded. The Institute had three departments: Architecture and Construction, Hydrology and Chemical Engineering.

In 1933, the Construction Institute was restructured into the Polytechnic Institute. In 1989 on the basis of the related departments and chairs of the Yerevan Polytechnic Institute, the Architectural/Construction Institute was established, which was renamed into Yerevan State University of Architecture and Construction, later in 2014 it was renamed into National University of Architecture and Construction of Armenia. At present NUACA has about 3300 students. Educational process in the University is organized in 3 educational levels: Bachelor, Master and PhD. The number of academic staff exceeds 450; most of them have doctor or candidate of sciences degrees.

NUACA diploma is officially recognized by governments of a number of countries. In 2013 the University became a member of the European Association of Institutions in Higher Education (EURASHE). NUACA cooperates with higher educational institutions in the EU countries (France, Great Britain, Germany, Italy, Poland, Ireland, Sweden, Switzerland, Bulgaria), as well as the Russian Federation, the United States, the Ukraine and CIS countries, Islamic Republic of Iran, People's Republic of China and other countries. Eventually, on 8 December 2015 NUACA was institutionally accredited and received the certificate of international accreditation.

The Faculty of Architecture where renowned architects and experts from leading construction companies are teaching as well as representatives of state and local governing bodies contributing not only to close cooperation among external stakeholders and employers, but also to the integration of educational, research and practical processes. Faculty teaching is carried out in Armenian, English and Russian as traditionally 20-30% of its students are foreign citizens.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	50
Number of students	3400
Number of Bachelor degrees offered	21
Number of Master degrees offered	23
Number of PhD degrees offered	5
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	Yes -Promoting academia-industry alliances for R&D through collaborative and open innovation platform: 598719-EPP-1-2018-1-MK-EPPKA2-CBHE-JP -IACOBUS+ Culture, Heritage and Integration: 2017-1-ES01-KA203-038344 -Enhancing Innovation Competences and Entrepreneurial Skills in Engineering Education: 573965-EPP-1-2016-1-SE-EPP KA2-CBHE-JP -Higher Education Interdisciplinary Reform in Tourism Management and Applied Geo-information Curricula: 561555-EPP-1-2015-1-ES-EPPKA2-CBHE-JP -Structural Development of the third Cycle based on Salzburg Principles: 543710-TEMPUS-1-2013-1-AM-TEMPUS-SMGR -Fostering Autonomy and Accountability: Development of State-of-the-Art, The Management System for Efficient Changes in Line with Bologna Principles: 543711-TEMPUS-1-2013-1-AM-TEMPUS-SMGR -Development of Embedded System Courses with implementation of Innovative Virtual approaches for

	integration of Research, Education and Production in UA, GE, AM: 544091-TEMPUS-1-2013-1-BE-TEMPUS-JPCR -Implementation of National and Sectorial Qualifications Frameworks in Armenia: 543817-TEMPUS-1-2013-1-SE-TEMPUS-SMHES Enhancing Students Participation in Quality in Armenia HE: 544261-TEMPUS-1-2013-1-BE-TEMPUS-SMGR

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

National University of Architecture and Construction of Armenia Foundation, will address related issues of curriculum improvement in the field of architecture. Within the framework of this project university intend to develop and improve existing courses as well as to create new courses at BSc and MSc Levels in the fields of Urban Development, Architectural Design and Heritage. With the realization of this project NUACA intended to build educational capacity based on cooperation with industrial sector and to strengthen university and enterprise cooperation.

National University of Architecture and Construction of Armenia - NUACA will be co-leader on WP7-Dissemination & Sustainability together with leader - IBU Architecture, Sarajevo, BiH, and will be working on other activities set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI. **I DO NOT CONFIRM**	Choose an item.

For new courses

What new courses will the project implement in your HEI?	1. BIM (Building Information Model) technologies (systems) 2. Architectural projection of contemporary construction systems 3. Territory Improvement and engineering development of area 4. Sustainable architecture 5. Project management for architects 6. Contemporary methods of preservation of historical environment

For each course please fill the following nested table:

Title	**BIM (Building Information Model) technologies (systems)**
Level of study	Bachelor
List of subjects and credits (ECTS or comparable credit system) for each of them	Two subjects (BIM Basics) and (BIM implementing and communication process), each by 2 ECTS, (4 credit total)

Estimated date of accreditation and accreditation body	2020,, The National Centre for Professional Education Quality Assurance Foundation (ANQA)
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	100 – 130 (students per year)
Number of teaching staff to be trained	2 - 3
Internship / placements (if applicable)	Yerevan, Armenia
List of equipment to be purchased for this course? (if applicable)	30 laptops, 1 ploter, softs (Revit, Archicad, etc.) (as the groups contains 25-30 students)

Title	**Architectural projection of contemporary construction systems**
Level of study	Bachelor
List of subjects and credits (ECTS or comparable credit system) for each of them	One subjects, each by 3 ECTS
Estimated date of accreditation and accreditation body	2020, The National Centre for Professional Education Quality Assurance Foundation (ANQA)
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	100 – 130 (students per year)
Number of teaching staff to be trained	2
Internship /placements (if applicable)	Yerevan, Armenia
List of equipment to be purchased for this course? (if applicable)	Modern Literature

Title	**Territory Improvement and engineering development of area**
Level of study	Bachelor
List of subjects and credits (ECTS or comparable credit system) for each of them	Two subjects, (Urban development of the territories) and (engineering component in the urban development of the architectural environment) each by 2 ECTS (4 credit total)
Estimated date of accreditation and accreditation body	2020, The National Centre for Professional Education Quality Assurance Foundation (ANQA)
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	100 – 130 (students per year)
Number of teaching staff to be trained	2
Internship /placements (if applicable)	Yerevan, Armenia
List of equipment to be purchased for this course? (if applicable)	Modern Literature

Title	**Sustainable architecture**
Level of study	Master
List of subjects and credits (ECTS or comparable credit system) for each of them	One subject, 2 credit
Estimated date of accreditation and accreditation body	2020, The National Centre for Professional Education Quality Assurance Foundation (ANQA)
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	30 - 50 (students per year)
Number of teaching staff to be trained	1
Internship /placements (if applicable)	Yerevan, Armenia

List of equipment to be purchased for this course? (if applicable)	Modern Literature

Title	**Project management for architects**
Level of study	Master
List of subjects and credits (ECTS or comparable credit system) for each of them	One subject, 2 credit
Estimated date of accreditation and accreditation body	2020, The National Centre for Professional Education Quality Assurance Foundation (ANQA)
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	30 - 50 (students per year)
Number of teaching staff to be trained	1
Internship /placements (if applicable)	Yerevan, Armenia
List of equipment to be purchased for this course? (if applicable)	Modern Literature

Title	**Contemporary methods of preservation of historical environment**
Level of study	Master
List of subjects and credits (ECTS or comparable credit system) for each of them	Two subject (Understanding theoretical backgrounds & management with environmental planning; Develop a comprehensive understanding of State laws and regulations) and (Knowledge of materials and systems approaches to investigating and assessing existing conditions and developing conservation and rehabilitation recommendations;), each by 2 ECTS (4 credit total)
Estimated date of accreditation and accreditation body	2020, The National Centre for Professional Education Quality Assurance Foundation (ANQA)
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	30 - 50 (students per year)
Number of teaching staff to be trained	2
Internship /placements (if applicable)	Yerevan, Armenia
List of equipment to be purchased for this course? (if applicable)	2 Modern digital measurement devices, 3D scanner, plotter, 2 digital photo cameras (canon)

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	
For each course please fill the following nested table:	

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	

Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	Modernized and new courses at BSc and MSc Level, new educational environment established (Literature, equipment and software's purchased), online platform, Internship program at partner HEIs.
How will the impact of these results be measured in your HEI?	Number of enrolled students in new program. Survey that will measure student and staff satisfaction. Also,

	student academic performance will be followed, and it is expected to be higher.
What financial means and human and other resources will be provided to sustain these results after the project ends?	Valuable physical and human resources set up by project will remain to function after the project implementation. On line platform, established network of industry partners, trained academicians, graduated students, will perform just as driving force towards long-term project goals. After the project completion, content will be integral part of teaching process of newly designed courses and will be frequently updated. New educational environment will become integral part of teaching process and each partner HEIs will continue to maintain it.

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Marine Ghazaryan	Marine Ghazaryan is Vice-rector of Finance, Communications and ICT. As a responsible person for NUACA external communication she is responsible for University public relations, builds and sustains NUACA reputation in general and for scientific standing, consistency and prominence. She is in the board of Organizing Committee of the annually held conferences “International Conference on Contemporary Issues of Architecture and Construction” (venue varies) and “Preservation of Cultural Heritage”, Venice, Italy. Recent pertinent publications: - “International Project Management Peculiarities”, Proceedings of the International Symposium on Embedded Systems and Trends in Teaching, Engineering, CPU, Nitra, 2016, pp. 270-272 - “Building Information Modelling for Existing Residential Buildings in Armenia”, Proceedings of the Conference on Computer Science and Information Technologies, Yerevan, 2017, pp. 427-430, - “Experience on Usage of Alfresco Software Package as an Archiving System at NUACA”, Proceedings of the Conference on Computer Science and Information Technologies, Yerevan, 2017, pp. 431 - 433, - “Existing Residential Buildings’ Management in Armenia and Application BIM”, Proceedings of 9th International Conference Contemporary Problems of Architecture and Construction, Batumi, 2017, pp. 113 – 116
Varazdat Hovhannisyan	PhD Varazdat Hovhannisyan is Associate Professor at the department of Engineering Geodesy ; Head of Quality Assurance Center of NUACA, coordinator of International Projects at NUACA. He has 18 years of teaching experience, initiation and development of different type of cooperation programs. Currently he is coordinating different programs and projects. He is an international experts of HE quality assurance and expert in curricula development. His research activity is in the fields of real property economics and management, real property assessment, expropriation and compensation etc. Recent pertinent publications: - "The methodological guidelines for ArcGis". Methodical manual, NUACA, Yerevan, 2014, p. 130 - "A network of satellite positioning stations continuously operating in the territory of the Republic of Armenia", 8th International Conference on contemporary problems in Architecture and Construction, 2016, p. 203-208 - "The application of geografical information systems in real estate appraisal and realtoring". NUACA Bulletin. - 2016.- N4, Yerevan, p. 134-139

Davit Grigoryan	Davit Grigoryan Ph.D in Engineering is Dean of the Faculty of Construction and an Associate Professor at the chair of Building Structures. He is structural engineer of many buildings and structures. Participant in many International Conferences and Congresses. He published 15 scientific articles and 1 educational handbooks. Recent pertinent publications: - "Reinforcing calculation specifications for concrete structures. Actual problems of continuum mechanics. Proceedings of IV international conference", 21-26 September 2015, Armenia, Yerevan 2015, p. 139-141. - "Investigation of Tensile Stress on the Area of the Reinforcement and Concrete Bond in Steel Reinforced Concrete Constructions". Internatonal Scientific Journal of IFToMM. Problems of Mechanics, Tbilisi., 2016. p. 29-36.
Emma Harutyunyan	PhD Emma Harutyunyan is an Associate Professor; Acting Chair holder of Theory of Architecture, Restoration and Reconstruction of Architectural Heritage. She has had an active participation in TEMPUS VERITAS Project (543710-TEMPUS-1-2013-1-AM-TEMPUS-SMGR) Recent pertinent publications: - Issues of modernization of school buildings of the Republic of Armenia, 7th International Conference on Contemporary Problems of Architecture and Construction, 19-21 November 2015, Florence, Italy, pp. 273-278 - Possibilities and prerequisites for computer 3D modeling and reconstruction of architectural heritage of Armenia, 8th International Conference on Contemporary Problems of Architecture and Construction, 26-28 October 2016, Yerevan, RA, pp. 36-38
Armen Shatvoryan	PhD Armen Shatvoryan is an Associate Professor at the Chair of "Architectural Projection and Design of Architectural Environment"; practicing architect; Vice Dean of the Faculty of Architecture. He has extensive experience in organizing architectural workshops electives, development of architectural syllabus, and overall support for architectural education. He is an Academic Coordinator of Erasmus+ mobility programs with Universities of Politechnico di Milano, and Architecture Faculty of Lisbon University. Recent pertinent publications: - "Contemporary issues of evolution of the architecture of medical facilities" Scientific papers of National university of Architecture & construction of Armenia, T.I (56), ISSN 1829-4200, 2015 - "The impact of the metaphysical symbolism on the architecture and urban environment" Scientific papers of National university of Architecture & construction of Armenia 2016-2017

Partner number		**P9**
Organisation name & acronym	**National Polytechnic University of Armenia - NPUA**	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

National Polytechnic University of Armenia (NPUA), the legal successor of State Engineering University of Armenia, has been founded in 1933 as Yerevan Polytechnic Institute. It was and remains the premier provider of technological education in the country. NPUA has about 10,000 students at all 3 study cycles. The number of academic staff exceeds 800, most of them holding doctoral degrees. The specialization scope of NPUA includes over 45 Bachelor, 55 Master, and 30 PhD programs in Engineering, Industrial Economics and Management, Applied Physics and Mathematics. The University has given nearly 125,000 graduates who have contributed greatly to the development of engineering manpower and technology base of Armenia. Besides the degree programs, the University also offers extended education courses by means of the Centre of Continuing Education.

NPUA plays a leading role in the reformations of the higher education system in Armenia. It was the first HEI in RA that introduced two and three level higher education systems, implemented the ECTS and long-term strategic planning. The University has developed an extended network of international cooperation including many leading Universities and research centres of the world. The University is a member of EUA, BSUN and other international associations and networks. NPUA was and is involved in many European academic and research programs including over 25 Tempus and Erasmus+ KA2 projects.
To ensure professional approach to the project tasks solution NPUA will mainly act through the Department of Academic and Methodical Affairs, the Department of Internal Quality Audit and Reform Programs, and the Faculty of Computer Systems and Informatics.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	over 150
Number of students	over 9,000
Number of Bachelor degrees offered	over 60
Number of Master degrees offered	45
Number of PhD degrees offered	40
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	Yes -"DOCMEN" Development of two cycle innovative curricula in microelectronic engineering (561627-EPP-1-2015-1-PL-EPPKA2-CBHE-JP) - "MARUEEB" Master Degree in Innovative Technologies in Energy Efficient Buildings for Russian & Armenian Universities and Stakeholders (561627-EPP-1-2015-1-PL-EPPKA2-CBHE-JP) - "eDRONE" Educational for Drone (574090-EPP-1-2016-1-IT-EPPKA2-CBHE-JP) - "InnoCENS" Enhancing Innovation Competences and Entrepreneurial skills in Engineering Education (573965-EPP-1-2016-1-SE-EPPKA2-CBHE-JP) - "PRINTeL" Change in Classroom: Promoting Innovative Teaching & Learning to Enhance Student Learning Experience in Eastern Partnership Countries (585760-EPP-1-2017-1-AM-EPPKA2-CBHE-JP) - "All4R&D" Promoting academia-industry alliances for R&D through collaborative and open innovation platform (598719-EPP-1-2018-1- MK-EPPKA2-CBHE-JP) - "MODEST" Modernization of Doctoral Education in Science and Improvement of Teaching Methodologies (598549-EPP-1-2018-1- LV-EPPKA2-CBHE-JP)

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

The role of the NPUA is to support project by its expertise in ICT methods everything in order to reach set up goals. To ensure professional approach to the project tasks solution NPUA will mainly act through the ICT sector and Department of Academic and Methodical Affairs, the Department of Internal Quality Audit and Reform Programs, and the Faculty of Computer Systems and Informatics. NPUA will be main actor in creation of online platform, training on innovatice teaching methods, and creation of project web site.

