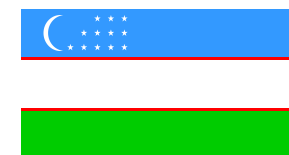


**Periodical Report
6 Months of project
implementation**

New and Innovative Courses for Precision Agriculture



**TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES NAMED
AFTER MUHAMMAD AL-KHWARIZMI,
FACULTY OF COMPUTER ENGINEERING**

PhD. Temurbek Kuchkorov

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

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



Work plan

МИНИСТЕРСТВО ПО РАЗВИТИЮ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ И КОММУНИКАЦИЙ РЕСПУБЛИКИ УЗБЕКИСТАН
ТАШКЕНТСКИЙ УНИВЕРСИТЕТ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ ИМЕНИ МУХАММАДА АЛ-ХОРАЗМИЙ



«УТВЕРЖДАЮ»
Ректор
Т.З. Тешабаев
«16» «12» 2018 г.

ПЛАН мероприятий по реализации проекта "New and Innovative Courses for Precision Agriculture (NICOPA)" на 2018 -2021 годы

№	Мероприятия по плану	Ссылка на рабочий план Проекта	Сроки выполнения	Примечание
1	Разработка плана мероприятий по реализации проекта в ТУИТ.	1.1 – 5.2	15.12.2018	Утверждение плана и формирование рабочей группы проекта с распределением обязанностей.
2	Составить перечень преподаваемых дисциплин для модернизации и внедрения в учебный процесс	1.1	20.12.2018	Перечень
3	а) Разработка анкет для анализа существующих учебных планов дисциплин (анкета для преподавателей, студентов, выпускников, молодых специалистов); = анкеты для заинтересованных в проекте неакадемических партнеров: потенциальные работодатели, местные объединения, представители промышленных предприятий, другие стороны, которые относятся к теме проекта б) Разработать график проведения анкетирования. в) Проведение анкетирования различных целевых групп. г) Анализ проведенного	1.1	30.12.2018	а) Анкета опроса должна полностью отражать уровень качества анализируемых учебных планов / дисциплин. Возможные вопросы для анкеты: название дисциплины, какие вовлечены факультеты и кафедры, с какого года преподаются дисциплины, количество обучающихся студентов, соотношение практических / теоретических часов и учебной нагрузки студентов. Наличие, год внедрения и «свежесть» технических средств обучения, компьютеров, программных продуктов, учебной литературы, использование периодических национальных, зарубежных тематических научно-технических журналов, наличие стажировок. в). Провести опрос преподавателей в
20	Управление проектом, включая управление проектом онлайн, ежедневное управление и координация проекта.	5.1	На протяжении всего проекта	
21	Координационные встречи	5.2	На протяжении всего проекта	
22	Обеспечение использования SKYPE/ZOOM для проведения встреч команды консорциума проекта.	5.1	На протяжении всего проекта	

Координатор проекта



Т. Кучков

МИНИСТЕРСТВО ПО РАЗВИТИЮ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ И КОММУНИКАЦИЙ РЕСПУБЛИКИ УЗБЕКИСТАН
ТАШКЕНТСКИЙ УНИВЕРСИТЕТ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ ИМЕНИ МУХАММАДА АЛ-ХОРАЗМИЙ

ERASMUS+
ПОВЫШЕНИЕ ПОТЕНЦИАЛА В ВЫСШЕМ ОБРАЗОВАНИИ

ERASMUS+

ПОВЫШЕНИЕ ПОТЕНЦИАЛА В ВЫСШЕМ ОБРАЗОВАНИИ

Проект

СОГЛАСОВАН:
Проректор по учебной работе
Ф.Агзамов
«16» «12» 2018 г.



УТВЕРЖДАЮ:
Ректор
Т.Тешабаев
«12» «12» 2018 г.

