

**ENVIRONMENTAL RISK ASSESSMENT AND
MITIGATION ON CULTURAL HERITAGE
ASSETS IN CENTRAL ASIA
ERAMCA
ERASMUS+ CBHE PROJECT NR. 609574**



**Deliverable D5.2
Selection of trainers**

**Deliverable D5.3
Selection of teachers and staff**

Date	Version	Author(s)
18.10.2021	Draft v1.0	BUW – L. Abrahamczyk
29.10.2021	Draft v1.1	BUW – L. Abrahamczyk

Table of Content

Table of Content	2
List of Tables	2
1. Introduction	3
2. Objectives	3
3. Selection of Trainers	3
4. Selection of Teachers and Staff	7
5. Concluding Remarks	9
6. References	10

List of Tables

Table 1. List of trainers – Group Geomatics	4
Table 2. List of trainers – Group Structures.....	4
Table 3. List of trainers – Group Geotechnics	5
Table 4. List of trainers – Group Hydrogeology	5
Table 5. List of trainers – Restoration	5
Table 6. List of trainers – Seismic Engineering	6
Table 7. List of local lecturers and supporting staff of the Partner University SamSACII	7
Table 8. List of local lecturers and supporting staff of the Partner University KPITTU	8
Table 9. List of local lecturers and supporting staff of the Partner University TTU	8
Table 10. List of local lecturers and supporting staff of the Partner University TTPU	9

1. Introduction

The deliverable entitled “Selection of trainers” is elaborated by BUW, leader of the development Work Package 5, for the project “ERAMCA – Environmental Risk Assessment and Mitigation on Cultural Heritage assets in Central Asia”, in the frame of an ERASMUS+ Capacity Building in the field of Higher Education grant with the reference number 609574-EPP-1-2019-1-IT-EPPKA2-CBHE-JP.

This report provides a detailed list of “D5.2 Selection of trainers” to provide information to the teachers and “D5.3 Selection of teachers and staff” that will take part in the Masters Course. The staff and trainers are selected from the participatory universities in the project and the list established based on a review of competence in the field of restoration, structures, seismic engineering, geomatics, geotechnics and hydrogeology. The list is developed with collaboration of all partners.

2. Objectives

The objectives of the Deliverable D5.2 entitled “Selection of trainers” is to document the staff to undertake training of the teachers and the Deliverable D5.3 “Selection of teachers and staff” is similarly aimed at recording the lecturers and supporting staff for the first year of the developed M.Sc. course “Environmental Risk Assessment and Mitigation on Cultural Heritage Assets” described in ERAMCA project report D3.1.

3. Selection of Trainers

Following the project objectives, a face-to-face intensive training week hosted by Programme Universities will be organized in February 2022 at Bauhaus-Universität Weimar (see ERAMCA project report D3.1). The structure will follow the taxonomy of the modules. Thus, individual trainings will be offered by the disciplinary teams.

Tables 1 to 6 lists the selected trainers for the face-to-face intensive training week for each disciplinary teams highlighting the team coordinator and affiliation. All trainers and their contribution to the training week are selected based on their faculty position and expertise in the field of the allocated training. E.g. it is distinguished between lecturer and trainer conducting hand-on exercises and software training.

The trainers were approached directly by the project coordinators of the Programme Universities on the basis of the expertise of the persons approached and their current teaching activities.

At the current state of the project, external experts are contacted but their participation still not confirmed by the date of the submission of the report. Therefore, no external expert is added to the list of trainers.

Professional Practice and Master Thesis topics need to be offered by all local lecturers. Whereas the topics should have a clear link to cultural heritage assets. Therefore, Programme Universities will organize a joint session in part of the ERAMCA training (D5.1) to present and discuss the recent practice at the Programme Universities and possible adaptation to the Partner Universities. The results will be documented in a small tutorial summarizing project requirements, procedures, and evaluation criteria.