National Polytechnical University of Armenia Foundation – NPUA will be co – Leader on WP3 - Capacity building together with leader - University of Maribor (Faculty of Civil Engineering, Transportation Engineering and Architecture) - UM (FGPA), Slovenia, and will be working on other activities set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)	
List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	
F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)* *Please fill in if you are applying for this type of project and define clear the activities to be held in your institution* (limit 2000 characters)	
F.3.6 – Expected results and impact *(only for Partner Country institutions)*	
What are the expected tangible results from the project in your HEI?	To ensure professional approach to the project tasks solution NPUA will mainly act through the ICT sector and Department of Academic and Methodical Affairs, the Department of Internal Quality Audit and Reform Programs, and the Faculty of Computer Systems and Informatics. Thus, new working environment for this type of ICT support is planned to be purchased.
How will the impact of these results be measured in your HEI?	NPUA staff will be experienced in this type of ICT support of project activities and will have infrastructure needed to continue to act through ICT support on other project applications. Impact could be measure by number of other partnerships on projects.
What financial means and human and other resources will be provided to sustain these results after the project ends?	Valuable physical resources purcased during the project used for creation of online platform, training on innovative teaching methods, and creation of project web site will remain to NPUA will continue to maintain it.

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Ruben Aghgashyan	Since 2003 Ruben Aghgashyan is the Vice-Rector of NPUA responsible for international relations and development programs. Main scientific interests concern the applications of mathematical modelling and IT based methods, new teaching technologies and HE reforms. Has over 110 publications, is full member of RA Engineering Academy and many other professional organizations and boards. Well experienced in the establishment and coordination of joint educational programs with industrial partners and HEIs. Starting from early 90-s is widely involved in different international programs and projects of NPUA, including Tempus and Erasmus projects as a key player. Recent pertinent publications: - R. Aghgashyan, G. Margarov, NPUA Experience in International Accreditation of Study Programs in the Context of Internationalization of Higher Education, 1-st Conference on Internationalization Practices in the Field of Higher Education, November 19–20, 2015, Yerevan, Armenia - R. Aghgashyan, G. Margarov, E. Mitrofanova, C. Rapp, Creating Effective Surveys for Obtaining Feedback from Stakeholders as a Basis for Continuous Study Programme Improvement, E-Competence Framework: Learning Enviroment, Eurilink, 2016, Rome, Italy - R. Aghgashyan, G. Margarov, Modern Features of Formation of Demanded Human Capacity in Professional Higher Education, Proceedings of the VII All-Russian Personnel Forum “Innovative Personnel Management” with International Participation, May 12-15, 2016, Samara, Russia - R. Aghgashyan and SP Development Team, Strategic Plan (2016-2020) of State Engineering University of Armenia, 101 pages, 2016, SEUA, Yerevan, Armenia - 5. R. Aghgashyan, G. Margarov, Engineering Education Quality Assurance Based on Information Technology, Bulletin of Karaganda State Industrial University, Temirtau, Kazakhstan, 2017
Gevorg Margarov	Ph.D, Professor Gevorg Margarov since 2004 is the Head of Information Security and Software Development chair of NPUA. Scientific interests are in organization of computer systems, principles of information security management and engineering, digital steganography, applied cryptography, Web-based design, e-learning, new teaching technologies. Over 30 years of experience in the teaching in ICT related subject areas. Author of over 150 scientific publications and teaching aids in the mentioned fields. Is well experienced in international cooperation projects of NPUA granted by different EU programs including Tempus projects. Recent pertinent publications: - G. Margarov, G. Ajemyan, Classification of Students as a Result of the Implementation of an Individual Component of Operational Knowledge Testing, Proceedings of the XIII International Scientific and Technical Conference “New Information Technologies and Systems”, Penza, 2016 - G. Margarov, Information Security – Basis of the Education System for Digital Generation Z, Meeting Security Challenges Through Data Analytics and Decision Support; NATO Science for Peace and Security Series D: Information and Communication Security – Vol. 47, ISO Press, 2016 - G. Margarov, E. Mitrofanova, R. Gevorgyan, Designing Effective Online Surveys for Engineering Study Programs Development Based on Feedback from Stakeholders, Proceedings of IEEE Global Engineering Education Conference (EDUCON), 2017, Athens, Greece - G. Margarov, I. Kuznetsova, Improving Efficiency of Engineering Education Based on Widespread Use of Information Technologies, Ashirov Readings: Proceedings of

	the International Scientific and Practical Conference, Volume 1, 2017, Samara, Russia - G. Margarov, G. Tomeyan, M. J. Varanda Pereira, Plagiarism Detection System for Armenian Language, Proceedings of the International Conference "Computer Science and Information Technologies", CSIT-2017, Yerevan, 2017
Karen Arzumanyan	Ph. D, Associate Professor Karen Arzumanyan from 2010 is the Head of the Department of Academic and Methodical Affairs of NPUA. The main scientific and professional interests concern the problems of Mechanical Engineering and Machine Building, also the state of the art methodologies of curriculum development and organization of teaching/learning processes in HE Institutions. Has published dozens of articles and teaching aids in the stated fields. Is well experienced in the teaching and in implementing different international cooperation programs including Tempus projects. Recent pertinent publications: - K. Arzumanyan, A. Qaryan, K. Hovhannisyan, S. Verlinsky, Dynamic Analysis of Planar Linkages. Course Problem in Applied Mechanics, Chartaraget, Yerevan, 2011, 60p. - K. Arzumanyan, R. Aghgashyan, H. Balabanyan, S. Mamyan, Yu. Sargsyan, Methodical Guidance for Development and Restructuring of Study Programs Based Expected Learning Outcomes, SEUA, Yerevan, 2011, 38 p. - K. Arzumanyan, Yu. Sargsyan, M. Harutyunyan, S. Verlinsky, Methodical Instructions for the Evaluation of Learning Outcomes of the SEUA Study Programs, SEUA, Yerevan, 2012, 29 p. - K. Arzumanyan, Yu. Sargsyan, K. Stepanian, Manipulation mechanisms: Tutorial, Chartaraget, Yerevan, 2012, 188 p. - K. Arzumanyan, A. Qaryan, A. Arustamyan, A. Karapetyan, Applied Mechanics: Methodical Guidelines, Chartaraget, Yerevan, 2012, 63 p.
Maria Mangasarova	Maria Mangasarova from 2003 to 2006 was specialist in the International Relations Office of SEUA. Since 2006 she is the Head of International Cooperation and Grant Programs Department of NPUA, involved in many EU projects such as Erasmus Mundus, Tempus, Erasmus+ and other international ones, responsible for their implementation. Main professional duties come to the contributing in the strengthening NPUA international relations.

Partner number		**P10**
Organisation name & acronym	**The Belarussian National Technical University - BNTU**	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

The Belarussian National Technical University (BNTU) is a state university founded in 1920 and is considered as the best engineering educational, methodological, research and industrial centre of the Republic of Belarus. The BNTU is proud of the fact that it has been awarded with the status as a leading engineering higher education institution of the Commonwealth of Independent States (CIS).
Every year the BNTU has more than 35,000 registered students and now it comprises 17 Faculties and 5 Institutes.

Being member of such reputed international organizations as International Association of Universities (IAU) and European University Association (EUA) the University does its best to be abreast with all modern education processes and uses every opportunity in order to activate its work in the field of international co-operation. Nowadays the BNTU has more than 150 Agreements on cooperation in the field of education, research, sports and culture with leading European, Asian and African Universities and higher education institutions. The BNTU has a community of more than 1500 international students who have come from over 40 countries worldwide. The

University has been welcoming international students to its undergraduate and postgraduate programs for many years and values the academic and cultural contribution they make to the University.

The BNTU regularly participates in TEMPUS, ERASMUS-MUNDUS, ERASMUS+ and other educational and research programs and due to such policy, its personnel have accumulated sufficient experience to execute jointly academic and research activity with their European partners. Nowadays the Belarusian National Technical University is ranked in the TOP 700+ Best World Universities in accordance with QS Rankings.In the latest QS ranking dedicated to the EECA (Emerging Europe and Central Asia) region, the Belarusian National Technical University (BNTU) has taken rather honourable position in TOP-100 list as a leader among Belarusian technical universities.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	150
Number of students	35000
Number of Bachelor degrees offered	120
Number of Master degrees offered	55
Number of PhD degrees offered	54
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	Yes

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

While implementing the proposed project the Belarusian National Technical University (BNTU) will be involved in following activities:

1) development of curriculum for Master degree students and its introduction in training process; 2) adequate participation in the management of the project as a member of Consortium, 3) participation in the realisation of the work packages of the Project, both in cooperation with other members of the Consortium and by assuming direct responsibility for the organisation of different actions in accordance with the Project's work plan, 4) organisation of mobility for staff, teachers and students, 5) participation in the process of permanent internal quality assessment, 6) participation in dissemination activities through academic and administrative staff members in order to ensure a quite professional approach to the project main tasks targeted to improving education exchange experiences and transfer of these experiences into regional and local policies.

The Belarussian National Technical University (BNTU) will be co-leader on WP5 - Implementation of new programmes together with leader - LEIPZIG UNIVERSITY OF APPLIED SCIENCES– HTWK, Germany, and will be working on other activities set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	**I CONFIRM**	Choose an item.

For new courses

What new courses will the project implement in your HEI?	**1. Energy Efficient Building Designing** **2. Structural Stability**

For each course please fill the following nested table:

Title	**Energy Efficient Building Designing**

Level of study	Bachelor degree
List of subjects and credits (ECTS or comparable credit system) for each of them	Insolating materials Compactness of a building Thermal bridges and airtightness Solar energy (architecture and systems) Heating and Air Conditioning Systems Automatics Energy Audit (1-2 credits for program)
Estimated date of accreditation and accreditation body	-
Estimated starting date of the new programme	2019-09-01 (or 2020-09-01)
Number of students to be accepted in the first year/ second year	40
Number of teaching staff to be trained	3
Internship /placements (if applicable)	-
List of equipment to be purchased for this course? (if applicable)	Projector, Screen

Title	**Structural Stability**
Level of study	Bachelor degree
List of subjects and credits (ECTS or comparable credit system) for each of them	12 hours (1 credits for program)
Estimated date of accreditation and accreditation body	-
Estimated starting date of the new programme	20.11.2019
Number of students to be accepted in the first year/ second year	25
Number of teaching staff to be trained	2
Internship /placements (if applicable)	-
List of equipment to be purchased for this course? (if applicable)	-

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	1. Advanced Structural Analysis 2. Advanced Construction Technology and Management` 3. Civil Engineering Materials 4. Freehand Drawing 5. Contemporary Architectural Discourse 6. Urban Design 7. Architecture Landscape and Technology 8. Multifunctional Space Design

For each course please fill the following nested table:

Title	**Advanced Structural Analysis**
Level of study	Bachelor degree
List of subjects and credits (ECTS or comparable credit system) for each of them	28 hours (1 credits for program)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021

Number of students to be accepted in the first year/ second year	25
Number of teaching staff to be trained	2
Internship /placements (if applicable)	-
List of equipment to be purchased for this course? (if applicable)	-

Title	**Advanced Construction Technology and Management`**
Level of study	Bachelor degree
List of subjects and credits (ECTS or comparable credit system) for each of them	1-2. Process management. Project management. Building construction team in project management 3. Building construction team in project management 4. Materials Management 5. Mechanical Handling and Risk Assessment 6. Managing Construction Defects 7. Hotel and Office Project Development 8. The Merlin Project 9. The Co-operative Head Office Building 10. Chinley School Project 11. Retail Unit and Car Park 12. University Refurbishment Project 13. Managing a Small Business (1-2 credits for program)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	50
Number of teaching staff to be trained	2
Internship /placements (if applicable)	-
List of equipment to be purchased for this course? (if applicable)	-

Title	**Civil Engineering Materials**
Level of study	Bachelor degree
List of subjects and credits (ECTS or comparable credit system) for each of them	1. Principal Properties Of Building Materials 2. Structural Clay Products 3. Ceramic Materials 4. Wood and Wood Products 5. Ferrous Metals 6. Tar, Bitumen and Asphalt 7. Polymeric Materials (1-2 credits for program)
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	40
Number of teaching staff to be trained	2
Internship /placements (if applicable)	-
List of equipment to be purchased for this course? (if applicable)	Projector, Screen

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	40
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Title	**Freehand Drawing**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	40
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Title	**Contemporary Architectural Discourse**
Level of study	BSc
List of subjects and credits (ECTS or comparable credit system) for each of them	7ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	40
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Title	**Urban Design**
Level of study	BSC
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	40
Number of teaching staff to be trained	2
Internship /placements (if applicable)	

List of equipment to be purchased for this course? (if applicable)	

Title	**Architecture Landscape and Technology**
Level of study	BSC
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS
Estimated date of accreditation and accreditation body	2020
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	40
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Title	**Multifunctional Space Design**
Level of study	BSC
List of subjects and credits (ECTS or comparable credit system) for each of them	5ECTS
Estimated date of accreditation and accreditation body	2020
% of the modernised subjects compared to total subjects included in the course	2021
Number of students to be accepted in the first year/ second year	40
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions) Please fill in if you are applying for this type of project and define clear the activities to be held in your institution* (limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	

How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution (limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	Modernized and new courses at BSc and MSc Level, new educational environment established (Literature, equipment and software's purchased), online platform, Internship program at partner HEIs.
How will the impact of these results be measured in your HEI?	Number of enrolled students in new program. Survey that will measure student and staff satisfaction. Also, student academic performance will be followed, and it is expected to be higher.
What financial means and human and other resources will be provided to sustain these results after the project ends?	Valuable physical and human resources set up by project will remain to function after the project implementation. On line platform, established network of industry partners, trained academicians, graduated students, will perform just as driving force towards long-term project goals. After the project completion, content will be integral part of teaching process of newly designed courses and will be frequently updated. New educational environment will become integral part of teaching process and each partner HEIs will continue to maintain it.