ВНУТРЕННИЙ ПЛАН
реализации мероприятий проекта:
«Новые и инновационные курсы по точному сельскому хозяйству»
«New Innovation courses of Precision Agriculture» - NICOPA

Ташкент 2018

DISSEMINATION & EXPLOITATION				
4.1	Project DISS& EXP /communication plan using a Set of Promotional Materials; Dissemination Events, Joint WEB based platform, "NICOPA+" Agreement	15.11.2018	14.11.2021	Komil Tashev Javlonbek Abdjalilov Zamira Allamuratova
4.2	Full media coverage of the project activities inclusive developing and maintenance of Joint WEB based platform	15.11.2018	14.11.2021	Dilmurod Davronbekov Yuriy Pisetskiy
4.3	Develop a set documentation on PASO with stakeholders support /purchase /install equipment /establish	01.02.2019	30.04.2020	Sherzod Sindarov Temurbek Kuchkorov Asqar Amirov
4.4	Staff training for PASO, establishing Regional /International PASO network, pilot operation	01.04.2020	30.09.2021	Sherzod Sindarov Komil Tashev
4.5	Refresh training courses for graduates in PASO	01.09.2020	31.07.2021	Dilmurod Davronbekov Yuriy Pisetskiy
4.6	International BA/ MSc Summer Schools	01.04.2020	31.04.2021	Komil Tashev Temurbek Kuchkorov
MANAGEMENT				
5.1	Management of the project including Project management online, daily project administration and coordination	15.11.2018	14.11.2021	Komil Tashev Temurbek Kuchkorov
5.2	Coordination meetings	15.11.2018	14.11.2021	All participants

Abbr.: PAL - Precision agriculture lab
VCR - Virtual Class Room
PASO - Precision Agriculture Service Office

Координатор проекта



Т. Кучков



Work group

No	Name, Surname, email	Position	Responsibility (WP, tasks according to the work plan)
1	Temurbek Kuchkorov timanet4u@gmail.com	associate professor, department of Computer systems	Coordinator, WP: 1.1, 2.1, 2.2, 2.4, 2.5, 3.1, 4.3, 4.6, 5.1, 5.2
2	Komil Tashev k.akhmatovich@gmail.com	vice rector for research and innovation	WP: 1.1, 1.2, 2.1, 2.3, 2.4, 2.5, 3.1, 4.4, 4.6, 5.1, 5.2
3	Sherzod Sindarov sh.sindarov@tuit.uz	vice rector for financial and economic affairs	WP: 1.1, 2.2, 4.3, 4.4, 5.2
4	Javlonbek Abdujalilov javlontuit@gmail.com	head of international department	WP: 1.1, 1.2, 2.1, 4.1, 5.2
5	Dilmurod Davronbekov d.davronbekov@tuit.uz	associate professor of “Mobile and radio communication” department	WP: 2.6, 4.2, 4.5, 5.2
6	Yuriy Pisetskiy yuriy.pisetskiy@mail.ru	dean of “Radio and mobile communications” faculty	WP: 1.1, 2.3, 2.6, 4.2, 4.5, 5.2
7	Asqar Amirov asqar@tuit.uz	Chief accountant	WP: 2.2, 4.3, 5.2
8	Zamira Allamuratova 74zamira@inbox.uz	teacher, department of Computer systems	WP: 1.1, 2.3, 4.1, 5.2



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
Computer vision	Temurbek Kuchkorov - Associate professor, Department of Computer systems	Upgrade methods of effective using and application in image and video processing and optimizing computer vision algorithms and real time implementation	30.09.2020
Industrial applications	Zamira Allamuratova - Teacher assistant of the department "Computer systems"	Update integration of web based applications for analytical systems	30.09.2020



Criteria for teacher selection for trainings

NICOPA Selection Criteria for teachers



NICOPA:
NEW AND INNOVATIVE COURSES FOR PRECISION AGRICULTURE
597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-1P
NICOPA Selection Criteria



NICOPA Selection Criteria for teachers

Objective:

This document contains information about selection criteria for teachers to participate in trainings planned at EU universities.

Selection Committee:

#	Full name	Position in committee	Position
1	Fayzulla Agzamov	chair	vice rector for educational affairs
2	Komil Tashev	vice chair	vice rector for research and innovation
3	Donyor Yaxshibayev	member	dean of Computer engineering faculty
4	Jamoljon Djumanov	member	head of department, Computer systems
5	Temurbek Kuchkorov	member	associate professor, Computer systems department, local coordinator
6	Javlonbek Abdujalilov	member	head of International department
7	Zamira Allamuratova	secretary	assistant teacher, Computer systems department

Compulsory (scanned) Documents:

1. Photocopy of international passport (only main/photo page);
2. Academic and/or professional Curriculum Vitae (CV);
3. English language certificate (if applicable);
4. Motivation letter;
5. Recommendation letter;
6. Other Documentation (optional).