Table 1. List of trainers – Group Geomatics

Lecturer	Institution	Examples of current teaching activities
Prof. Fulvio Rinaudo <i>Coordinator</i>	Politecnico di Torino Dipartimento di Architettura e Design	GIS and 3D modeling for Cultural Heritage Laboratory of Geomatics for Architecture modeling
Prof. Volker Rodehorst	Bauhaus-Universität Weimar Chair of Computer Vision in Engineering	Image analysis and object recognition Geo-spatial Monitoring Photogrammetric computer vision
Domagoj Trajber, PhD Student	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Mechanics II (exercises) Strength of Materials I (exercises) Strength of Materials II (exercises)

Table 2. List of trainers – Group Structures

Lecturer	Institution	Examples of current teaching activities
Prof. Fabrizio Barpi <i>Coordinator</i>	Politecnico di Torino Dept. of Structural, Geotechnical and Building Engineering	Theory of Elasticity Structural Mechanics Advanced Structural Mechanics
Assoc. Prof. Alberto Sapora	Politecnico di Torino Dept. of Structural, Geotechnical and Building Engineering	Structural Mechanics
Jun.-Prof. Lars Abrahamczyk	Bauhaus-Universität Weimar Chair of Advanced Structures	Earthquake Engineering Masonry Structures
Kemmar T. Webber, PhD student	Bauhaus-Universität Weimar Chair of Advanced Structures	PhD Topic: „Optimized Piped and Spherically Voided Concrete Frame Elements“
Silva Lozančić, PhD, Associate Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Civil Engineering Statics I Civil Engineering Statics II
Damir Varevac, PhD, Full Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Bridges I Bridges II Prestressed Concrete
Zlata Dolaček Alduk, PhD, Full Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Construction Engineering I Construction Engineering II Quality Management

Table 3. List of trainers – Group Geotechnics

Lecturer	Institution	Examples of current teaching activities
Assoc. Prof. Monica Barbero <i>Coordinator</i>	Politecnico di Torino Dept. of Structural, Geotechnical and Building Engineering	Rocks Mechanics Geotechnical Engineering for the Sustainability of Buildings Analysis and design of geotechnical structures and earthworks
Krunoslav Minažek, PhD, Associate Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Soil Mechanics Geotechnical Engineering Soil Mechanics and Foundations Transportation Geotechnics Geosynthetics Application Execution Of Geotechnical Works

Table 4. List of trainers – Group Hydrogeology

Lecturer	Institution	Examples of current teaching activities
Adriano Fiorucci <i>Coordinator</i>	Politecnico di Torino Department of Environment, Land and Infrastructure Engineering	Hydrogeology Petroleum and mining geology
Dr. rer. nat. Gunther Aselmeyer	Bauhaus-Universität Weimar Chair of Geotechnics	Applied hydrogeology Environmental Geotechnics
Jasna Kopic, PhD, Assistant Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Applied Hydrogeology Geological Engineering

Table 5. List of trainers – Restoration

Lecturer	Institution	Examples of current teaching activities
Prof. Carla Bartolozzi <i>Coordinator</i>	Politecnico di Torino Dipartimento di Architettura e Design	Restoration theory and practice
Dina Stober, PhD, Associate Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Urbanism I Urbanism II Rurism Residential and Public Buildings Revitalization of architectural heritage Architecture of industrial buildings Integrated design
Margareta Turkalj Podmanicki, PhD, Associate Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	The art of the old age Fundamentals of architecture 15th and 16th century art Art of the 17th and 18th centuries

Table 6. List of trainers – Seismic Engineering

Lecturer	Institution	Examples of current teaching activities
Prof. Rosario Ceravolo <i>Coordinator</i>	Politecnico di Torino Dept. of Structural, Geotechnical and Building Engineering	Earthquake Engineering Challenges in the preservation of the architectural heritage of the 20th century: themes and experiences
Jun.-Prof. Lars Abrahamczyk	Bauhaus-Universität Weimar Chair of Advanced Structures	Earthquake Engineering Risk Projects and Evaluation of Structures Seismic Monitoring (<i>partially</i>)
Anis Uzair, PhD Student	Bauhaus-Universität Weimar Chair of Advanced Structures	Earthquake Engineering (exercises) Risk Projects and Evaluation of Structures (exercises)
Ivica Guljaš, PhD, Full Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Seismic Design Structural Dynamics Testing of Structures
Davorin Penava, PhD, Associate Professor	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture Osijek	Plates and Shells Theory Analysis of Structure Stress and Load- Bearing Behaviour Finite Element Method Computer Programming in Engineering Theory and Principles of Assessment and Retrofit of Historical Buildings
Filip Anić, PhD Student	Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering Osijek	Plates and Shells Theory (exercises) Analysis of Structure Stress and Load- Bearing Behaviour (exercises) Strength of Materials I (exercises) Strength of Materials II (exercises)