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
KHARYTONCHYK Sergei V.	KHARYTONCHYK Sergei V. Associate Professor, Doctor of Science (Engineering) is Rector of Belarusian National Technical University (BNTU). KHARYTONCHYK Sergei V is a well-known specialist in the field of technologies on computer design of mobile equipment. In 1999 he defended PhD dissertation and in 2012 he successfully presented doctoral thesis. He has published more than 100 scientific papers including a monograph and more than 20 patents. Results of his research work have received a practical approval at prestigious and reputed international automotive forums (USA, Canada, Spain, Poland, Russia, Japan, Germany, Hungary, and Netherlands). He was awarded with a special Diploma for the Best research report which was made at International Congress FISITA-2010 in Budapest (Hungary). He is participating in the activity of the FISITA (International Federation

	of Automotive Engineering Societies) Educational Committee. He has taken an active part in preparation of national team for competitions of professional skills which were held in Kazan (Russia) and San-Paulo (Brazil). For several years, he worked as Dean of Mechanical Engineering Faculty. He has extensive experinec in preparation and implementation of all University's international projects. Recent pertinent publications: - Vysotski, M., Kharytonchyk, S., Kochetov, S., "Fundamentals of modular highway trucks," Minsk, Belarus. Navuka, 2011, (in Russian) - Multibody simulation of curvelinear dynamics while engineering superlong highway multilink trucks / M. Vysotski, A. Kalesnikovich, S. Kharytonchyk, S. Kochetov, S. Susha // FISITA 2010 Paper. – 2010. – F2010B012. – 10 p. - Principles of constructing the system of automatic control of the movement of a vehicle /B. Belousov, S. Kharytonchyk, A. Ostretsov, A, Shmelev // Avtomobilnaya Promyshlennost, 2017, #6, p. 15-28 (in Russian)
SARDAROV Armen S.	Prof. SARDAROV Armen S. is Dean of Architecture Faculty at the Belarussian National Technical University (since 2015) and Professor of Urbanism. In 1974 he was awarded his Doctor of Sc. title. For the period of 1974 – 2005 he was working at road-managing and road design organization in Belarus as a principal architect, chief of design bureau, vice-director, chief architect. He and his students actively participate in various international exhibitions and architecture biennales (Romualdo del Bianco Foundation – Italy). His Faculty is regularly involved in the activity of International Association for Exchange of Students for Technical Experience (IAESTE). Owing to this Association Architecture Faculty has accumulated sufficient experience in organizing mobility of its and international students. He is author of 10 books and more than 150 papers. His main area of research is urbanism. He actively participates in international conferences, exhibitions and symposia. For several years, he was a BNTU Local Coordinator for implementation of ERASMUS-MUNDUS project – TEMPO (Trans-European Mobility Project on Education for Sustainable Development). TEMPO project involved such European Universities as Polytechnic University of Milan (Italy), University of Pavia (Italy), Polytechnic University of Turin (Italy), Lisbon Technical University (Portugal), Polytechnic University of Tomar (Portugal), University of Fernando Pessoa (Portugal), University of Alicante (Spain), University of Cordoba (Spain), University of A Corunna (Spain). Recent pertinent publications: - Sardarov A.S. – Challenge of Time and Reality: Sketches of Architectural Memorials // A.S. Sardarov // Architecture and Construction of Belarus. 2016. – No.2 – pp.42-45. - Sardarov A.S. – Architectural School Today / A.S. Sardarov// Architecture and Construction of Belarus. 2016. – No.1 – pp.8-13. - Sardarov A.S. – Philosophy of Chinese Architecture/A.S.Sardarov// Architecture and Construction of Belarus. 2015. – No.4 – pp.12-15. - Sardarov A.S. – Architectural Aesthetics of Material / A.S. Sardarov// Architecture and Construction of Belarus. 2014. – No.6 – pp.30-33. - Sardarov A.S. - Indoor Scene and Individuality in Architecture / A.S. Sardarov, T.V. Basharimova// Architecture: Collection of Research Papers. – Minsk: BNTU [Belarusian National Technical University], 2017. – Issue 10. – pp.41-45
KOLOSOVSKAYA Anatasiya N.	KOLOSOVSKAYA Anatasiya N. PhD (Architecture) is an Associate Professor and since 2010 she is Deputy Dean of Architecture Faculty. She has been working at "Theory and History of Architecture" department, Architecture Faculty since 2001. In 2001 she worked as an assistant of the department. In 2005 she was promoted to Senior

	Lecturer. She has been working as Associate Professor since 2007. In 2005 she defended PhD dissertation on the theme "Architectural and spatial structure of order monasteries in Belarus of the XVII-XVIII centuries. In 2009 she received her academic title of Associate Professor. Main directions of her research investigations are history of Belarus architecture, preservation of national historical and cultural heritage. She has published 174 papers on the above-mentioned themes in national and foreign (Russia, Poland) scientific journals and collected books, proceedings of scientific conferences, workshops, seminars, encyclopedias and periodicals. She is giving a course of lectures on the specialty "Architecture" and "Architecture Design" and practical classes on architecture design. She is taking an active participation in international programs and projects directed on improvement of relations with CIS and European universities. In November-December 2014 she had a probation at Czestochowa University of Technology (Poland). Recent pertinent publications: - Kolosovskaya A.N. – Urban Development Tendencies in Formation of Baroque Style in Grand Duchy of Lithuania / A.N. Kolosovskaya // Architecture: Collection of Research Papers. – Minsk: BNTU [Belarusian National Technical University], 2017. – Issue 10. – pp.13-18. - Kolosovskaya A.N. – Architectural Structures of Religious and Chivalric Orders / A.N. Kolosovskaya // Bulletin of Brest State Technical University. Series: Construction and Architecture. – 2015. – No.1. – pp.3-7. - Kolosovskaya A.N. – Formation of First Baroque-Style Objects in Architecture of Grand Duchy of Lithuania / A.N. Kolosovskaya // Architecture: Collection of Research Papers. – Minsk: BNTU [Belarusian National Technical University], 2016. – Issue 9. – pp.35-40. - Kolosovskaya A.N. – Architecture of Catholic Monasteries in Belarus during the Second Half of the 19th Century / A.N. KOlosovskaya // Bulletin of Polotsk State University. Series: F. Applied Sciences. Construction. – 2014. – No.8. – pp.9-14. - Kolosovskaya A.N. – - Architecture of Catholic Churches and Jesuit Collegium in Minsk, Polotsk and Grodno / A.N. Kolosovskaya, N.Yu. Yaroshevich, Architecture and Construction Sciences. – 2014. – Nos.1-2. – pp.27-30.
SYSOEVA Vera A.	SYSOEVA Vera A. PhD (Architecture) is Associate Professor. She has been working at "Urban Planning" department, Architecture Faculty since 2001. She is managing course and diploma designing on urban planning themes. She is giving a course of lectures in architecture theory. She is responsible for execution of research activity on Master Degree in Architecture. In 2002 she defended PhD dissertation on the theme "Peculiar features in formation of urban areas in the zones of underground influence (Minsk taken as an example)" and she was awarded her PhD in Architecture. In 2012 she received her academic title of Associate Professor. She is actively participating in scientific-research activity of the department, making reports at national and international scientific conferences, seminars, workshops, publishing papers in scientific collected books and journals. She has more than 40 scientific and methodological publications including a training textbook "Theoretical Fundamentals of Architecture". Being a local tutor, she is monitoring participation of architecture students in practical seminars and forums. She is an expert of International research program "New Urban Topologies". Recent pertinent publications: - Sysoyeva V.A. – Modern Aspects in Formation of Mixed Housing Zones and Prospects of Their Development in Minsk / V. A. Sysoyeva // Architecture: Collection of Research Papers. – Minsk: BNTU [Belarusian National Technical University], 2016. – Issue 9. – pp.166-172.

	- Sysoyeva V.A. – Urban Development Means for Realization of Density Indices of Dwelling Areas in Minsk / V. A. Sysoyeva // Architecture: Collection of Research Papers. – Minsk: BNTU [Belarusian National Technical University], 2015. – Issue 8. – pp.62-68. - Sysoyeva V.A. – Method of Eventual Designing / V. A. Sysoyeva // Architecture: Collection of Research Papers. – Minsk: BNTU [Belarusian National Technical University], 2014. – Issue 7. – pp.158-163. - Sysoyeva V.A. – Pre-Requisites of Structural Integration of Functions in Belarusian Cities / V. A. Sysoyeva // Architecture: Collection of Research Papers. – Minsk: BNTU [Belarusian National Technical University], 2013. – Issue 6. – pp.175-180. - Sysoyeva, V. A. Fixing up impediments the way to sustainable Minsk / V. A. Sysoyeva // Architecture: Collection of Research Papers. – Minsk: BNTU [Belarusian National Technical University], 2017. – Issue 10. – pp.126-135.
LEONOVICH S.N.	LEONOVICH Sergei N. Doctor of Technical Sciences, Professor is performing duties of Dean at Civil Engineering Faculty, Belarusian National Technical University. His primary specialization is “Civil Engineering” but his research activity concerns other specializations as well: “Fracture Mechanics of Concrete”, “Durability of Concrete Structures”,“Service Life Prediction of Structural Concrete”. He is well-known lecturer and researcher. He is constantly invited by our University-partners (Izhevsk State Technical University – Russia; Vienna University of Technology – Austria) to deliver a course of lectures and execute joint scientific and research works. He regularly participates in International Conferences and presents his reports at these events. He has international reputation among specialists and he is included in many International and National Committees: RILEM – Technical Committee, Paris, France – Member of the Committee since 2002; Russian Academy of Architecture and Construction, Member of Technical Committee since 2006; Belarusian Academy of Architecture, Member of Technical Committee since 1999; Belarusian Engineering Academy, Member of Technical Committee since 2001. He has more than 150 publications in refereed journals and conference proceedings. He has obtained 25 patents for his inventions. Recent pertinent publications: - Chernyakevich O.Yu.; Leonovich S.N.: Calculation of concrete composition of the reinforced concrete structures, exploited in the conditions of the class XC1 depending on protective layer thickness (in Russian), Science and technology, T.15, No. 6, 460-468 p., 2016. - Snezhkov D.Yu.; Leonovich S.N.: Multiwave ultrasonic monitoring of concrete (in Russian), Bulletin of the Volga Region State Technological University (VRSTU). Series "Materials. Structures. Technologies". No. 1, 13-21 p., 2017. - Khroustalev B.M.; Leonovich S.N.; Yakovlev G.I.; Polianskich I.S.; Lahayne O.: Structural Modification of New Formations in Cement Matrix Using Carbon Nanotube Dispersions and National (English), Science and technology, Volume 16, No. 2, 93-103p., 2017. - Leonovich S.N.; Peredkov I.I.: Advanced system of cross reinforcing of monolithic reinforced concrete plates of overlapping (in Russian), Bulletin of the Volga region state technological university, Series "Materials. Structures. Technologies" No. 2, 73-86 p., 2017. - Leonovich S.N.; Poleyko N.L.: Technology of waterproofing and anticorrosive protection of reinforced concrete structures with use of structures of the getting action (in Russian), "New Technologies in Construction", issue 32. Kiev, 18-26p., 2017.
GORBASH Vitaly G.	GORBASH Vitaly G. is Senior Specialist of Centre for International Programs, Rankings and Information Systems (CIPRIS). His duty is to communicate and organize partnership relations with international higher education institutions and organizations.

	He is Executive Secretary of BNTU Associations in such international organizations as FISITA (International Federation of Automotive Engineering Societies) and IWA (International Water Association). He participates in preparation of BNTU applications for international programs and projects. He has accumulated sufficient experience in implementation of international projects. He participated in 3 international TEMPUS projects as Project Secretary. Nowadays he is Project Secretary of 6 ERASMUS-MUNDUS projects (EWENT, ACTIVE, IANUS, IANUS II, TEMPO and ELECTRA). He regularly participates in the workshops organized by European Commission.

Partner number		**P11**
Organisation name & acronym	**Brest State Technical University - BrSTU**	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

Brest State Technical University is one of the largest educational and scientific centers in the western part of Belarus, carrying out specialists' training for the national economy. Brest State Technical University undertakes research into important areas of construction, architecture, electronics, mechanical engineering, economy and ecology and offers more than thirty-degree courses. There are 8545 students (4272 full-time and 4273 part-time students) studying at 8 faculties comprised of 33 departments: Civil Engineering, Mechanical Engineering and Electronics, Electronic Information Systems, Water Supply Systems and Soil Conservation, Economics, Innovation, Management and Finance, Extra-Mural Studies, Preparatory and the Institute of Further Education and Retraining. The University offers 24 undergraduate courses, 18 graduate courses and 14 postgraduate ones.

The scientific potential of the University includes 17 professors, 14 doctors of science, 125 associate professors and 157 candidates (Ph.D.) and experienced academic teachers. The total number of academic staff is 529. At present the University is involved in more than 100 international bilateral agreements with higher educational establishments in EU countries, Russia, Ukraine, Kazakhstan and actively participates in international projects.

The University is a member of two international organizations:
-the Association of European Civil Engineering Faculties with the participation of civil engineering faculties from non-European countries, AECEF,
- the Baltic Sea Academy, Hamburg-based organisation that unites European universities and academies, with the aim to intensify the University's international cooperation.

The University has taken part in 14 projects under TEMPUS, Erasmus Mundus, Erasmus Plus and the Baltic Sea Region programs.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	130
Number of students	6824
Number of Bachelor degrees offered	29
Number of Master degrees offered	11
Number of PhD degrees offered	13
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	Yes -PRINTeL - Change in Classroom: Promoting Innovative Teaching & Learning to Enhance Student Learning Experience in Eastern Partnership Countries 585760-EPP-1-2017-1-AM-EPPKA2-CBHE-JP -BELL - Enhancement of Lifelong Learning in Belarus 586278-EPP-1-2017-1-LV-EPPKA2-CBHE-JP

	-InnoCENS - Enhancing Innovation Competences and ENtrepreneurial Skills in engineering education 573965-EPP-1-2016-1-SE-EPPKA2-CBHE-JP - LNSS - Library Network Support Services: Modernizing libraries in Armenia, Moldova and Belarus through library staff development and reforming library services 561633-EPP-1-2015-1-AM-EPPKA2-CBHE-JP

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

In connection with the implementation of the European standards for the design of building structures in Belarus, the basic programs and courses taught are being processed and adapted to new structures. And for the specialty "structural design of high-rise and unique buildings", a program 4+2 is being developed and for the other specialties - 4+1.

Brest State Technical University, Belarus will be co-leader on WP1 - Current programmes in EU and partner HEIs - State of the Art together with leader - University of Maribor (Faculty of Civil Engineering, Transportation Engineering and Architecture) - UM (FGPA), Slovenia, and will be working on other activities set up by project.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI. I **CONFIRM**	Choose an item.