Selection Criteria:

The selection procedure is established according to the minimum requirements set by the European Commission. The selection procedure guarantees the transparency of the selection process and an equitable treatment of individual applications. The selection process is starting with shortlisting. The short list will be based on an interview by national (local) coordinator persons for initial "filtering". This initial filtering based on rating contributes to the selection procedure. Rating is done by national (local) coordinator and is based on this standard evaluation form.

The Selection Committee will receive a summary of ratings and (filtered) proposals from the project administration, where we also will take care of all quotas as planned in the proposal. Each applicant will be interviewed. Based on the ratings and interviews the Selection Committee will provide a proposal for the project leader before places being offered on the mobility programme.

NICOPA:



NICOPA:
NEW AND INNOVATIVE COURSES FOR PRECISION AGRICULTURE
597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-1P
NICOPA Selection Criteria



Table.1 Rating for NICOPA point score

NICOPA Point Score	Code Rating
80-100	Outstanding
60-80	Highly competent
40-60	Competent
20-40	Not yet competent
0-20	Not achieved

Prerequisites:

1. Working experience in TUIT for at least 3 years;
2. Lecturing experience of at least 2 years;
3. Basic education in the field, informatics and information technologies, radio electronics, computer/software engineering, agroengineering, astronomy.

Table.2 NICOPA selection criteria

№	Applicant:	Full Name		
		Criteria Items	Points max.	Points scores
1.	Level of English language (at least intermediate)		20	
2.	Average of grades in presented certificates		20	
3.	Prior learning in subjects related with trainings within the project		20	
4.	Motivation letter		20	
5.	Bonus points (max. 5 points each) -publications in the related sphere -conference presentations -teaching experience -developed related syllabi		20	
TOTAL Points (..... / 100)			100	
Evaluator is encouraged to conduct a personal/phone interview where this is deemed necessary to fairly assess the candidate's qualifications				
Additional Comments:				

NICOPA:
NEW AND INNOVATIVE COURSES FOR PRECISION AGRICULTURE
Joint Project: Capacity Building in the Field of Higher Education ERASMUS+
597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-1P



Teacher that will develop new courses

#	Teacher/participant	Position	e-mail
1	Temurbek Kuchkorov	Associate professor, Department of Computer systems	timanet4u@gmail.com
2	Zamira Allamuratova	Teacher assistant of the department “Computer systems”	74zamira@inbox.ru
3	Murodali Nazarov	Senior lecturer, Department of Mobile communication technologies	m.nazarov@tuit.uz
4	Komil Tashev	Associate professor, vice rector for research and innovation	k.akhmatovich@gmail.com
5	Yuriy Pisetskiy	associate professor, dean of “Radio and mobile communications” faculty	yuriy.pisetskiy@mail.ru



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	Yuriy Pisetskiy Asqar Amirov	Dean of “Radio and mobile communications” faculty Chief accountant	yuriy.pisetskiy@mail.ru
Software	Temurbek Kuchkorov Asqar Amirov	Associate professor, Department of Computer systems Chief accountant	timanet4u@gmail.com



Dissemination plan

ERASMUS PLUS
HIGHER EDUCATION CAPACITY BUILDING



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



Erasmus+ Project
New and Innovative Courses for Precision Agriculture
(NICOPA)

WP4 – Dissemination and Exploitation

NICOPA strategy - plan
for Dissemination, Sustainability and exploitation

Prepared by: ECM Space Technologies GmbH

Document control data			
Document ref. :	NICOPA-WP4-ECM_V01		
Revision:	Original		
Date of issue:	01/03/2019		
Author's name:	A. Sterenharz/ECM	Status:	Released

1

New and Innovative Courses for Precision Agriculture

NICOPA strategy - plan
for Dissemination, Sustainability and exploitation

Effective dissemination is essential in order to make sure that the project and their effect will be visible. The NICOPA consortium will be disseminating the results of the project to multiple audiences, via different channels, at different intervals, etc. The aim of this dissemination strategy is to maximize the impact, visibility and credibility of the project. The objectives of the strategy are as follows:

- Design, develop and regularly update the NICOPA website.
- Share information about the project and publish its findings via both traditional media (e.g. press relation) and digital media (e.g. social media)
- Transfer knowledge to industry about changes in academic area - the creation of new training materials, educational resources and the new curricula.
- Support the development of a strategy for the exploitation.

1. Strategy of activities

Dissemination & exploitation activities will address the following target groups and be organized following:

- Event-based dissemination. The project will organize a minimum of 3 annual dissemination workshops to inform and engage with the national academic communities. The Final project Conference will address a broader audience bringing together additionally policy makers, NGOs, education authorities, other stakeholders important to the best practice proliferation in the countries.

