

Periodical Report  
6 Months of project  
implementation

# New and Innovative Courses for Precision Agriculture



## Turkmen State Architecture and Construction Institute

Y. Myradov, TSACI, Berlin, Germany.  
August 2019 y.

Joint Project: Capacity Building in the Field  
of Higher Education ERASMUS+ 2018

Co-funded by the  
Erasmus+ Programme  
of the European Union



# Work plan

ERASMUS +



HIGHER EDUCATION CAPACITY BUILDING

TÜRKMENISTANYŇ BILIM MINISTRIGI  
TÜRKMEN DÖWLET BINAGÄRLIK-GURLUŞYK INSTITUTY

«TASSYKLAÝARYN»  
Türkmen döwlet binagärlik-gurluşyk  
institutyň rektory  
B. Atamanow  
"\_\_\_" \_\_\_\_\_ 2019 ý.

2018-2021-nji ýyllarda "New and Innovative Courses for Precision Agriculture (NICOPA)" tsalamasyny amala aşyrmak boýunça geçirilmeli çäreleriň

## ME Ý I L N A M A S Y

№	Geçirilmeli çäreler	Taslamanyň iş meýilnamasyna salgylanma	Yerine ýetirilmeli möhleti	Düşündiriş
1	Türkmen döwlet binagärlik-gurluşyk institutynda taslamany durmuşa geçirmek boýunça iş meýilnamasyny taýýarlamak	1.1-5.2	15.12.2018	Taslamanyň meýilnamasyny tassyklamak we agzalaryň jogapkärçiliklerini kesgitlemek bilen iş toparyny döretmek
2	Kämilleşdirmek we okuw işine ornaşdyrmak üçin okadylýan dersleriň sanawyny düzmek. Ugur: 2.08.0000. Gurluşyk tehnikasi we tehnologiýasy Hünär: 2.08.05.15. Amaly geodeziýa	1.1	20.12.2018	Dersleriň sanawy: 1. Radioelektronika; 2. Metrologiýa we stadartlaşdyрма; 3. Geodizik abzallary; 4. Geodezik ölçenmeleriniň netijelerini hasaplama nazaryýeti; 5. Geodeziki astronomiýa; 6. Fotogrammetriýa; 7. Kartografiýa; 8. Geoinformasiýa ulgamlary; 9. Yer aralykdan öwrenmek; 10. Inžener geodezik gözlegler; 11. Kosmik geodeziýa.

Erasmus+ Project

New and Innovative Courses for Precision Agriculture  
(NICOPA)

Information Management Package

Recommendations and informational materials regarding implementation of project activities according to the Bologna Process principles and guidelines of European Education, Audiovisual and Culture Executive Agency

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# Work group

No	Name, Surname, email	Position	Responsibility (WP, tasks according to the work plan)
1 co-ordinator	Myradov Yolly	Dean of the Faculty of Economics and Management	<a href="mailto:yolly1605tm@mail.ru">yolly1605tm@mail.ru</a>
2	Atageldi Garajayev	Head of the department "Road construction"	<a href="mailto:ata8984@mail.ru">ata8984@mail.ru/</a> <a href="mailto:alyhan2019@hotmail.com">alyhan2019@hotmail.com</a>
3	Bendov Maksatguly	Head of the department "Computer Technologies"	<a href="mailto:bent@yandex.com">bent@yandex.com</a>
4	Bashimov Polat	Head of the department "Geodesy"	
5	Annayeva Guncha	Teacher of the department "Geodesy"	<a href="mailto:buton-annayeva@rambler.ru">buton-annayeva@rambler.ru</a>
6	Charyyeva Saadat	Teacher of the department "Geodesy"	
7	Nurgeldiyev Perman	Teacher of the department "Computer Technologies"	<a href="mailto:permannur@gmail.com">permannur@gmail.com</a>

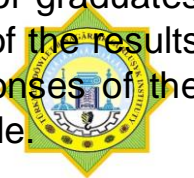


# Courses to update

Name of the course to be upgraded	1. Radio electronics	2. Metrology and standardization	3. Geodysic equipment	4. The calculated theory of the results of geophysical measurements	5. Geodysic astronomy	6. Photogrammetry	7. Cartography	8. Geoinformation systems	9. Inter-Earth learning	10. Engineering geodetic studies	11. Space geodesy
Person/teacher/department/faculty responsible for the course upgrade	Bashimov Polat Bendov Maksatguly	Bashimov Polat Myradov Yolly	Bashimov Polat Nurgeldiyev Perman	Annayeva Guncha Atageldi Garajayev	Bashimov Polat Annayeva Guncha	Charyyeva Saadat Bashimov Polat	Annayeva Guncha	Annayeva Guncha Bendov Maksatguly	Charyyeva Saadat Bashimov Polae	Charyyeva Saadat Bendov Maksatguly Bashimov Polat	Charyyeva Saadat Bashimov Polat