For new courses

What new courses will the project implement in your HEI?	1. BIM Technology
For each course please fill the following nested table:	

Title	**BIM Technology**
Level of study	Bachelor, Master
List of subjects and credits (ECTS or comparable credit system) for each of them	Consideration of an innovative approach in architectural and construction design consisting in creating a computer model of the designed building. BIM technology appliance in the context of the standards (eurocodes) operating in the Republic of Belarus (3 ECTS)
Estimated date of accreditation and accreditation body	2020, Ministry of Education of the Republic of Belarus
Estimated starting date of the new programme	2021
Number of students to be accepted in the first year/ second year	70
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	PC, interactive board, textbooks and journals

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	1. Reinforced concrete and masonry structures 2. Timber and plastic structures 3. Construction material science 4. Architecture

For each course please fill the following nested table:

Title	**Reinforced concrete and masonry structures**
Level of study	Bachelor, Master
List of subjects and credits (ECTS or comparable credit system) for each of them	The use of modern reinforced concrete and stone structures in the design and construction of multifunctional multi-storey buildings. Features of Eurocodes usage, taking into account European experience (9 ECTS)
Estimated date of accreditation and accreditation body	2020, Ministry of Education of the Republic of Belarus
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	70
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	PC, interactive board, textbooks and journals

Title	**Timber and plastic structures**
Level of study	Bachelor, Master
List of subjects and credits (ECTS or comparable credit system) for each of them	The use of wood as an environmental friendly building material. Upgrade of the laboratory practicum in order to adapt it to the regional requirements. The study of modern reinforced composite materials' features (5 ECTS)
Estimated date of accreditation and accreditation body	2020, Ministry of Education of the Republic of Belarus
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	70
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	PC, interactive board, textbooks and journals

Title	**Construction material science**
Level of study	Bachelor, Master

List of subjects and credits (ECTS or comparable credit system) for each of them	Changing the paradigm of used environmental friendly construction materials. The inclusion of a module dedicated to modern finishing materials, taking into account the conditions of their future operation. Water-based and solvent-free materials (9 ECTS)
Estimated date of accreditation and accreditation body	2020, Ministry of Education of the Republic of Belarus
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	70
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	PC, interactive board, textbooks and journals

Title	
Level of study	Bachelor, Master
List of subjects and credits (ECTS or comparable credit system) for each of them	Use of European experience in the field of urban planning. “Green city” concept. Logistics schemes in the organization of transport flows of the modern city (8 ECTS)
Estimated date of accreditation and accreditation body	2020, Ministry of Education of the Republic of Belarus
% of the modernised subjects compared to total subjects included in the course	20%
Number of students to be accepted in the first year/ second year	70
Number of teaching staff to be trained	2
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	PC, interactive board, textbooks and journals, software

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions) Please fill in if you are applying for this type of project and define clear the activities to be held in your institution* (limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	

Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	During the project implementation purchase of multimedia equipment for students' e-learning, textbooks and journals is expected. Thanks to international workshops and trainings the number of professors possessing modern educational technologies will be increased.
How will the impact of these results be measured in your HEI?	Questionnaires on educational process satisfactory will be held among both students and academic staff. Academic performance of students of Civil Engineering faculty is expected to be higher
What financial means and human and other resources will be provided to sustain these results after the project ends?	Well trained lecturers continue working at the university as well as equipment and website. Current expenses will be covered by the university

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Shalabyta N.N.	Shalabyta Nikalai is Vice-rector for scientific work, Candidate of Technical Sciences, associate professor, author of more than 80 scientific papers and 20 teaching developments, co-author of 22 patents, participant of various national and international conferences. In 1995 Shalabyta Nikalai graduated with honours from the Brest State Technical University on specialty "Industrial and Civil Engineering" and obtained diploma of engineer. He obtained a degree of candidate of technical sciences upon a thesis defense on "Stress-strain state of the node from hollow ball with new metallic structure" in the Council for the Protection of theses K.02.09.01 of Educational Institution "Brest State Technical University" on February 26, 2009. Associate Professor from 2010. He works at BrSTU since 1995: assistant (1995-2000), senior lecturer (2000-2009), associate professor (2009). Since 2009, Head of the Department of Building Structures.

	Mr. Shalabyta carries out Government Programs of Fundamental Research. He is Vice-Chair of the section "Construction" of Scientific and Technical Council of the Brest State Technical University. Recent pertinent publications: - N.N. Shalabyta, T.P. Shalabyta. Stress-strain state and the method of calculation of the strength of the connection node of rod elements of metal structures "BrSTU"// Budownictwo z optymalizowanym potencjalę energetycznym: praca zbiorova pod redakcja Tadeusza Bobki i Jaroslava Rajczyka, Czestochowa, 2010 / Politechnika Czestochowska. – Czestochowa, 2010. – p. 279–290. - N.N. Shalabyta, V.I. Dragan. A.B. Shurin. Stress-strain state of the nodal element of system structure "BrSTU // Industrial and civil engineering. – 2017. № 6. Moscow. – p. 39–45. - N.N. Shalabyta, M.Ch. Polonski. Features of the construction of an analytical model of the numerical study of the forces distribution in reinforced concrete beams with hybrid reinforcement. // Theory and practice of research and design in construction using computer-aided design: collection of articles of the International Scientific and Technical Conference. – Brest: BrSTU Publishing House, 2017. p.196-205.
Panchanka T.A.	Tatsiana Panhanka is an Associate Professor of Architecture Department, author of 38 scientific papers, the head of the team of the concept of development of the water-green diameter and the landscape-town planning organization of the embankment of Brest. In 1997 graduated from the Belarusian State Polytechnic Academy, specialty "Architecture". In 1998-2005 she studied at the National Technical University at graduate school with a separation from production. Since 1997 works at Brest State Technical University. In 2013 she defended her doctoral thesis "Architectural and spatial organization of the Orthodox centers in Belarus." In 2014 obtained Associate Professor rank. In the period from 2013 till 2017 she was the head of scientific research and the executor of the reporting documentation on the genesis of the town-planning structure in Brest. Main publications: - Hermeneutics of architectural and spatial structure of Belarusian monasteries T.A. Panhanka // Bulletin of the Brest State Technical University. – 2008. – № 1: Civil Engineering and architecture. – p. 7– 11. - Panhanka T.A. Trends and prospects for the development of Orthodox spiritual centers of Belarus / T.A. Panhanka // The temple as a synthesis of the arts: collection of scientific papers / Union of Architects of Poland – Kielce, 2014. – p. 62-67. - Panhanka T.A. Belarusian Orthodox centers in urban environment: characteristics, trends and prospects of formation / PanhankaT.A. // Architecture: collection of scientific papers/ Minsk State Technical University –Minsk: BNTU, 2016. Issue. 9. – P. 62-67. - Panhanka T.A. The architecture of the foreign monasteries of the Kyiv diocese on the Belarusian lands in the period of the 17th-18th centuries. // Architektura Kultur Lokalnych Pogranicza. Sacrum-profanum-sacrum. Konwersje i rekonwersje architektury sakralnej: collection of scientific papers / Union of Architects of Poland – Belostok, 2017. – p. 62-67. - Panhanka T.A. The evolution of the understanding of architectural space / Panhanka T.A. // Bulletin of the Brest State Technical University. – 2016. – № 1(97): Civil Engineering and architecture – C. 3–6.
Tur V.V.	Viktor Tur is Full Professor and the Head of Concrete Technology and Building Materials Department (from 2008 – present) and Scientific Laboratory of Self Stressed Structures. Viktor Tur got Diploma of Engineer in Structural Engineering, 1989-PhD degree. He was a visit Professor at Lublin Politechnica, Poland (1990-

	1992). In 1999 he is appointed as Doctor of Technical Science in Structural Mechanics at the Central Research Institute for Building Structures. (Moscow, former USSR). He was a scientist then a senior Scientist at the Research Laboratory of Self-Stressed Structures of BrSTU. 1982-1991, 1992-2002 - Head of Concrete Technology and Building Materials Department at BrSTU and Vice-rector for scientific work (2002-2008). From 1997 to 1998 he took part in TEMPUS-Tacis project (Development of Technology Transfer Center at BrSTU), was a visit Professor at Nottingham Trent University (UK). Moreover, from 2008 to 2012 he was representative in ISO TC 98 SC3WG Basis for Design and Structures, Loads and other actions, took part in elaboration of Standards of International Standardization Organization (ISO), National Standardization Committee. He was a member of Chairman of some working groups for elaboration of Standards (TC 8 Concrete and Concrete Structures). Also, in 2010 he was Chairman of a working group (TC 8) "Application of Euro codes in Belarus" and took part in elaboration of National Annex top E# 1990, E#1991, E31992. He is the author of more than 200 scientific papers and reports published in national and international journals. He is the author and co-author of seven books (in Russian and Polish language) on the problem of expansive concrete and self-stressed structure, post-tensioned structures, reliability analysis and probabilistic methods of design, modeling of hydration process of cementous materials and other. For many years, he has been a member of Scientific Committee of national and international conferences, symposia, seminars and has taken part in their work. V.Tur was appointed as Laureate of Medal prize of Prime-Minister of Belarus in the field of Architecture and Construction. Recent pertinent publications: - M. Krol, W.Tur " Expansive Concrete"- Warszaw, 1999 "Arkady"- 240 s. (in Polish) - V.Tur, "Shear Design of Reinforced Concrete Elements"-Brest, BSTU-400s. (in Russian) - V.Tur, T. Petzold "Reinforced Concrete Design"- Brest, BSTU-450s. (in Russian) - Tur V, valuev V, Derechennik S. Ground Snow loads in Belarusian Code // Environmental Effects of buildings, Structures, Materials and People/ Edited by A. Flaga, Lub. Tech. Uni., 2007-p131-139 - Tur V., Obraztsov O. The Combined prestressing of concrete beams with unbonded tendons/ Problemy hankowo- badawcze budownictwa. Tom II. Konstrukcij budowalne I inzynierskie/ Wyd.Pol. Bialostok- p.165-179 - Markouski D., Tur V., Reliability level of structures designed according to the design Codes of the Republic of Belarus// Application of statistic and probability in Civil Engineering – Faber, Kohler//2011, Taylor and Francis. Group, London, ISB 978- p.179-183 - Krol M., Halicka A., Tur W. Konstrukcje zepolone z udzialem betonu zwyklego I expansyionego-Lublin, Wyd. Ucheln, 1999-367s. - Tur V., Rabenka N. Test method for determination of transmission length in presstressed concrete elements in situation of instant release// European and National Dimension in Research, 2-12-p.41-45.
Vitali Khaletski	Vitali Khaletski is the Head of International Affairs Office, Associated Professor of the Department of Environmental Engineering and Chemistry, Deputy Secretary of Admission Board of Brest State Technical University. Experience in curriculum development for engineering specialties. Local coordinator and team member of Erasmus + and Tempus Projects in BrSTU. Published more than 120 articles in the field of educational sciences. Recent pertinent publications:

	- Engineering Education in Republic of Belarus: Main Trends of Admission Campaign / P. Poita, U. Navaseltsau, V. Khaletski / Švietimas politika vadyba kokybė (Education policy, management and quality). – 2016. – Vol. 8. – No. 1. – C. 19–28. - Content Lines in Design of Chemical Education for Would-Be Engineers / V. Khaletski // State-of-the-Art and Future Perspectives: Proceedings of the 1st International Baltic Symposium on Science and Technology Education (BalticSTE 2015), Šiauliai, 15-18 June, 2015 / Šiauliai University; edited by V. Lamanauskas, V. Šlekienė and L. Ragulienė. – Šiauliai: The Scientia Socialis Press, 2015. – P. 59-61.

Partner number		**P12**
Organisation name & acronym	**CUBE DESIGN d.o.o. Sarajevo - CD**	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

Cube Design is an interdisciplnarly, reserch-based studio of architecture, based in Sarajevo, Bosnia and Herzegovina. Studio was formed by young architects and designers and their mission is to provide thoughtful design that fuses art, science and practicality in a manner that is responsive to its environment and that nurturing to the people experiencing it. It is founded on belief that architecture has power to transform lives and enhance communities throught application of sustainable design models.

The studio works as practice of six architects, designers and thinkers, collaborating closely with clients, expert consultants and specialist from range of fields and realizes innovative projects at multiple scales. Interdisciplinary team include some of brightest minds in architecture, interior and urban design contribute to leadership skills in respective areas. Additionally, company catalyse innovative design technologies that create smarter and more competitive environments.

Cube Design architectural studio is profile of company that continuously offer opportunities for students (internship program) and young architects and designers to work with the team and gain experience in diverse types of projects such as residential architecture, office buildings, interior design and wide range of branding and visual identity design. Moreover, research and educational component of company resulted in collaborative work with HEIs in Bosnia and Herzegovina on different activities. Therefore, members of company besides being active in professional practice are equally notable members of educational process of HEIs as visiting experts from practice, invited experts for curricula evaluation, invited jury members etc.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

With its architectural expertise and professional pratice, the role of the Cube Design studio is to be actively involved in WP1 - Current programmes in EU and partner HEIs - State of the Art, with the participation in analysis on labour market needs at partner countries, and creation of learning outcomes.

As a research and educational oriented company that already offer enormous possibilities for future professional development of students and young architect, and that has numerous activities with HEIs the role of Cube Design will be of importance in the WP4 - University Enterprise Collaboration. It will give valuable contribution in creation and fostering mutually beneficial network between industry and universities, will suggest new concepts of joint projects and refresh perspectives on diverse types of internship programs. Moreover, it will help in conceptual creation of new courses on architectural BSc and MSc programs. Cube Design will give contribution in external quality control, through the network of associated experts. It will take significant role in all dissemination activities of project results through participation in thematic conferences, workshops and seminars.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	

Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Edin Mešanović	Edin Mešanović is architect and general director & founder of the company Cube Design. He graduated in Faculty of Architecture, University of Sarajevo and has been working as an architect and designer for 10 years. He has extensive experience as project engineer, team leader, supervisor, and consultant engineer. Through professional practice he realized many valuable architectural objects. His practical work is reflection of his in-depth understanding of context in which he deals, cultural values and sustainable design principles. As director of Cube Design he is articulate and purposeful communicator with excellent communication, coordination, and time management skills. He possesses complete knowledge of state and local building codes; sound knowledge of current construction practices and computer technology; ability to work according to the project demands; ability to plan, design, and construct sage and functional structures; strong analytical skills, attention to detail and commercial awareness. His vision to develop sustainable model of architectural company that at the same time interfere with Universities, labor market and society is widely recognized and respected. He is actively involved in the teaching process of HEIs being through different activities such as visiting expert from practice, invited jury member or incited member of committed for curricula evaluation. Research component employed in company moto gives him outstanding leading position in environment composed of enthusiastic professionals willing to design path towards future through synergy between HEIs and industry.
Edin Spahić	Edin Spahić is architect and manager ath the company Cube Design with a broad and deep expert knowledge of every aspect of building construction planning and execution. Adept at handling multiple projects simultaneously and bringing them to completion ahead of deadline and under budget. He graduated at the Faculty of Architecture, University of Sarajevo. Working as an architect and designer for 7 years - project manager, supervisor and consultant engineer. His core qualifications are gained through work in practice in local and international companies where he meets diverse cultural contexts. He poses outstanding experience in engineering and architectural industries; excellent knowledge of building construction process; materials and sales; high proficiency with 2D and 3D CAD tools; strong grasp of building construction administration codes and design specifications; superior ability to visually communicate ideas to clients; exceptional problem-solving and communication skills.