- Web-based dissemination. The project website will serve as a major interface and community building platform. In addition to being a repository to all tangible outcomes (training and teaching materials, webinars, results of the Feasibility Study, Repository entry point, methodological materials, reference materials, etc.), it will enable community activities (blogs, social networks interface, FAQ, etc.). On top of that, all partners will use other available web-based dissemination channels (own websites, mailing lists, community resources). All target groups will be addressed.

- Traditional dissemination. The project will produce the set of traditional promotional materials, it will publish major results in media (general public) and professional journals (academic community). Additionally, the project will organize several briefing meetings with policy making stakeholders to enable a multiplier effect.

2. Exploitation planning and exploitation of the results:

- Exploitation planning. The project will plan the exploitation (including how to bear running costs) of such principle outcomes as the set of developed methodological materials, the Repository, the website, etc. for the period of 3-5 years after the project end.
- Exploitation nature: public nature - openly available for re-use.
- Involving into practical aspects of dissemination/exploitation: involving external stakeholders in Evaluation trial and in developing practical tutorials during workshops to ease external exploitation and uptake.

2



Schedule of dissemination events

#	Dissemination event	Dissemination method	Period
1	Regional meeting	Event-based	At starting of the project
2	Project announcement in web site (tuit.uz)	Web-based	January
3	Kick-off Meeting results	Event-based and web-based	March
4	Project dissemination in Educational-methodological council of TUIT	Event-based	April
5	Result of trainings	Web-based	September
6	Information about project achievements in journal “Xabar”	Traditional	October-November
7	Explore the NICOPA project through social network	Web-based	Regularly



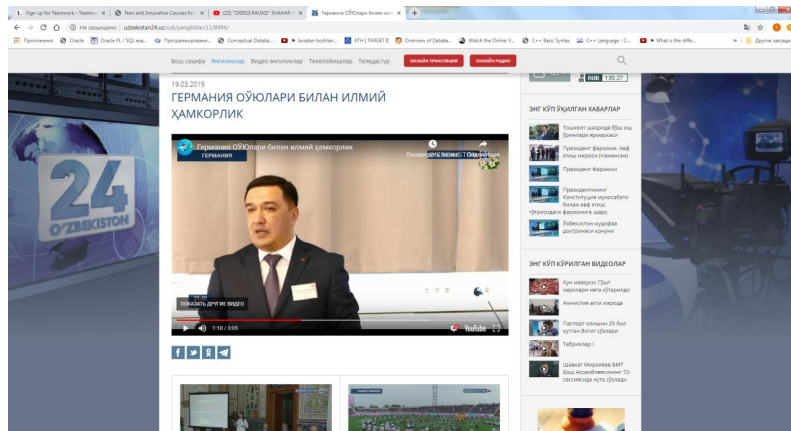
Non-consortium organizations

No	Name of Organization	Contact details
1	SE “Institute of Hydrogeology and Engineering geology”	100041, Tashkent, M.Ulugbeksky District, Olimlar Str, 64-a Phone: +998 71) 262-75-92 hydrouz@olam.uz
2		
3		



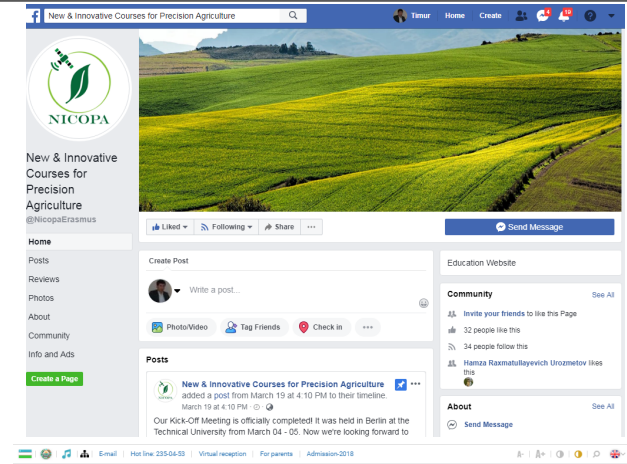
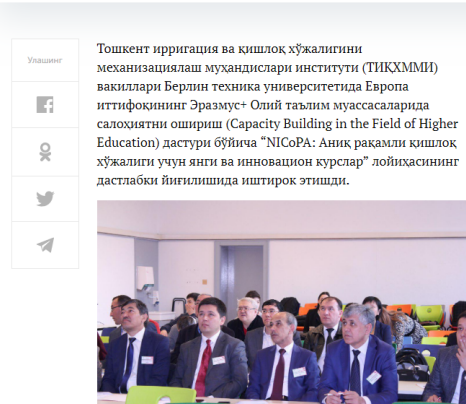
Dissemination (internet links)