In order to update current courses, an approach based on learning outcomes has been chosen. The following stages are distinguished: organizational (preparatory); study requirements for graduates; analysis of research results, development of recommendations; approval of updates; analysis of the results of the implementation of updates, development of recommendations for correction.

At the organizational stage, an update schedule has been drawn up. The study of requirements for graduates is based on identifying the need for changes in programs by the questionnaire method. Analysis of the results of the study is based on a qualitative analysis, systematization and generalization of the responses of the questionnaires. As a result of information processing, the formation of new competencies is possible.



# Courses to update

Name of the course to be upgraded	Person/teacher/department/faculty responsible for the course upgrade	What has to be upgraded in the course?	Deadlines
Radio electronics	Bashimov Polat Bendov Maksatguly	Modern digital electronic devices, their features. The role of satellite radio navigation systems in creating a planning-high-altitude base	04.2020
Metrology and standardization	Bashimov Polat Myradov Yolly	Innovative methods of rationing geodetic works and the creation of a single local coordinate system taking into account international standards	04.2020
Geodysic equipment	Bashimov Polat Nurgeldiyev Perman	Technology for processing data from geodetic instruments to determine deformations in buildings and structures under construction. Classification of geodetic software by scope and structural elements	04.2020

# Courses to update

Name of the course to be upgraded	Person/teacher/department/faculty responsible for the course upgrade	What has to be upgraded in the course?	Deadlines
The calculated theory of the results of geophysical measurements	Annayeva Guncha Atageldi Garajayev	Modern methods of leveling and assessing the accuracy of geodetic networks. The use of computer programs in the processing of geodetic measurements	04.2020
Geodysic astronomy	Bashimov Polat Annayeva Guncha	Mathematical processing of the results of approximate astronomical observations. Modern tools used in geodesic astronomy and their design features	04.2020
Photogrammetry	Charyyeva Saadat Bashimov Polat	Characteristics of digital photogrammetric systems. Application of modern photogrammetry methods in construction work, in the study of deformations of structures and building materials	04.2020

# Courses to update

Name of the course to be upgraded	Person/teacher/department/faculty responsible for the course upgrade	What has to be upgraded in the course?	Deadlines
Cartography	Annayeva Guncha	Methodology for creating digital models of geographical maps and plans. Possibilities for applying the results of geodetic calculations to an electronic map	05.2020
Geoinformation systems	Annayeva Guncha Bendov Maksatguly	Features of the use of applied GIS programs and vectorizer programs in the management of construction and transport works. Using GIS for spatial modeling and visualization of various types of data	05.2020
Inter-Earth learning	Charyyeva Saadat Bashimov Polae	The possibility of creating a network of differentiated stations using satellite technology for engineering and geodetic surveys	05.2020

# Courses to update

Name of the course to be upgraded	Person/teacher/department/faculty responsible for the course upgrade	What has to be upgraded in the course?	Deadlines
Engineering geodetic studies	Charyyeva Saadat Bendov Maksatguly Bashimov Polat	Analysis of modern methods for thickening the reference geodetic network at the construction site. Innovations in geodetic research on the deformation of structures and roads	06.2020
Space geodesy	Charyyeva Saadat Bashimov Polat	Using the results of space research to create integrated information management systems. Analysis of innovative methods of space geodesy for earthquake-resistant construction of buildings and structures	06.2020





# Criteria for teacher selection for trainings

When selecting teachers, it is necessary to consider:

- ✓ The candidate must comply with the direction and educational complex;
- ✓ Work experience of at least 3 years;
- ✓ Basic education in the field of Surveying and Information Technology;
- ✓ Computer literacy;
- ✓ Motivation (application of acquired knowledge in practice)
- ✓ Specialist in the development of educational modules / disciplines, who will be responsible for the analysis, updating and development of educational modules at the university.