Partner number		**P13**
Organisation name & acronym	**“KF Gradnja” doo, Bihać**	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

KF Gradnja doo is a limited company for trade, civil engineering and services registered in 2014. KF Gradnja doo, inherited the KF civil handicraft, established in 2007. The company is licensed for civil engineering in high and low-rise construction. KF Gradnja doo is team of experienced professionals with the background in the civil engineering, architecture and construction industry. The success of the company and long-term experience has been based on quality standards along with competitive prices and full-satisfaction of customers. The company continuously strives towards improvement of products and processes, in order to keep the obtained success and trust of previous and future customers. It strives to fulfil environmental protection criteria, commercial awareness, excellent communication as well as the protection and safety.
The vision of the company is to create positive business environment that will foster local values through employment of a locally based skilled and experienced workforce, as well are opened to employ and work with international professionals and to give opportunity to anyone who shows positive attitude and work habits. Additionally, company is oriented towards implementing a training and development programme in liaison with local and international educational and training providers that will potentially enrich quality of company work and provide it stable ground for future innovative research in construction sector. Mission of company, along with the obtained trust and reputation, is development of our business, offering high quality services, satisfaction of our customers and sustainability with competitive prices.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

As licensed company for civil engineering in high and low-rise construction, the role of the "KF Gradnja" doo Bihać is to be actively involved in WP1 - Current programmes in EU and partner HEIs - State of the Art, with the participation in analysis on labour market needs at partner countries and creation of learning outcomes. Also, in the WP4 - University Enterprise Collaboration it will give valuable contribution in creation of network between industry and universities, joint projects and internship programs. "KF Gradnja" will give contribution in external quality control, through the network of associated experts. It will take significant role in all dissemination activities of project results through participation in thematic conferences, workshops and seminars.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	

Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions) Please fill in if you are applying for this type of project and define clear the activities to be held in your institution* (limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	

Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution (limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Imširović Mirhet	Imširović Mirhet is civil technician in high- rise construction. His work experience starts back in 1988. During his 30 years of work experience he was appointed as construction manager. Since 2014, Mirhet is engaged in KF Gradnja and he showed high knowledge in civil engineering, high – rise construction, preservation, reconstruction and adaptation of numerous residential, commercial, industry buildings. He is talented professional able to collaborate with large teams to implement successful problem-solving strategies. He can ensure that all quality matters relating to project control, design, procurement, implementation and asset handover and commissioning are identified. He is as well part of the team who manage, maintain and improve the Quality Management System on construction sites.
Ilda Kovačević	Ilda Kovačević, an architect, graduated from International Burch University, at the faculty of Engineering and Natural Sciences, Department of Architecture. In 2018, she obtained her master degree in Architecture, with the topic High – rise buildings and opportunities for construction in high – strength concrete (HSC) in Bosnia and Herzegovina. During her studies she was volunteering in civil engineering companies, “Grading” and “KF Gradnja” and architectural studios “Arhaus” and “Gaus”. After graduation she became employee in KF Gradnja doo, Bihać. In company her responsibility lays

	in architectural design, project development and project management. Her interest and focuses are currently in construction technologies, project managing and architectural design. Published papers in local and international conferences: - Kovačević, I., Džidić, S.(2018). Possibilities for Production of High-Strength Concrete (HSC) in Bosnia and Herzegovina, 15th Congress of Association of Structural Engineers of Serbia, Zlatibor, Serbia, Proceedings, ISBN 978-86-6022-070-9, pg. 549-562 - Kovačević, I., Džidić, S. (2018). Modern Structural Concepts for High – Rise Buildings,13th Scientific Conference with International Participation "Contemporary Theory and Practice in Construction, Banja Luka, Bosnia and Herzegovina, Book of Proceedings, ISSN 2566-4484, pg. 549-561 - Kovačević, I., Džidić, S.(2018). Lateral and Accidental Actions – Risk of Progressive Collapse in High-Rise Buildings, 6th International Conference "Contemporary Achievements in Civil Engineering", Subotica, Serbia, Conference Proceedings, ISBN 978-86-80297-73-6 - Kovačević, I., Džidić, S.(2018). HIGH-STRENGTH CONCRETE (HSC) -MATERIAL FOR HIGH-RISE BUILDINGS, Conference: 12th Scientific Research Symposium with International Participation "Metallic and Nonmetallic Materials: production-properties-application (MNM), Vlašic, Bosnia and Herzegovina, Volume: Year 12, No. 12, ISSN 2566-4344, pg. 214-223 Authorship in books: - Džidić, S., Kovačević, I., Kozlica, S. (2018). "Concrete Studies", International BURCH University Sarajevo, ISBN 978-9958-834-60-8, Sarajevo, Bosnia and Herzegovina - Kovačević I, Džidić S, 2018. "High-Rise Buildings -Structures and Materials", International BURCH University Sarajevo, ISBN 978-9958-834-58-5, Sarajevo, Bosnia and Herzegovina

Partner number		**P14**
Organisation name & acronym	**Chamber of Architects of Armenia - CARA**	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

The Armenian Union of Architects was founded in 1932 in Yerevan. The famous architects (Gevorg Kochar. M. Mazmanian, N. Buniatyan, Alexander Tamanyan, A. Aharonian, F. Hakobyan, B. Arazyan A. Margaryan, M. Mkrtchyan and other) have been members of the Union. Since September 13, 2017 the Armenian Union of Architects was renamed into the Chamber of Architects of Armenia (hereinafter Chamber). The main goal of the Chamber is to protect the professional interests of specialists. The members of the Chamber have a huge contribution to the construction of towns, villages and unique engineered systems in Armenia. Currently the Chamber has up to 700 members. It engages in the protection of the interests of architects from the dictates of developers, as well as is responsible for the activities of the architect. In addition, the Chamber organizes to periodically refresher courses for architects in such specialties as the history of world architecture, the history of Armenian architecture, the history of modern architecture, engineering structures, architectural typology, architectural principles, etc.

Within the "Capacity Building in Sustainability for Architectural Heritage (SAH)" Erasmus+ project the Chamber will take part actively in the development and testing of new interdisciplinary Model BA&MA curricula of architectural practical-oriented education for Architectural Heritage. The appropriate architects specialized in the field of Armenian Architectural Heritage restauration and protection will participate in the events and discussions aimed to the curricula forming.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project

Please describe also the role of your organisation in the project (limit 1000 characters).

CARA with its sustainable oriented vision towards education, extensive knowledge of labour market, innovative approaches that promote the efficiency of students' learning process will contribute greatly in the preparation and planning phase of this project. It will accept the role of medium between society, HEIs and Experts from practice seeking to present on best way vision of project and its beneficial role for sustainable development. CARA knowledge of labour market and future needs will support project activities from WP1 - Current programmes in EU and partner HEIs - State of the Art. Moreover, it will be involved in creation of learning outcomes.

Also, in the WP4 - University Enterprise Collaboration it will give valuable contribution in creation of network between industry and universities, joint projects and internship programs. CARA will also give contribution in external quality control, through the network of associated experts. It will take significant role in all dissemination activities of project results through participation in thematic conferences, workshops and seminars.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*

Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	
For each course please fill the following nested table:	

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
Sarhat Petrosyan	Holds M.S. in Architecture and Ph.D. in Urban Planning from National University of Architecture and Construction of Armenia. Founder of urbanlab a Yerevan based urban thaink-do-share lab, from its establishment till August 2018, Associate Professor at the Chair of Urban Planning of the National University of Architecture and Construction of Armenia (2004-2017), Founding Director of SP2 (previously Sarhat & Partners) research based design office (2006 - present), Curator of Armenian National Pavilion at the Venice Architecture Biennale (2016), Adjunct Lecturer at the Acopian Center for the Environment of the American University of Armenia (2017), Head of the Cadastre Committee of Armenia (2018-2019) International and Local Expert on Sustainable Urban Planning and Development (2017- present), collaborated with a number of institutions, among them: Heinrich Boell Foundation South Caucasus Office, World Bank Group, Doing Business Report Armenia (since 2015), Transparency International Anti-corruption Centre, Monitoring of Urban Development in Yerevan City and Promoting Public Participation in Environmental Decision-Making, etc. Recent Publications : - Utopia & Collapse - Rethinking Metsamor: The Armenian Atomic City, Co-editor: K. Roters, Park Books, 2018 - “The Transformation of Yerevan’s Urban Landscape After Independence”, Caucasus Analytical Digest, “Cities in the SouthCaucasus”, No. 87, 2016, Bremen and Centre for Security Studies, Zürich Research Centre for East European Studies, 2016 - “Armenian Cultural Territorial Systems First Experience”, Chapter in Cultural Territorial Systems, Landscape and Cultural Heritage as a Key to Sustainable and Local Development in Eastern Europe, Co-author: G. Badescu, Editors: F. Rotondo,F. Selicato, V. Marin, J. Lopez Galdeano, Springer, 2016, 299 pages, English, 2016 - “Contrivances on Araratian Street: An Ideology or An Urban Public Space”, Co-author: N. Topalian, Articles of Radical Space In Between Disciplines, International Interdisciplinary Conference; University of Novi Sad, Serbia, English, 2015
Seda Kostanyan	Architect, specialized in conservation of the historical monuments and archaeological site. Founder and President of Architects' Association of Armenian Historical Monuments, Yerevan. President of the UNESCO heritage preservation club in Armenia. Gagik Soghomonyan has DEA – Post Masters degree from Paris-Sorbonne IV University, Institute of History and Archeology, Post-graduate course, of Advanced

	Studies. Gagik Soghomonyan actively participated in scientific conferences especially During 1987-1993 UNESCO, Strasbourg, Moscow, Vilnus`Scientific Conferences devoted to Monuments' issues. He also has aworded to Architects' Union of Armenia- The Best Project of the Year: " Restoration of St. Mary's Church in Garni, 13th century." (1987) ArmProjectRestoration Institute . The Best Restoration of the Year "Restoration of St. Mary's. (Mashtots Hayrapet) Church in Garni, 13th century." (1989) Gagik Soghomonyan implemented any professional projects, such as. - 2019-Project for the 2019 US Ambassador's Fund for Cultural Preservation Grant «Conservation and Historical landscaping of the East group of monuments of Sanahin Monastery Complex», listed on the 1996 UNESCO World Heritage list - 2016-2017 Havuts Tar Monastery Complex, Survey buildings, Conservation and Preservation Project. - 2015-2016 Artashat, Capital of Ancient Armenia, Conservation and reabilitation Conceptual Project - 2013-2014 Ptghni Catedral VI-VII ss. Conservation and Preservation Project, Chief Architect - 2007-2008 Proposal and Program for the Urban Development of a District with educational, cultural and business center in Erevan, Armenia. - 1993-2006 "Hotel Bedford" Complete Renovation Project, Participation in Project of French Embassy in Armenia
Ashot Manasyan	Architect, Director of "ASHOT MANASYAN Architecture Workshop" LTD. Since 2003 he is Chief Architect of The Holy See of St. Etchmiadzin, Ashot Manasyan implemented many professional projects, such as: - 2016-2019 Design of the building office "Tonus -Les" In Yerevan - 2015-2019 Design of the building IT CENTRE In Yerevan - 2011-2015 Design of the vocational school for 225 pupils in Shushi, Republic of Artsakh - 2010 St. Targmanchats church (7th c.) in Aigeshat village - 2009 Reconstruction design of the building "Eremian Kshtser" the monastery st. Etchmiadzin - 2003-2008 Private houses design in different places of Armenia - 2001-2002 Embassy of Great Britain and Northern Ireland in Yerevan, design, construction and coordination - 2000-2001 Reconstruction design for a 16-apartment building,Nor-Spitak, - 2001 Private house design, CAL PADRONA AVINYO, Barcelona, - 1998-1999 Logistic facilities at the French Embassy in Yerevan - 1999 Reconstruction and enhancement of St. Khor-Virap monastery,1st stage - 1998-1999 Design of the 2nd building of HSBC Bank, Yerevan - 1997-1998 Reconstruction and repairs of the 3rd floor and attic in UN Headquarters in Yerevan - 1997-1998 Reconstruction design of Spitak Municipality - 1996 Reconstruction design for RA National Assembly building (awarded)

Partner number		**P15**
Organisation name & acronym	**State Enterprise "Institute of Housing-NIPTIS named after Ataev S.S."**	

F.3.1 - Aims and activities of the organisation
Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project (limit 2000 characters).

State Enterprise "Institute of Housing-NIPTIS named after Ataev S.S." is one of the research institutes within the structure of Ministry of Architecture and Construction of the Republic of Belarus. The Institute is considered a main executor of R&D, prototype and design, project-oriented and technological works pertaining to saving of energy in residential and public buildings. The Institute is performing works which presuppose saving of energy while operating buildings by applying of alternative energy sources, namely: heat pumps, solar collecting panels, photovoltaic arrays, heat exchange system, biotechnological units etc. The Institute is involved in implementation of new construction projects, reconstruction, modernization and capital repair of buildings.

"Institute of Housing-NIPTIS named after Ataev S.S." comprises 14 scientific-research, design and technological and information departments. The Institute staff includes 245 persons including 4 Doctors of Science, 14 Philosophy Doctors, 7 Academicians and Correspondent members of Belarusian and International Engineering Academies, 8 Laureates of State prizes of USSR and Belarusian Council of Ministers. Annual volume of scientific and research, design and technological works and information services is equal to 6,000,000 US dollars. The Institute is considered as a leading organization in formation and monitoring of Republican scientific and technical program "Construction Materials and Technologies", scientific research and development of new structural and technological systems of buildings and installations. The Institute is regularly a winner and a laureate of International and Republican competitions for the best scientific-research and designing organization on the CIS territory in the following nominations: "Best Enterprise of the Year", "New Technology of the Year", "Best Object of the Year", "Best Manager of the Year". The Institute has been entered in the Golden Book of Inter-Governmental Council on Cooperation in Construction Activity of CIS-countries.

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project
Please describe also the role of your organisation in the project (limit 1000 characters).

"Institute of Housing-NIPTIS named after Ataev S.S." within the scope of the project will be significant as it will deliver consulting services when modernizing and developing new BSc and MSc civil engineering courses at partner country institutions. Also, it will be actively involved in WP1 - Current programmes in EU and partner HEIs - State of the Art, with the participation in analysis on labour market needs at partner countries and creation of learning outcomes.

In accordance to their practical experience, expertise on sustainabilty and substantial practice of using new technologies in construction, NIPTIS will assist in conceptual definition of practical civil engeenering courses. Also, in the WP4 - University Enterprise Collaboration the institute will give valuable contribution in creation of network between industry and universities, joint projects and internship programs. It will also assist in external quality control, through the network of associated experts. It will take significant role in all dissemination activities of project results through the thematic conferences, workshops and seminars.