1. <https://tuit.uz/en/new-and-innovative-courses-for-precision-agriculture-nicopa>
2. <http://tiame.uz/oz/article/deuch>
3. <http://uzbekistan24.uz/uzk/yangiliklar/11/8904/>
4. <https://kun.uz/news/2019/03/09/ozbekiston-otm-germaniya-universitetlari-bilan-hamkorlikni-kuchaytirmoqda>
5. <https://www.facebook.com/NicopaErasmus/>



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Ўзбекистон ОТМ Германия университетлари билан ҳамкорликни кучайтirmoқда



UNIVERSITY STRUCTURE ACTIVITY FOR STUDENTS FOR APPLICANTS NEWS CONTACTS

- Quick links
- Faculties
- Departments
- Centres and Departments
- For the applicant
- For the students
- Competitions
- Normative Documentation
- Researcher

NEW AND INNOVATIVE COURSES FOR PRECISION AGRICULTURE (NICOPA)



New and Innovative Courses for Precision Agriculture (NICOPA). Project is funded by Erasmus+ Implementation 2018-2021 years.
Coordinator: Temurbek Kuchkorov, Associate Professor
Tel: +998977082210
Email: timanet4@gmail.com
Website: <https://nicopa.eu/index.php>



Dissemination (in Educational and Methodological Council)



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

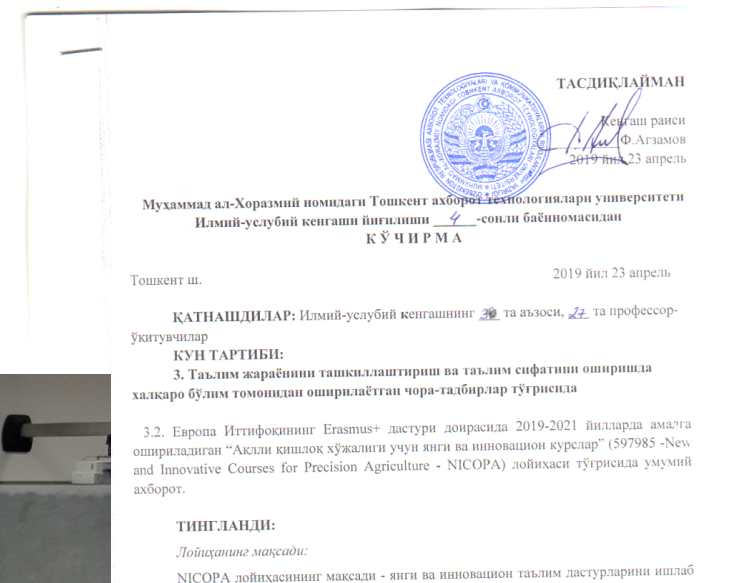
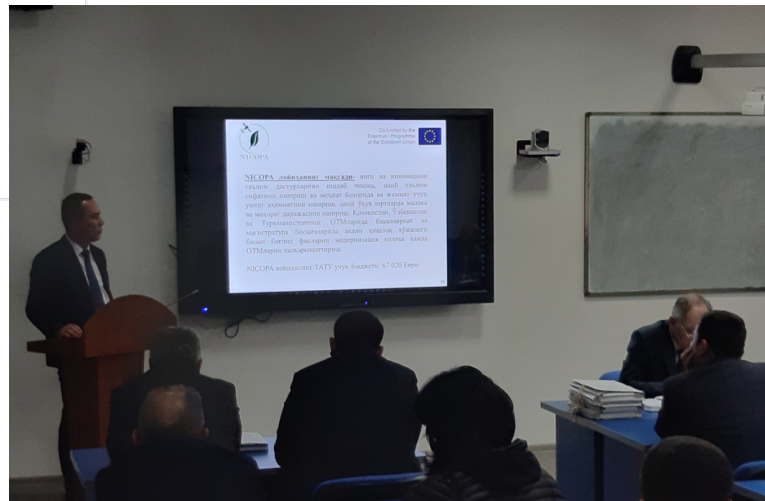