# Teacher that will develop new courses

1. **Bashimov Polat** – Head of the department “Geodesy”
2. **Myradov Yolly** – Head of educational department, 15 years experience in international projects. Knowledge of computer technology, training platforms in the construction industry, head of the department of road construction, work with graphics. Successful participation in international projects: the TEMPUS project (development and implementation of an eLearning quality management system in Central Asian universities); project TEMPUS (development and implementation of the specialty Energy Management on the basis of blended learning in universities of Kazakhstan and Turkmenistan).
3. **Atageldi Garajayev** – Head of the department “Road construction”, 9 years experience in international projects. Knowledge of computer technology, training platforms in the construction industry, head of the department of road construction, work with graphics. Successful participation in international projects: the TEMPUS project (development and implementation of an eLearning quality management system in Central Asian universities); project TEMPUS (development and implementation of the specialty Energy Management on the basis of blended learning in universities of Kazakhstan and Turkmenistan).



# Equipment & Software

Equipment/ Software	Name of the person(s) responsible for the equipment/software installation	Occupation of the responsible persons	Contact information of the responsible persons
Equipment	Annayeva Guncha	Teacher of the department “Geodesy”	<a href="mailto:buton-annayeva@rambler.ru">buton-annayeva@rambler.ru</a>
	Bashimov Polat	Head of the department “Geodesy”	
Software	Atageldi Garajayev	Head of the department “Road construction”	<a href="mailto:ata8984@mail.ru">ata8984@mail.ru/</a> <a href="mailto:alyhan2019@hotmail.com">alyhan2019@hotmail.com</a>
	Bendov Maksatguly	Head of the department “Computer Technologies”	<a href="mailto:bent@yandex.com">bent@yandex.com</a>
	Nurgeldiyev Perman	Teacher of the department “Computer Technologies”	<a href="mailto:permannur@gmail.com">permannur@gmail.com</a>



# Dissemination plan

1. Project Responsibilities
  - Y. Myradov
  - A. Garajaev
  - M. Bendov
2. Review and preparation of materials for project coordination meetings;
3. Speeches by the project coordinator on the work done at the academic council of the institute;
4. Development of a project work plan;
5. Work with the Department of Geodesy (teaching staff and students);
6. Conducting a survey;
7. Dissemination of project information at the institute
8. Meetings with national and partner institutions and discuss the status of the project;
9. Organization of trainings and seminars for employees of the institute;
10. Work with the public;
11. Conducting a meeting with university project staff.



# Implemented dissemination activities

Open Day. Meetings of schoolchildren with employees of the institute were held: Y. Myradov talks about international projects.



# Implemented dissemination activities



# Implemented dissemination activities

Conducting a meeting with university project staff



# Implemented dissemination activities

Scientific Council of the Turkmen State architecture and construction institute: Speech by Y. Myradov on the first coordination meeting held in March 2019 at the Technical University of Berlin, Germany, talks about international projects.





# Questionnaire for students

This questionnaire is one of the methods of monitoring the quality of educational activities in accordance with the developed program of action for the project “NICOPA-new and innovative training programs for precision agriculture”.

Object conducted questionnaire are students TSACI all specialties faculty road construction 1- 3 -th courses.

The subject of the survey is the quality of higher specialized technical education.

The purpose of the questionnaire is to clarify and analyze the opinions of students about the quality of specialized education in the university in which they study.

The objectives of the survey are:

- ✓ identify the main factors that positively affect the quality of education at the institute ;
- ✓ to find out the students opinion on suitability in the future in the production of knowledge obtained at the TSACI ;
- ✓ to find out how students evaluate the educational process of their graduating department;
- ✓ to find out how, in the students opinion, the “NICOPA” project can affect the quality education at TSACI.



# Questionnaire for students

## Conclusion on the report

Most survey participants are generally satisfied with the quality of education received. This shows that the educational process and everything connected with it meets the requirements for educational services in general. However, on the basis of the studies, problems related to technical equipment and organizational issues regarding the library's work were identified. In the future, the actual direction is the development of a set of measures to improve the infrastructure of a higher educational institution.