F.3.3 – Curriculum development project *(only for Partner Country institutions)*
Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

Provide information on (if applicable)	
List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	
F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)* *Please fill in if you are applying for this type of project and define clear the activities to be held in your institution* (limit 2000 characters)	
F.3.6 – Expected results and impact *(only for Partner Country institutions)*	
What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	
F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project *Please add lines as necessary.*	
Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
PILIPENKO Vladimir	Dr. Prof.Pilipenko Vladimir M. is Director of "Institute of Housing-NIPTIS named after Ataev S.S.". In 1967 he graduated from the Voronezh Construction Engineering Institute. He is a foreign member of the Russian Academy of Architecture and Construction Sciences, Academician of the Belarusian Engineering Academy, Correspondent member of International Engineering Academy. He is one of the research advisers of "Energy Efficient House" project and one of the research ideologists who promotes energy-efficient construction in the Republic of Belarus.

	He works as Professor at the Belarusian National Technical University (BNTU) (Department of Building and Structure Reconstruction). He is delivering lectures to the BNTU students. He has been awarded with numerous National and International Diplomas, medals. He has written more than 100 scientific papers. He is an owner of 26 patents. He is regularly participating in National and International conferences, workshops, seminars. He has accumulated sufficient experience to implement any international project in the field of architecture and civil engineering. Recent pertinent publications: - Khroustalev B.M., Pilipenko V.M., Nguyen Thuy Nga – To Problem of Housing Construction Development with Minimum Consumption of Power Resources. Journal "Energetika" [Power Engineering] No.5, 2014. - Osipov S.N., Pilipenko V.M. – About Some Peculiar Features in Energy Saving in Dwelling Houses during Heating Season. Journal "Energetika" [Power Engineering] No.1, 2017. - Pilipenko V.M. – Sustainable Development of Mass Residential Construction in Last Periods of Time as One of Efficient Directions in Housing Policy at Present Time. Journal "Architecture and Construction" No.1, 2016. - Pilipenko V.M., Zakharenko A.S. – Tendencies in Changing Consumers Quality in Industrial Housing Construction. Journal "Architecture and Construction" No.1, 2017. - Pilipenko V.M., Zakharenko A.S. – Tendencies in Changing Consumers Quality in Industrial Housing Construction. Part 2. Journal "Architecture and Construction" No.2, 2017. - Pilipenko V.M., Zakharenko A.S. – Tendencies in Changing Consumers Quality in Industrial Housing Construction. Part 3. Journal "Architecture and Construction" No.3, 2017. - Petsold T.M., Pilipenko V.M., Penyaz M. – Efficient Constructive System of Dwelling Site-Cast Concrete Buildings while Using Precast Reinforced Concrete Structures. Peculiar Features in Designing and Construction. Journal "Architecture and Construction" No.6, 2017.
Danilevsky Leonid N.	D.Sc. Danilevsky Leonid N. is first Deputy Director of "Institute of Housing-NIPTIS named after Ataev S.S.". He graduated from the Belarusian State University in 1970. His speciality is heat supply, ventilation, conditioning and lightning. He has earned title of Doctor of Science and Senior Research Scientist. He has been awarded with the prize of Belarusian Council of Ministers. He has a title of Academician of the Belarusian Engineering Academy. He is a holder of 18 patents and more than 20 inventor's certificates. 17 scientific developments of D.Sc. Danilevsky have been introduced into production. He has written a monograph "Principles of designing and engineering equipment for energy efficient residential buildings" (Minsk, 2011) and a textbook "Systems of forced air supply with thermal energy recuperation of taken-off air for residential buildings" (Minsk, 2015). He has more than 150 publications on the following subjects: energy efficient construction, measuring of thermo-technical characteristics for buildings, alternative energy sources.

Partner number		**P16**
Organisation name & acronym	**The Belarusian Union of Architects - BUA**	
F.3.1 - Aims and activities of the organisation *Please provide a short presentation of your organisation (key activities, affiliations, size of the organisation, etc.) relating to the area covered by the project* (limit 2000 characters).		

Only for Partner Country institutions, please provide information on:

Number of Memoranda of Cooperation/Understanding the HEI has signed with HEIs outside their own country?	
Number of students	
Number of Bachelor degrees offered	
Number of Master degrees offered	
Number of PhD degrees offered	
Have you participated in CBHE? If yes, list CBHE projects titles and reference numbers. Describe curricular/ courses developed/ modernised, if any (name of the subject area and courses titles)	

F.3.2 – Role of your organisation in the project

Please describe also the role of your organisation in the project (limit 1000 characters).

F.3.3 – Curriculum development project *(only for Partner Country institutions)*

Please fill in if you are applying for a curriculum development project

Please confirm that no similar curricula/ courses/modules were developed/modernised in Tempus IV projects in this HEI.	Choose an item.

For new courses

What new courses will the project implement in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
Estimated starting date of the new programme	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	

List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

For updated courses

Which existing courses will be updated in your HEI?	

For each course please fill the following nested table:

Title	
Level of study	
List of subjects and credits (ECTS or comparable credit system) for each of them	
Estimated date of accreditation and accreditation body	
% of the modernised subjects compared to total subjects included in the course	
Number of students to be accepted in the first year/ second year	
Number of teaching staff to be trained	
Internship /placements (if applicable)	
List of equipment to be purchased for this course? (if applicable)	

Please copy and paste nested tables as necessary

F.3.4 – Modernisation of governance, management and functioning of HEIs *(only for Partner Country institutions) Please fill in if you are applying for this type of project and define clear the activities to be held in your institution* (limit 2000 characters)

Provide information on (if applicable)

List the number of existing centres/networks in your HEI	
Is the centre to be created a new one or an update?	
If new, why is a new centre necessary? If updated, why is an updated centre necessary?	
Where will the centre be located in the institution?	
Will this infrastructure be made available to the centre after the project ends?	
How many people will be employed in the centre?	
Will the institution fund these posts after the project ends?	
How many administrative staff will be trained?	
Which procedures will be updated /introduced in the institution?	

F.3.5 – Strengthening of relations between HEIs and the wider economic and social environment *(only for Partner Country institutions)*
Please fill in if you are applying for this type of project and define clear the activities to be held in your institution
(limit 2000 characters)

F.3.6 – Expected results and impact *(only for Partner Country institutions)*

What are the expected tangible results from the project in your HEI?	
How will the impact of these results be measured in your HEI?	
What financial means and human and other resources will be provided to sustain these results after the project ends?	

F.3.7 - Operational capacity: Skills and expertise of key staff involved in the project
Please add lines as necessary.

Name of staff member	***Summary of relevant skills and experience, including where relevant a list of recent publications related to the domain of the project.***
KORBUT Alexandre	Prof.Korbut Alexandre has been Chairman of the Belarusian Union of Architects (BUA) since 2003. Previously he worked at such design institutes as "Belkolkhozproyekt", "Minskselstroyproyekt" (1987-1990 - Chief Architect). Since 1992 he has been Head of Personal Creativity Workshop. He was elected Vice-President of International Association of Unions of Architects (IAUA) for the period of 2015-2016. Nowadays Prof.Korbut A. is Honorary Member of American Institute of Architects (Chicago, USA, 2004), Professor of Moscow Branch of International Academy of Architecture (2005). He has been President of the CIS International Association of Unions of Architects (IAUA) since 2009. He is well-known architect due to the following works: Zhemchuzhny township in Baranovichi district, Chist township in Molodechno district, Belousovo township for Public Joint Stock Company "Gazprom" (Russia), Business-Centre "21st Century" (Minsk), Shopping Centre in the Nekrasova Street, Business Centre "Kravira City" and many other modern buildings.
Samoylik Yuri	He is Chairman of Minsk provincial organization of the Belarusian Union of Architects (BUA) and the same time he is member of the BUA Executive Committee and its Board. In 1979 he graduated from the Belarussian Polytechnical Institute (BPI) which is known now as the Belarusian National Technical University. His speciality is "Architecture". After graduation from the Institute he worked at various state design institutes. He was working as Chief Architect of Nesvizh-city for the period of 1982-1995. Since 1995 till the present moment he has been working as chief executive officer at several private design organizations located in Minsk. For the whole period of his activity more than 100 buildings and objects have been constructed in accordance with his architectural designs. These buildings and objects have been built in the Republic of Belarus, Russia, the Ukraine. He is well-known and highly-qualified architect in the following fields : town-planning, urbanism, architecture of residential, public and industrial buildings, monumental and art activity.

Please copy and paste tables as necessary

F.4 List of Associated Partners

(Where applicable)

Capacity-building projects can involve associated partners who contribute to the implementation of specific project tasks/activities or support the dissemination and sustainability of the project. Associated Partners cannot be responsible for core activities of the project (e.g. management, coordination, monitoring, leader of a work group etc.). ***No financial contribution from the project grant will be allocated to these organisations.***

Name of organisation	Type of institution	Website	City	Country	Role in the project	Activities and related Work Packages
HORIZON-95 LLC	Small and medium sized enterprise	www.horizon.am	YEREVAN	Armenia	The role of Horizon-95 will be to deliver consulting services when modernizing and developing new BSc and MSc civil engineering courses at partner country institutions. It will take role in all dissemination activities of project results through the thematic conferences, workshops and seminars.	In accordance to their expertise and practical production capacities, with the high-quality design entity, laboratories for elaboration of new construction materials and technologies and for quality control, Horizon-95 will assist in conceptual definition of practical civil engineering courses. It will be involved in WP1 - Current programmes in EU and partner HEIs - State of the Art, with the participation in analysis on labour market needs at partner countries and creation of learning outcomes. In the WP4 - University Enterprise Collaboration the company will give valuable contribution in creation of network between industry and universities, joint projects and internship programs.

Please insert rows as necessary

PART G – Impact and Sustainability

G.1 Expected impact of the project

Please explain which target groups will use the project outputs /products /results. Describe how the target groups will be reached and involved during the life of the project and afterwards and how the project will benefit the target group at local, regional, national and/or regional level. Please structure your description according to the different levels of impact and stakeholders.

#	Project results	Who will they impact at national, regional level?	How?
1	**Modernized courses and new courses at BSc and MSc level**	Altogether, participating institutions (**academicians, students**) and **stakeholders** will become driving force for changes and indispensable part of shifting perspectives in architectural and civil engineering education oriented towards sustainable model. It is envisioned that will have a sustained impact on target groups with a long-term benefit for all members involved, but also project results will reflect on **community**.	TACEESM promotes a vision of future that engage new generations of graduates capable to influence changes on environment. To meet rapid changing labor demands, students with the gained competences become prepared for multi-disciplinary approaches to problem solving. As a result, the project will enhance employability of graduates.
2	**Trained partner HEIs staff in for current relevant topics in architecture and civil engineering**	By recruiting highly skillful generation of **students** and **academic staff**, project will have concrete impacts on **local environment** and **construction sector**.	The project will develop network of academicians trained in specific architectural and civil engineering disciplines.
3	**Trained partner HEIs staff in new innovative teaching methods/ICT**	By recruiting highly skillful generation of **students** and **academic staff**, project will have concrete impacts on **local environment** and **construction sector**.	The training by EU institutions on innovative topic in architecture and civil engineering produces knowledgeable academicians specialized to lead educational process based on sustainable model.
4	**On-line platform established**	The established online platform will impact at first **students** enrolled in the	TACEESM asserts new forms of delivering education throught online platform that

		study program, opening them possibilities for virtual community and shared knowledge. Moreover, it will impact **academic staff** that will have chance to develop necessary content, and create base of teaching material for specific topics.	opens up enormous possibilities for partner countries to become part of European network of education and industry, and brings new dimension of education through virtual space. It employs a broad range of shared materials, instructional modules for particular architectural and civil engineering units, software's, innovative teaching methods, designed and prepared by collaborative work of partners and stakeholders that links newly formed educational environment to project objectives.
5	**New educational environment established (Literature, equipment and software's purchased)**	The region will benefit because project will increase flexibility and efficiency of education that follows ever-changing labour market needs. By re-orienting educational system all partner institutions will have possibility to follow trends and answer on demands of European market.	TACEESM is seen as revolutionary development of HEIs in partner countries that enhance 'traditional' ways of delivering knowledge with the potential for a high impact on the other higher education institutions on local, national and regional level.
6	**Developed network between the industry and partner universities**	TACEESM is viewed as long-term process of transformation through which **each participating institution** will benefit.	Developed network between industry and partner HEIs is seen as a growing resource for future potential collaborations on globally important issues.
7	**Internship program at partner HEIs**	Created Internship program at partner HEIs will impact students but industry as well.	From one side, internship program will offer student's involvement in real industry environment, but from other side, industry will benefit since it will work together will enthusiastic young generation, use students'

			knowledge and potential, and reediness for additional exploration.
8	**5 Joint projects between HEIs and industry created**	All partner HEIs will be an exemplar case of sustainable model of HEIs that will influence changes in the region. Through dynamic, up to date, and innovative activities HEIs will have shared understanding of sustainable model of education that will collaborate closely with local community, industry and international partners.	Created network between the industry and partner universities will enable continuous cooperation on various projects that will be developed.

Please insert rows as necessary

Overview of short term impact indicators (during the project EU funding period)

Short term impact	Target groups/potential beneficiaries	Quantitative indicators (in numbers please)	Qualitative indicators
Modernized and new courses at BSc Level	**Students Academic Staff**	**Approx. 25 students enrolled at BSc program in each HEIs partner country**	**Architectural and civil engineering courses designed in line with the labour market needs.**
Modernized and new courses at MSc Level	**Students Academic Staff**	**Approx. 15 students enrolled at MSc program in each HEIs partner country**	**New courses promote architecture and civil engineering as diverse profession and train students to gain universal professional competences.**
Trained partner HEIs staff for current relevant topics in architecture and civil engineering	**Academic Staff Students**	**Approx. 40 trained partner HEIs staff for current relevant topics in architecture and civil engineering**	**Knowledgeable academicians specialized to lead educational process for current relevant topics in architecture and civil engineering.**
Trained partner HEIs staff in new innovative teaching methods/ICT	**Academic Staff Students**	**Approx. 30 trained partner HEIs staff in new innovative teaching methods**	**Knowledgeable academicians specialized to lead educational with new innovative teaching methods.**

On-line platform established	**Students Academic Staff Industry**	**On-line platform will become part of teaching process for approx. 80 students and 10 staff at each partner HEIs.**	**The online platform opens enormous possibilities for partner countries to become part of European network of education and industry and brought new dimension of education through virtual space.**
Teaching materials developed and published	**Students Academic Staff**	**Approx. 30 trained partner HEIs staff for current relevant topics in architecture and civil engineering.**	**Students will use teaching material prepared by experts on current relevant topics in architecture and civil engineering.**

Please insert rows as necessary

Overview of long term impact indicators (after the projects EU funding period)

Long term impact	Target groups/potential beneficiaries	Quantitative indicators (in numbers please)	Qualitative indicators
Modernization of the partner institutions through modernized and new courses at BSc Level	**Students Academic Staff**	**Approx. 25 students enrolled at BSc program in each HEIs partner country.**	**Architectural and civil engineering courses designed in line with the labour market needs.**
Increased attractiveness of the partner HEIs through Modernized and new courses at MSc Level	**Students Academic Staff**	**Approx. 15 students enrolled at MSc program in each HEIs partner country**	**New courses promote architecture and civil engineering as diverse profession and train students to gain universal professional competences.**
On-line platform in function after project ending	**Students Academic Staff Industry**	**On-line platform will become part of teaching process for approx. 80 students and 10 staff at each partner HEIs.**	**The online platform opens enormous possibilities for partner countries to become part of European network of education and industry and brought new dimension of**

			education through virtual space.
New educational environment established (Literature, equipment and software's purchased)	**Students Academic Staff**	**Approx. 100 students and 20 staff from each partner HEIs will use education environment established by the project.**	**This project employs a broad range of shared materials, instructional modules for architectural and civil engineering units and software's.**
Increased cooperation between universities and partners from industry	**Students Academic Staff Industry**	**Mutual collaboration between industry and partner universities through internship programmes, joint project etc.**	**This network between the industry and partner universities will enable continuous cooperation.**

Please insert rows as necessary

G.2 Dissemination and exploitation strategy

Please explain how the dissemination will be organised during and after the project's lifetime. Define each target group and what communication channels will be used to reach them and when.