4. Selection of Teachers and Staff

Table 7 list the local lecturers and supporting staff of the Partner Universities for the developed M.Sc. course “Environmental Risk Assessment and Mitigation on Cultural Heritage Assets”. Beside the name and affiliation, the assigned courses are given. The lecturers are appointed by the Rector of each Partner University based on their scientific or management skills, previous engagement in educational activities concerning with Environment risks and/or disciplines present in the Master.

Professional Practice and Master Thesis topics need to be offered by all local lecturers and are therefore not separated listed. The requirements and evaluation criteria will be discussed among all participants in part of the ERAMCA training (D5.1). It shall support transparent assessment. Project partners recommend a collaboration among the partner universities. It will strongly support the joint objectives.

Table 7. List of local lecturers and supporting staff of the Partner University SamSACII

Name	Institution	Module Title	Semester
Abror Gadoev	SamSACII	Hydrogeology Risk Assessment and Mitigation (Hydrogeology and Geotechnics)	1 st 3 rd
Damir Sultanov	SamSACII	Earthquake Engineering Seismic Protection of Historical Structures	2 nd 3 rd
Erkin Isakov	SamSACII	Geomatics I Geomatics II	1 st 3 rd
Farida Suvankulova	SamSACII	Structural Mechanics Advanced Structural Mechanics	1 st 2 nd
Mukhsin Hidirov	SamSACII	History of Architecture in Central Asia Restoration I: History and Theories Restoration II	1 st 2 nd 3 rd
Said Manoev	SamSACII	Structural Mechanics Advanced Structural Mechanics	1 st 2 nd
Shavkat Achilov	SamSACII	Restoration I: History and Theories Restoration II	2 nd 3 rd
Sitora Sadikova	SamSACII	Restoration I: History and Theories Restoration II	2 nd 3 rd
Zoir Khasanov	SamSACII	Geotechnical Engineering Risk Assessment and Mitigation (Hydrogeology and Geotechnics)	2 nd 3 rd

Table 8. List of local lecturers and supporting staff of the Partner University KPITTU

Name	Institution	Module Title	Semester
Amirtemir Vahobov	KPITTU	Hydrogeology Risk Assessment and Mitigation (Hydrogeology and Geotechnics)	1 st 3 rd
Farrukh Aminov	KPITTU	Structural Mechanics Advanced Structural Mechanics Earthquake Engineering Seismic Protection of Historical Structures	1 st 2 nd 2 nd 3 rd
Khurshed Bobojonov	KPITTU	Geotechnical Engineering Risk Assessment and Mitigation (Hydrogeology and Geotechnics)	2 nd 3 rd
Shuhrat Usmonov	KPITTU	History of Architecture in Central Asia Restoration I: History and Theories Restoration II	1 st 2 nd 3 rd
Usmonjon Ahmedov	KPITTU	Geomatics I Geomatics II	1 st 3 rd

Table 9. List of local lecturers and supporting staff of the Partner University TTU

Name	Institution	Module Title	Semester
Bozorov Shamsiddin	TTU	Geomatics I Geomatics II	1 st 3 rd
Jafar Niyazov	TTU	Geomatics I Geomatics II Risk Assessment and Mitigation (Hydrogeology and Geotechnics)	1 st 3 rd 3 rd
Kalandarbekov Imom	TTU	Earthquake Engineering Seismic Protection of Historical Structures	2 nd 3 rd
Mukimov Rustam	TTU	History of Architecture in Central Asia Restoration I: History and Theories Restoration II	1 st 2 nd 3 rd
Mukimova Sayora	TTU	History of Architecture in Central Asia Restoration I: History and Theories Restoration II	1 st 2 nd 3 rd
Rahmonzoda Ahmadjon	TTU	Structural Mechanics Advanced Structural Mechanics Earthquake Engineering Seismic Protection of Historical Structures	1 st 2 nd 2 nd 3 rd
Karimov Farshed	TTU	Geotechnical Engineering	2 nd
Ruziev Ahmad	TTU	Hydrogeology	1 st
Sharipov Shuhrat	TTU	Hydrogeology Risk Assessment and Mitigation (Hydrogeology and Geotechnics)	1 st 3 rd