# Quality Assurance Plan

Name, Surname	Occupation	Organization	Contact info (email)
Myradov Yolly	Dean of the Faculty of Economics and Management	TSACI	<a href="mailto:yolly1605tm@mail.ru">yolly1605tm@mail.ru</a>
Atageldi Garajayev	Head of the department "Road construction"	TSACI	<a href="mailto:ata8984@mail.ru">ata8984@mail.ru/</a> <a href="mailto:alyhan2019@hotmail.com">alyhan2019@hotmail.com</a>
Bendov Maksatguly	Head of the department "Computer Technologies"	TSACI	<a href="mailto:bent@yandex.com">bent@yandex.com</a>
Bashimov Polat	Head of the department "Geodesy"	TSACI	



# Quality Assurance Plan

The Plan provides for two types of procedures:

- carrying out the procedure with the evaluation of work by external experts;
- carrying out the procedure with an assessment of the work within the educational organization.

Main functions:

- ✓ execution control;
- ✓ conformity control of the results of mastering basic educational programs;
- ✓ identification of inconsistencies, deficiencies and violations;
- ✓ preparation of proposals for the adoption of measures aimed at the prevention, suppression and elimination of violations;
- ✓ monitoring of the implementation of the elimination of identified violations;
- ✓ information support of educational control activities;
- ✓ participation in activities related to issues related to the project.



# PASENSO

Türkmenistanyň Maliýe we ykdysadyýet ministrliginiň Yuridik şahslary we maýa goýum taslamalary döwlet tarapyndan bellige almak bölümi tarapyndan "BELLIGE ALYNDY"

"TASSYKLAÝARYN"

Türkmenistanyň Bilim ministri

M. Geldinyazow M. Geldinyazow

" " 2019 ýyl.

No 44/2019

" 4 " 09 2019 ýyl.

Türkmen döwlet binagärlik-gurluşyk institutynyň  
TERTIPNAMASY

Türkmen döwlet binagärlik-gurluşyk institutynyň tertipnamasyna  
GOŞMACA

1. Tertipnamanyň başlangyç tesimlerini aýtdedip, aşakdaký görüşi beýan etmeli:

Su Tertipnama Türkmenistanyň Konstitusiasynyň, Rajat kodeksiniň, "Karhanalar hakynda", "Bilim hakynda" Türkmenistanyň kanunlarynyň, Türkmenistanyň Prezidentiniň 2014-njy ýyly 20-ijr. sanlynda çykaran 13552-nji karary bilen tassyklan "Döwlet ýokary hünär bilimi edaralary hakynda Düzgünnamanyň" we Türkmenistanyň beýleki kadalaşdyryjy hukuk namalarynyň esasynda işlenip düzüldi.

Su Tertipnama hünär, ruhy we sazlaşykly terbiýe, raýatlygyň kemala gelmegi we kämilleşmegi üçin okaýan talyplara durmuş we bilim hyzmatlaryny üpjün etmek boýunça ýokary okuw mekdebinin umumy guramasy üçin taýýarlandy.

Turkmen state architecture  
and construction institute  
school of economics and  
business



# PASENSO

# Turkmen state architecture and construction institute school of economics and business





TÜRKMENISTANYŇ BILIM MINISTRILIGI  
TÜRKMEN DÖWLET BINAGÄRLİK-GURLUŞYK INSTITUTYNYŇ  
YKDYSADYYET WE BIZNES MEKDEBI  
MINISTRY OF EDUCATION OF TURKMENISTAN  
TURKMEN STATE ARCHITECTURE AND CONSTRUCTION  
INSTITUTE SCHOOL OF ECONOMICS AND BUSINESS

## ŞAHADATNAMA CERTIFICATE

YB № 002203

Türkmenistanyň Bilim ministrliginiň  
№ 1-29-26-189 ygtyýamamasy Ministry of Education of Turkmenistan  
Licence No. 1-29-26-189

Şu şahadatnama ATAYEV AZAT KAKAMYRADOWICE  
*(okazy tamamlanyn familiýasy we atanyň ady)*  
onuň hakykätindäni hem 2019-njy ýylyň 18-nji fewralyndan, 2019-njy ýylyň 11-nji iýunyňa çenli.