Target Group	Means of Communication to Reach These Target Groups	When	Indicators to measure the effectiveness of the means of communication
- High-school students - Bachelor students from different Universities, - Students from involved institutions, but different study programs - Architects and Engineers working in the Construction Industry - Researchers from Universities that are not involved in the project - Academic staff from universities that are	**Web Site**	Web site will be launched at **M2** and will be constantly updated with the relevant content until the end of Project-M36.	Each involved institution will elect one member that will have access to the web site and will be responsible for updating information. However, in order to filter information given by the representative of each institution, the SC and PM will elect one member among all representatives that will approve new posts and news.

not involved in the project - Architectural and Civil Engineering companies - Municipalities and governmental agencies			The **effectiveness** of Web Site will be measured by **website traffic statistics & analytics** (number of visits, number of download materials, average time on site, etc.)
-Industry representatives -Academic staff from other partner HEIs -students from other universities -high-schools	**Workshop**	The representative of each institution will make contact with Industry representatives, Academic staff from other partner HEIs, students from other universities, high-schools, and inform them about the project and its goals. In order to make the draft version of the study program, an introductory survey will take a place within a workshop, where participants will answer questions regarding courses required to be in the program.	The workshop will result with the **report** on summary of results of the **survey**. This report will be presented to the SC and PM on 2nd meeting. Effectiveness of this workshop will be measured by effectiveness of valuable comments written in the survey by workshop participants and its possible impact on Curricula changes.
- High-school students - Bachelor students from different Universities, - Students from involved institutions, but different study programs - Architects and Engineers working in the Construction Industry	**Workshops**	Starting from the M4, every 4 months until the M22, Workshops will be held at partner countries' universities and target population will participate in order to prepare quality program but also one member from EU.	All workshops will result with reports. Reports are summary of discussions and surveys filled by workshop participants that consist of concise and constructive comments on Curriculum changes. Efficiency of communication within workshop members

- Researchers from Universities that are not involved in the project - Academic staff from universities that are not involved in the project - Architectural and Civil Engineering companies - Municipalities and governmental agencies		Within **six workshops** (**M4, M8, M12, M16, M20, M22**) organized for target population at partner countries, two workshops will be attended by 4 members from program countries and representatives from industry sector. In the M18, the pilot program will be given to the stakeholders and the target population to study it and to give their feedback by the representatives of each institution.	will directly impact effectiveness of workshop.
- Media - High-school students - Bachelor students from different Universities - Students from involved institutions but different study programs - Architects and Engineers working in the Construction Industry - Researchers from Universities that are not involved in the project - Academic staff from universities that are not involved in the project - Architectural and Civil Engineering companies	**Press Conference**	The final version of the program will be finalized in the M24 and will be signed on the SC and PM coordination meeting. The final version will be announced on a press conference that will be held at IBU and the conference later will be translated to all local languages of institutions involved. After the main conference, set of individual conferences will be held by each institution to introduce the media to the program agreed on.	The effectiveness of the press conference will be measured by the number of participants (media, journalist etc.) who responded to this event. Afterwards, the effectiveness will be measured by the number of published news in media, radio, number of guest appearances in television shows and radios etc.

- Municipalities and governmental agencies - Community			
- Media High-school students - Bachelor students from different Universities, - Students from involved institutions, but different study programs - Architects and Engineers working in the Construction Industry - Researchers from Universities that are not involved in the project - Academic staff from universities that are not involved in the project - Architectural and Civil Engineering companies - Municipalities and governmental agencies - Community	**Final Conference**	After press conference, during the M36, there will be organized **two final conferences**, one in National University of Architecture and Construction of Armenia Foundation, NUACA in Yerevan and another at International Burch University in Sarajevo, where the achievements of the project will be presented, and the future steps are displayed. At the conferences, the representatives of institutions will be present and will take part in presenting the results at their university.	The effectiveness of the Final conference will be measured by the number of participants who responded to this event.
- High-school students -Bachelor students from different Universities, - Students from involved institutions, but different study programs - Architects and Engineers working in the Construction Industry	**Brochure and promotion material**	A brochure with promotion material in digital and printed version will be distributed to the target population when the program is adopted and finalized (M24).	The effectiveness of the brochure and promotion material will be measured by the number of downloaded digital version of brochures and promotion materials, by the number of distributed printed versions of materials, and the number of interested

- Researchers from Universities that are not involved in the project - Academic staff from universities that are not involved in the project - Architectural and Civil Engineering companies - Municipalities and governmental agencies - Community			parties to receive more information on new program, number of new visits on web site, number of comments on social media etc.

Please insert rows as necessary

G.3 Sustainability

Explain how exploitation activities will ensure optimal use of the results within the project's lifetime and afterwards. Explain how the impact of the project will be sustained beyond its lifetime. Please list the outcomes that you consider sustainable and describe the strategy to ensure their long lasting use beyond the project's lifetime. Also explain how the results will be mainstreamed and multiplied at national/regional level. Describe the strategy foreseen to attract co-funding and other forms of non-EU support for the project.

Sustainable Outcomes	**Strategy to ensure their sustainability**	**Resources necessary to achieve this**	**Where will these resources be obtained?**
TACEESMM Curricula at HEIs with modernized and new courses at BSc and MSc level	The strategic sustainability plan (Financial and institutional strategic plan) will be presented at the end of the first year of the project. It will present the institutional sustainability of the Bachelor and Master programme, as both programmes will become part of the Universities' work.	Physical resources, intellectual resources, human resources Financial resources	Partner HEIs resources Participating private HEIs enjoy full financial autonomy. Thus, tuition fees will remain to be primary income source for them. Participating public HEIs will continue to be financed from the public budget

			approved by the governing body.
New educational environment	New educational environment will become integral part of teaching process and each partner HEIs will continue to maintain it.	Physical resources, human resource, financial resources	Partner HEIs resources Labs will be further maintained by individual institutions at the partner countries.
Online platform	Successful implementation of new courses at HEIs will be followed by created on-line platform, interactive and specifically tailored for the project, and new equipment and software's. Substantial materials before project completion will be created on online-platform by all participants. After the project completion, content will be integral part of teaching process of newly designed courses and will be frequently updated. During the project, it will be agreed which institution will be responsible for maintenance of online-platform after the project completion.	Physical resources, human resource, financial resources	Partner HEIs resources
Sustainable cooperation with labour market	Institutions from partner countries will sign an agreement with the representative of	Physical resources, human resource, financial resources	University enterprise collaboration will provide long-term contribution to financial sustainability.

	labour markets after finalizing the final version of both programmes and publishing them on the announced press conference on the M24. The agreement will ensure better employment chances for those that finishes the agreed study programmes. The agreement will also increase the interest of the labour market representatives to take part in adopting the study programmes that will improve the knowledge of students and will improve their qualities to match the market they will work at.		Joint projects between industry and HEIs is envisaged to provide extra funds. Partner HEIs resources Industry resources
Internship program	Signed agreements between industry and HEIs will guarantee that internship program function after project.	Physical resources, human resource, financial resources	Partner HEIs resources Industry resources

Please insert rows as necessary

PART H - Other EU grants

*Please list the **projects** for which the organisations involved in this application have received financial support from EU programmes.*

Programme or initiative	Reference number	Beneficiary Organisation	Title of the Project
H2020-SC6-REV-INEQUAL-2016	726950	Università G. d'Annunzio – Chieti, Pescara partner	Integrative Mechanisms for Addressing Spatial Justice and Territorial Inequalities in Europe
EAC-A04-2015	579917	Università G. d'Annunzio – Chieti, Pescara partner	Development and evaluation of guide-models mass athletics for sports in students with special needs (obese, disabled persons etc.)
H2020-MSCA-ITN-2017	765198	Università G. d'Annunzio – Chieti, Pescara partner	CiRcular Economy : SusTainability Implications and guidING progress
FP7-2010-GC-ELECTROCHEMICAL-STORAGE	265644	Università G. d'Annunzio – Chieti, Pescara partner	Advanced, High Performance, Polymer Lithium Batteries for Electrochemical Storage
FP7-2012-GC-MATERIALS	314282	Università G. d'Annunzio – Chieti, Pescara partner	Lithium Sulfur Superbattery Exploitating Nanotechnology
FP7-SSH-2010-2	266767	Università G. d'Annunzio – Chieti, Pescara partner	The Europeanisation of Everyday Life: Cross-Border Practices and Transnational Itentities among EU and Third-Country Citizens
ERASMUS + Bando KA2		Università G. d'Annunzio – Chieti, Pescara	Accessibility of Higher Education for Students with Special Needs
TEMPUS - Bando EACEA	517471-Tempus-2011-It-Jpcr	Università G. d'Annunzio – Chieti, Pescara partner	Network for Post Graduate Masters in Cultural Heritage and Tourism Management in Balkan Countries
TEMPUS - Bando EACEA/35/12	544293-TEMPUS-1-2013-1-AZ-TEMPUS-JPCR	Università G. d'Annunzio – Chieti, Pescara partner	Foreign languages education for professional pourposes

TEMPUS - Bando EACEA/35/12	543801-TEMPUS-1-2013-1-UK-TEMPUS-JPGR	Università G. d'Annunzio – Chieti, Pescara partner	Strategic support on establishment and development of sustainable structures on quality assurance, international relations and student support services at the newly
H2020	723368-2	FGPA University of Maribor, Partner	Modular Approach to Hybrid Electric Propulsion Architecture
INTERREG 2014-2020 Central Europe	CE222 SULPiTER	FGPA University of Maribor, partner	Sustainable Urban Logistics PlannIng to Enhance Regional freight transport
Interreg MED	GRASPINNO (531)	FGPA University of Maribor, partner	GRASPINNO - Transnational model, strategies and decision support for innovative clusters and business networks towards green growth, focusing on green e-procurement in EE/RES for energy refurbishment of public buildings
Interreg CE	CE222 SULPiTER	FGPA University of Maribor, partner	SULPiTER - Sustainable Urban Logistics PlannIng To Enhance Regional freight transport
ERA NET	C.N.: 3211-11-000447	FGPA University of Maribor, partner	LBTGC - Wood based construction for multi-storey buildings. The potential of adhesives bounded timber-glass composites as load bearing beams, columns, stiffening panels
FP7	C.N.: 605305	FGPA University of Maribor, partner	HYPSTAIR - Development and validation of hybrid propulsion system components and sub-systems for electrical aircraft
FP7	C.N.: 265710	FGPA University of Maribor, partner	BESTFACT - Best Practise Factory for Freight Transport
COST	COST ACTION TU1104	FGPA University of Maribor, partner	Smart Energy Regions
COST	COST ACTION CA15221	FGPA University of Maribor, partner	Advancing effective institutional models

			towards cohesive teaching, learning, research and writing development
Erasmus+ KA2	2014-1-DE02-KA202-001474	HTWK Leipzig partner	Profession Profile of the surgical trainer: Train-the-trainer curricula (SurgTTT)
Erasmus+ KA2	573915-EPP-1-2016-1-DE EPPKA2-CBHE-JP	HTWK Leipzig partner	Online Platform for Academic TEaching and Learning in Iraq and Iran (OPATEL)
Erasmus+ KA2	574253-EPP-1-2016-1-DE-EPPKA2-CBHE-JP	HTWK Leipzig partner	University as a key partner of NETwork for vocational educational training centers of Middle Age Generation in Uzbekistan (MAGNET)
Erasmus+ KA2	561857-EPP-1-2015-1-DE-EPPKA2-CBHE-JP	HTWK Leipzig partner	Modernizing Health Education in Universities (ModeHEd)
Erasmus+ KA2	561708-EPP-1-2015-1-DE-EPPKA2-CBHE-JP	HTWK Leipzig partner	Vocational training center for undergraduate university students and teachers in Jordan (VTC)
Erasmus+ KA2	585980-EPP-1-2017-1-DE-EPPKA2-CBHE-JP	HTWK Leipzig partner	Training for Medical Education via innovative eTechnology (MediTec)
Erasmus+ KA2	574010-EPP-1-2016-1-JO-EPPKA2-CBHE-JP	HTWK Leipzig partner	Fostering Academia-Industry Collaboration in Food Safety and Quality (FOODQA)
Erasmus+ KA2	561940-EPP-1-2015-1-JO-EPPKA2-CBHE-JP	University of Jordan HTWK Leipzig partner	Modernization of TEaching MeThodologies in Higher educatiOn: EU experience for JorDan and PaleStinian Territory (METHODS)
Erasmus+ Programme - KA2	585681-EEP-1-2017-1-EL-EPPKA2-CBHE-JP	International Burch University – Partner	Electrical Energy Markets and Engineering Education (ELEMEND)
Erasmus LLL Program	540 051-LLP-1-2013-1	University of Gloucestshire University of Bihać partner institution	University educators for the sustainable development