Table 10. List of local lecturers and supporting staff of the Partner University TTPU

Name	Institution	Module Title	Semester
Juliev Mukhiddin	TTPU	Geotechnical Engineering Risk Assessment and Mitigation (Hydrogeology and Geotechnics)	2 nd 3 rd
Karimov Bekmurod	TTPU	Earthquake Engineering Seismic Protection of Historical Structures	2 nd 3 rd
Bakhrom Tulaganov	TTPU	Structural Mechanics Advanced Structural Mechanics	1 st 2 nd
Erkin Khaltursunov	TTPU	Hydrogeology Risk Assessment and Mitigation (Hydrogeology and Geotechnics)	1 st 3 rd
Usmanov Saidislomkhon	TTPU	Geomatics I Geomatics II	1 st 3 rd
Azizova Bonu	TTPU	Restoration I: History and Theories Restoration II	2 nd 3 rd
<i>t.b.a.</i> *		History of Architecture in Central Asia	1 st

* support by other partner universities

5. Concluding Remarks

ERAMCA project aims to mix European experience in Environmental CH risk assessment and reduction actions with the specific constraints for Central Asia region, to offer a possible and feasible interdisciplinary approach, which will grow up in joint actions at national level, thanks to the collaboration of local expert and young researchers that will continue to develop the strategy of ERAMCA project in the future years.

CH in Central Asia is prone to environmental action therefore ERAMCA would like to give to the involved Countries (Uzbekistan and Tajikistan) effective solutions by acting and enhancing local potentialities represented by young generations of teachers and students and by inviting local stakeholders (mainly public authorities and agencies) to give specific objectives to be reached.

ERAMCA join three European universities where update research and teaching activities are developed on environmental risk assessment and reduction on CH assets by using an interdisciplinary approach. Among the teachers of those three HEIs involved in the project, all the disciplines and experiences are present with a not negligible experience also in international project of Capacity Building and planning of specific curricula at a second level of the high education system (e.g. Master, Master of Science, Ph.D.).

ERAMCA has two main topics: to design, experiment, and implement a new Master on Environmental risk assessment and mitigation on CH assets in Central Asia by adapting the European experiences to the local situation, and to increase the local teacher's skills in interdisciplinary teaching activities. To ensure the sustainability of the project after its conclusion, a strong training period is planned for local teacher and technicians, which will manage the pilot course and the following edition of the Master that each HEIs in Uzbekistan and Tajikistan could activate.

The report provides a summary of involved Programme University trainer's per interdisciplinary team as well as Partner University teachers and staff assigned to the courses of the developed M.Sc. Study programme (D3.1).

6. References

ERASMUS+ KA2–Cooperation for innovation and the exchange of good practices –Capacity Building in the field of Higher Education. Application Form. Call for Proposals 2019 -EAC/A03/2018. Environmental Risk Assessment and Mitigation on Cultural Heritage assets in Central Asia / ERAMCA. Detailed description of the project

Erasmus+ project card [Internet]. Erasmus+ -European Commission. 2020 [Accessed: 28 January 2021]. Available at: <https://ec.europa.eu/programmes/erasmus-plus/projects/eplu-project-details/#project/609574->

ERAMCA project main web-site [Internet]. Eramca.com. 2020 [Accessed: 28 January 2021]. Available at: <https://www.eramca.com/>

Work Package WP3 “Design of a Master in Environmental risk assessment and mitigation on Cultural Heritage assets”: Deliverable D3.1 “Definition of a Master in Cultural Heritage Conservation in Central Asia”

Work Package WP2 “Identification of actual educational portfolio in environmental risk assessment and mitigation on Cultural Heritage in Partner Countries”

Work Package WP5 “Teacher and Staff training”: Deliverable D5.1 “Creation of a program of training for teachers and staff”