Ykdysadyýet we biznes mekdebinde okandyy we İlis dil  
*(başlangyç)* okuwyny üstünlikli tamamlandygy barada berildi.  
*(okazyň ady)*

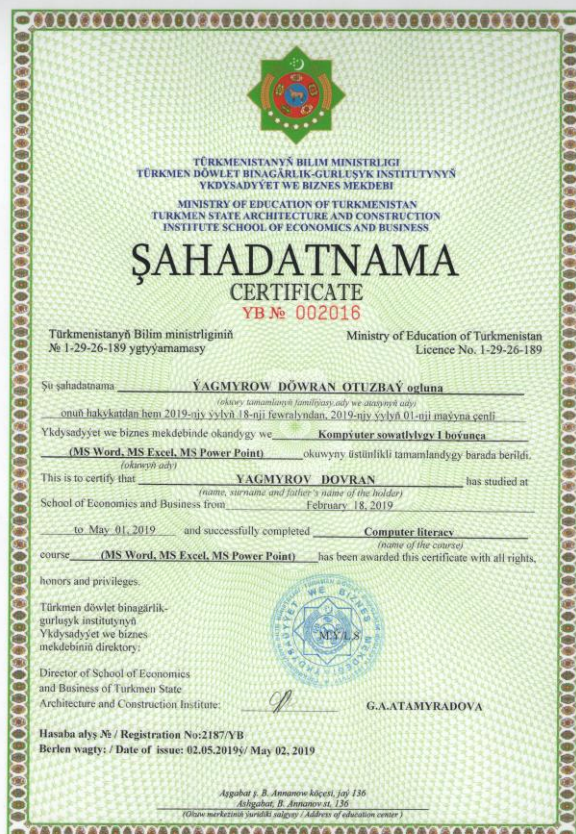
This is to certify that ATAYEV AZAT has studied at  
*(name, surname and father's name of the holder)*  
School of Economics and Business from February 18, 2019  
to June 11, 2019 and successfully completed English language  
*(name of the course)*  
course (for beginners) has been awarded this certificate with all rights,  
honors and privileges.


Türkmen döwlet binagärlik-guruluşyk institutyň  
Ykdysadyýet we biznes mekdebinin direktory:

Director of School of Economics and Business of Turkmen State  
Architecture and Construction Institute:  G.A.ATAMYRADOVA

Hasaba alyş № / Registration No: 2374/YB  
Berlen wagty / Date of issue: 12.06.2019/June 12, 2019

*Aşgabat ş. B. Ananow mekdebi, juy 136  
Aşgabat, B. Ananow ş. 136  
(Okuw merkeziniň yuridiki salgysy / Address of education center)*





TÜRKMENISTANYŇ BILIM MINISTRILIGI  
TÜRKMEN DÖWLET BINAGÄRLİK-GURLUŞYK INSTITUTYNYŇ  
YKDYSADYYET WE BIZNES MEKDEBI  
MINISTRY OF EDUCATION OF TURKMENISTAN  
TURKMEN STATE ARCHITECTURE AND CONSTRUCTION  
INSTITUTE SCHOOL OF ECONOMICS AND BUSINESS

## ŞAHADATNAMA CERTIFICATE

YB № 002016


Türkmenistanyň Bilim ministrliginiň  
№ 1-29-26-189 ygtyýamamasy Ministry of Education of Turkmenistan  
Licence No. 1-29-26-189

Şu şahadatnama YAGMYROW DÖWRAN OTUZBAÝ ogluna  
*(okazy tamamlanyn familiýasy we atanyň ady)*  
onuň hakykätindäni hem 2019-njy ýylyň 18-nji fewralyndan, 2019-njy ýylyň 01-nji maýyňa çenli.

Ykdysadyýet we biznes mekdebinde okandyy we Kompýuter sowatlylygy I boýunça  
*(MS Word, MS Excel, MS Power Point)* okuwyny üstünlikli tamamlandygy barada berildi.  
*(okazyň ady)*

This is to certify that YAGMYROW DÖWRAN has studied at  
*(name, surname and father's name of the holder)*  
School of Economics and Business from February 18, 2019  
to May 01, 2019 and successfully completed Computer literacy  
*(name of the course)*  
course (MS Word, MS Excel, MS Power Point) has been awarded this certificate with all rights,  
honors and privileges.

Türkmen döwlet binagärlik-guruluşyk institutyň  
Ykdysadyýet we biznes mekdebinin direktory:

Director of School of Economics and Business of Turkmen State  
Architecture and Construction Institute:  G.A.ATAMYRADOVA

Hasaba alyş № / Registration No: 2187/YB  
Berlen wagty / Date of issue: 02.05.2019/May 02, 2019

*Aşgabat ş. B. Ananow mekdebi, juy 136  
Aşgabat, B. Ananow ş. 136  
(Okuw merkeziniň yuridiki salgysy / Address of education center)*





# Thank you for you attention!



Co-funded by the  
Erasmus+ Programme  
of the European Union

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