Tempus	544464-TEMPUS-1-2013-1-DE-TEMPUS-SMHES	University of Paderborn University of Bihać partner institution	B&H Qualification Framework for Higher Education
Erasmus Mundus Action 2 – Strand 1 – Selection 2014	552105-EM-1-2014-1-PL-ERA MUNDUS-EMA21	University of Warsaw University of Bihać partner institution	SIGMA Agile – Critical Skills Learning for Innovation, Sustainable Growth, Mobility and EmployAbility in the Multicultural Environment of the Western Balkans
Tempus	530423-TEMPUS-1-2012-1-UK-TEMPUS-JPRC	University of Birmingham University of Bihać partner institution	Studies in Bioengineering and Medical Informatics
Erasmus+	561874-EPP-1-2015-1-BE-EPPKA2-CBHE-SP	KU Leuven University of Bihać partner institution	Strengthening of Internationalisation in B&H Higher Education (STINT)
Erasmus+	561688-EPP-1-2015-1-XK-EPPKA2-CBHE-JP	University of Priština University of Bihać partner institution	Implementation of the study program – Digital Broadcasting and Broadband Technologies (Master studies) [DBBT-MS]
Erasmus+	574076-EPP-1-2016-1-BA-EPPKA2-CBHE-JP	University of Travnik University of Bihać partner institution	TEACHER : Introducing competence-based preschool teacher education curricula in Bosnia and Herzegovina
Erasmus+	574009-EPP-1-2016-1-IE EPPKA2-CBHE-SP	University of Limerick University of Bihać partner institution	Qualifications Framework as Platform for the development of learning outcomes based curriculum
Erasmus+ KA2	585833-EPP-1- 2017-1-RSEPPKA2- CBHE-JP	Visoka Poljoprivrednoprehrambena Skola Strukovnih Studija Prokuplje UNMO Partner	Next Destination Balkans : Agritourism Landscapes Development
Erasmus+ KA2	586304-EPP-1-2017-1-BAEPPKA2- CBHE-JP	Univerzitet u Sarajevu UNMO Partner	Western Balkans Urban Agriculture Initiative
Erasmus+ KA2	574193-EPP-1-2016-1-RS-EPPKA2-CBHE-JP	UNIVERSITY OF NOVI SAD UNMO Partner	Strengthening Capacities for Tourism Changes in WB – Building Competences for Quality Management of Heritage and Cultural Tourism
Erasmus+ KA2	574009-EPP-1-2016-1-IE-EPPKA2-CBHE-SP	University of Limerick UNMO Partner	Qualifications Framework as Platform for the

			development of learning outcomes based curriculum
Erasmus+ KA2	561902-EPP-1-2015-1SE-EPPKA2-CBHE-JP	KUNGLIGA TEKNISKA HOEGSKOLAN UNMO Partner	Modernising geodesy education in Western Balkan with focus on competences and learning outcome
Erasmus+ KA2	561675-EPP-1-2015-1XK-EPPKA2-CBHE-JP	University of Mitrovica UNMO Partner	Creating the Network of Knowledge Labs for Sustainable and Resilient Environments
Erasmus+ KA2	561874-EPP-1-2015-1BE-EPPKA2-CBHE-SP	KATHOLIEKE UNIVERSITEIT LEUVEN UNMO Partner	Strengthening of Internationalisation in B&H Higher Education
TEMPUS	544464-TEMPUS-1-2013-1- DE-TEMPUS-SMHES	University of Paderborn UNMO Partner	Bosnia and Herzegovina Qualification Framework for Higher Education
Erasmus+ CBHE Project	561555-EPP-1-2015-1-ES-EPPKA2-CBH E-JP	Polytechnic University of Valencia, Spain NUACA partner institution	Higher Education Interdisciplinary Reform in Tourism Management and Applied Geo-information Curricula (HERITAG)
TEMPUS	543710-TEMPUS-1-2013-1-AM-TEMPUS-SMGR	Yerevan State Medical University, Armenia	Structural Development of the third Cycle based on Salzburg Principles (VERITAS)
TEMPUS	543711-TEMPUS-1-2013-1-AM-TEMPUS-SMGR	COORDINATOR : Yerevan State Academy of Fine Arts NUACA partner institution	Fostering Autonomy and Accountability : Development of State-of-the-Art, The Management System for Efficient Changes in Line with Bologna Principles (GOVERN)
TEMPUS	544091-TEMPUS-1-2013-1-BE-TEMPUS-JPCR	Thomas More University College, Belgium NUACA partner institution	Development of Embedded System Courses with implementation of Innovative Virtual approaches for integration of Research, Education and Production in UA, GE, AM (DesIRE)
TEMPUS	543817-TEMPUS-1-2013-1-SE-TEMPUS-SMHES	Linkoping University, Sweden NUACA partner institution	Implementation of National and Sectorial Qualifications Frameworks in Armenia (ARMENQA)

TEMPUS	544261-TEMPUS-1-2013-1-BE-TEMPUS-SMGR	University of Macerata, Italy NUACA partner institution	Enhancing Students Participation in Quality in Armenia HE (ESPAQ)
TEMPUS - IV	543868-TEMPUS-1-2013-1-DE-TEMPUS-JPCR	University of Saarland (Germany) National Polytechnic University of Armenia (NPUA) partner	"MATH-GEAR" Modernization of Mathematics curricula for Engineering and Natural Sciences studies in South Caucasian Universities by introducing modern educational technologies
TEMPUS - IV	543904-TEMPUS-1-2013-1-GR-TEMPUS-JPCR	University of Patras (Greece) National Polytechnic University of Armenia (NPUA) partner	"BME-ENA" Biomedical Engineering Education Tempus Initiative in Eastern Neighbouring Area
TEMPUS - IV	544091-TEMPUS-1-2013-1-BE-TEMPUS-JPCR	Thomas More University College (Belgium) National Polytechnic University of Armenia (NPUA) partner	"DESIRE" Development of Embedded System Courses with implementation of Innovative Virtual approaches for integration of Research, Education and Production in UA, GE, AM
TEMPUS - IV	544178-TEMPUS-1-2013-1-PT-TEMPUS-JPCR	University of Lisbon (Portugal) National Polytechnic University of Armenia (NPUA) partner	"RETHINK" Reform of Education THru International Knowledge exchange
TEMPUS - IV	544605-TEMPUS-1-2013-1-BE-TEMPUS-JPHES	Catholic University of Leuven (Belgium) National Polytechnic University of Armenia (NPUA) partner	"ARMAZEG" Developing tools for lifelong learning in Transcaucasus region : e-Learning.
TEMPUS - IV	544125-TEMPUS-1-2013-1-AM-TEMPUS-SMGR	Yerevan State University (Armenia) National Polytechnic University of Armenia (NPUA) partner	"PICASA" Promoting Internationalization of HEIs in Eastern Neighborhood Countries through Cultural and Structural Adaptations
TEMPUS - IV	544261-TEMPUS- 1-2013-1-BE-TEMPUS-SMGR	National Union of Students in Europe (Belgium)	"ESPAQ" Enhancing Students Participation in Quality Assurance in Armenian HE

		National Polytechnic University of Armenia (NPUA) partner	
Erasmus+ Programme - KA2	561627-EPP-1-2015-1-PL-EPPKA2-CBHE-JP	Cracow University of Technology (Poland) National Polytechnic University of Armenia (NPUA) partner	"DOCMEN " Development of two cycle innovative curricula in microelectronic engineering
Erasmus+ Programme - KA2	561890-EPP-1-2015-1-IT-EPPKA2-CBHE-JP	University of Genoa (Italy) National Polytechnic University of Armenia (NPUA) partner	"MARUEEB" Master Degree in Innovative Tech-nologies in Energy Efficient Buildings for Russian & Armenian Universities and Stakeholders
Erasmus+ Programme - KA2	574090-EPP-1-2016-1-IT-EPPKA2-CBHE-JP	University of Sannio (Italy) National Polytechnic University of Armenia (NPUA) partner	"eDRONE" Educational for Drone
Erasmus+ Programme - KA2	573965-EPP-1-2016-1-SE-EPPKA2-CBHE-JP	Royal Institute of Technology (KTH), Sweden National Polytechnic University of Armenia (NPUA) partner	"InnoCENS" Enhancing Innovation Competences and Entrepreneurial skills in Engineering Education
Erasmus+ Programme (KA2)	585760-EPP-1-2017-1-AM-EPPKA2-CBHE-JP	Yerevan State University (YSU), Armenia National Polytechnic University of Armenia (NPUA) partner	"PRINTeL" Change in Classroom : Promoting Innovative Teaching & Learning to Enhance Student Learning Experience in Eastern Partnership Countries
TEMPUS	517346-TEMPUS-1-2011-1-SE-TEMPUS-JPCR	Royal Institute of Technology (Stockholm, Sweden) The Belarussian National Technical University (BNTU) partner	Establishing Modern Master-Level Studies in Industrial Ecology
TEMPUS	530349-TEMPUS-1-2012-1-FR-TEMPUS-JPHES	University Montpellier 2 (Montpellier, France) The Belarussian National Technical University (BNTU) partner	Inter-university Start-up centers for students' innovations development & promotion
TEMPUS	530379-TEMPUS-1-2012-1-LV-TEMPUS-JP	Riga Technical University (Riga, Latvia)	Development of Training Network for Improving Education in Energy Efficiency

		The Belarussian National Technical University (BNTU) partner	
TEMPUS	543724-TEMPUS-1-2013-1-LT-TEMPUS-JPCR	Vilnius Gediminas Technical University (Vilnius, Lithuania) The Belarussian National Technical University (BNTU) partner	New model of the Third Cycle in Engineering Education due to Bologna Process in BY, RU, UA
TEMPUS	543853-TEMPUS-1-2013-1-DE-TEMPUS-SMHES	Paderborn University (Paderborn, Germany) The Belarussian National Technical University (BNTU) partner	Fostering the Knowledge Triangle in Belarus, Ukraine and Moldova
TEMPUS	544181-TEMPUS-1-2013-1-IT-TEMPUS-JPCR	Sapienza University of Rome The Belarussian National Technical University (BNTU) partner	Belarusian Road Safety Network
TEMPUS	544498-TEMPUS-1-2013-1-SE-TEMPUS-JPHES	Linnaeus University (Kalmar and Växjö, Sweden) The Belarussian National Technical University (BNTU) partner	Interregional Network for Innovative Development of Ecosystems Technosphere Based on Micro- and Nanoobject Technologies
TEMPUS	544609-TEMPUS-1-2013-1-AT-TEMPUS-JPCR	Vienna Technical University (Vienna, Austria) The Belarussian National Technical University (BNTU) partner	Applied Computing in Engineering and Science
ERASMUS+	561536-EPP-1-2015-1-UK-EPPKA2-CBHE-JP	Buckinghamshire New University (UK) The Belarussian National Technical University (BNTU) partner	Development of a network infrastructure for youth innovation entrepreneurship support on fablab platforms
ERASMUS-MUNDUS	ACTION 2 STRAND 1 Selected in 2012	Alexandru Ioan Cuza University of Iasi (Iasi, Romania) The Belarussian National Technical University (BNTU) partner	IANUS – Inter-Academic Network erasmus-mundUS
ERASMUS-MUNDUS	ACTION 2 STRAND 1 Selected in 2011	Warsaw University of Technology (Warsaw, Poland) The Belarussian National Technical University (BNTU) partner	EWENT – East-West European mobility with neighbouring Region in the East : Ukraine, Moldova, Belarus

ERASMUS-MUNDUS	ACTION 2 STRAND 1 Selected in 2012	Alexandru Ioan Cuza University of Iasi (Iasi, Romania) The Belarussian National Technical University (BNTU) partner	IANUS – Inter-Academic Network erasmus-mundUS
ERASMUS-MUNDUS	ACTION 2 STRAND 1 Selected in 2012	Lisbon Technical University (Lisbon, Portugal) The Belarussian National Technical University (BNTU) partner	TEMPO – Trans-European Mobility Project On education for sustainable development
ERASMUS-MUNDUS	ACTION 2 STRAND 1 Selected in 2012	Oldenburg University (Oldenburg, Germany) The Belarussian National Technical University (BNTU) partner	ELECTRA – Enhancing Learning in ENPI Countries through clean Technologies and Research related Activities
ERASMUS-MUNDUS	ACTION 2 STRAND 1 Selected in 2013	Alexandru Ioan Cuza University of Iasi (Iasi, Romania) The Belarussian National Technical University (BNTU) partner	IANUS II – Inter-Academic Network erasmus-mundUS II
ERASMUS-MUNDUS	ACTION 2 STRAND 1 Selected in 2013	Warsaw University of Technology (Warsaw, Poland) The Belarussian National Technical University (BNTU) partner	ACTIVE – Atlantic Caucasus Technical universities Initiative for Valuable Education
TEMPUS	544137-TEMPUS-1-2013-1-SK-TEMPUS-JPHES	University of Zilina, Slovakia Brest State Technical University (BrSTU) partner	Centers of Excellence for young RESearchers (CERES)
TEMPUS	544178-TEMPUS-1-2013-1-PT-TEMPUS-JPCR	Lisbon Technical University, Portugal Brest State Technical University (BrSTU) partner	Reform of Education THru INternational Knowledge exchange (RETHINK)
TEMPUS	544181-TEMPUS-1-2013-1-IT-TEMPUS-JPCR	Sapienza University of Rome, Italy Brest State Technical University (BrSTU) partner	Belarusian Road Safety Network (Be safe)
ERASMUS+	561633-EPP-1-2015-1-AM-EPPKA2-CBHE-JP	Public Administration Academy of the Republic of Armenia Brest State Technical University (BrSTU) partner	Library Network Support Services : modernising libraries in Armenia, Moldova and Belarus through library staff development and reforming libraries (LNSS)

Please insert rows as necessary.

*Please list **other EU grant proposals** submitted by your organisation, or by any partner organisation in this project proposal. For each grant application, please mention the EU Programme concerned and the amount requested.*

Programme concerned	Beneficiary Organisation	Amount requested
Research Project "Cooperativas vecinales. Modelo de Gestión Colaborativa en Rehabilitación y Conservación de barriadas". Regional Program: Consejería de Fomento y Vivienda, Junta de Andalucía (2014-2015).	Habitat, Tourism and Territory Institute. School of Architecture. University of Malaga	52.947 eur
Research Project "Tourism Atlas Costa del Sol". Regional Program: Consejería de Fomento y Vivienda, Junta de Andalucía (2008-2010).	School of Architecture, University of Malaga.	249.200 eur
Research Project "Piezas Mínimas del Turismo". Regional Program: Consejería de Fomento y Vivienda, Junta de Andalucía (2006-2010).	School of Architecture, University of Malaga.	247.500 eur
"The neighbourhood Carretera de Cádiz in Malaga: towards a sustainable model of integrated urban and architectural regeneration". Regional Program: Consejería de Fomento y Vivienda, Junta de Andalucía (2008-2010).	School of Architecture, University of Malaga	29.900 eur

Please insert rows as necessary.

PART I - Check List

*Please make sure that you **fully** completed each part of this application form, as follows:*

- ☒ PART D - RELEVANCE OF THE PROJECT
- ☒ PART E - QUALITY OF THE PROJECT DESIGN AND IMPLEMENTATION
  - ☒ E.4 Logical Framework Matrix
  - ☒ E.5 Workplan
  - ☒ E.6 Work packages
- ☒ PART F - Quality of the Project Team and Cooperation Arrangements
- ☒ PART G - Impact and Sustainability
- ☒ PART H - Other EU grants
- ☒ PART I - CHECK LIST