KA2 ERASMUS+ PROJECT: 597985-EPP-1-2018-1-KZ-EPPKA2-CBHE-JP


“Ақлли кишлок хўжалиги учун янги ва инновацион
курслар”
(New and Innovative Courses for Precision Agriculture)

Европа иттифокининг Эрасмус+ дастури доирасида олиб
борилаётган лойиҳа


ТАТУда лойиҳа координатор: Темурбек Кучкоров
timanet4u@gmail.com
23/04/2019



Questionnaire for students




STUDENT QUESTIONNAIRE / NICOPA




Indicative Questions to determine the level of awareness about the NICOPA project among students and teachers of Tashkent University of Information Technologies named after Muhammad al-Khwarizmi

No	The questionnaire
1	Do you know about the ERASMUS+ program?
2	Do you know about the project NICOPA? If you know anything about it, please inform us from whom or how have you found out this information.
3	Evaluate the necessity of the educational process modernization 1 – no need 2 – some aspects need 3 – only special disciplines are need 4 – need 5 – high need
4	Do you think that teaching of special disciplines is at a satisfactory level?
5	Do you think that the amount of special disciplines is at a satisfactory level?
6	Do you think that the content of special disciplines is at a satisfactory level?
7	Do you think that proportion between theoretical (i.e. lectures) workload and practical (i.e. seminars, laboratorial practice, self-study) workload of special disciplines is at a satisfactory level?
8	Do you think that equipment in laboratories and computer classrooms, as well as state of computers' operational systems are at the satisfactory level for the purposes of the study of disciplines in the field of Precision Agriculture?
9	Do you think that literature at the libraries, such as books, academic publications; electronic sources, academic journals etc. are up-to-date and are able to improve the quality of learning and increase your knowledge of special disciplines?



STUDENT QUESTIONNAIRE / NICOPA



10	What do you think should be also done in order to upgrade the quality of teaching and learning of special disciplines?
11	Do you think that new approaches, such as blended learning and e-learning are able to improve the quality of knowledge acquisition?
12	What do you think about the participation of your University in international projects along with the leading European universities? 1 – Positive 2 – Indifferent 3 – Negative
13	The project NICOPA is based on years of European experience. In this regard, do you consider it right to use it in the modernization of the teaching process?
14	What do you think, will the acquisition of practical skills in Precision Agriculture increase your professional competence?
15	How much are you interested in the opportunity to get a certificate that is equivalent to the ones of the leading universities? rate from 1 to 3 1 – not interested 2 - interested 3 - highly interested
16	How do you consider, whether the use of a new laboratory will increase your interest in Precision Agriculture?
17	Are you interested to get more information about the purpose, objectives and the scope of the NICOPA project?
18	Would you like to participate in the project?

For Teachers:

19. Will the project NICOPA improve you professional skills as high school teacher?



Quality Assurance Group

Name, Surname	Occupation	Organization	Contact info (email)
Doniyor Yaxshibaev	Phd, Dean of Computer engineering faculty	TUIT	d.yaxshibayev@tuit.uz
Jamoljon Djumanov	DSc, Head of department of Computer systems	TUIT	jamoljon@mail.ru
Temurbek Kuchkorov	Phd, Associate professor, Department of Computer systems	TUIT	timanet4u@gmail.com



Concept of PASO (draft)

Концепция / задачи PASO

Abbr: PASO - Precision Agriculture Service Office

PASO офис создаётся в каждом целевом университете при поддержке неакадемических организаций (партнёров университета, базовых предприятий, фермерских хозяйств, агротехнических предприятий) в удобной университету организационной форме исходя из местных условий.

Возможная сфера деятельности PASO:

- маркетинг потребностей в области повышения эффективности сельского хозяйства (повышения урожайности) и снижения вредного воздействия агротехнологий на окружающую среду и разработка соответствующих услуг и сервисов для различных заинтересованных целевых групп.
- разработка и проведение курсов обучения и/или повышения квалификации различных целевых групп,
- маркетинг рынка образовательных услуг, изучение требований работодателей, изучение соответствия знаний выпускников ВУЗа требованиям работодателей, информационное обеспечение периодического проведения в ВУЗе ревизии действующих учебных курсов с целью замены/ модернизации устаревших учебных планов и разработки новых,
- изучение потребности агротехнических предприятий и фермерских хозяйств в услугах по повышению квалификации профессиональных кадров,
- поиск заинтересованных организаций и спонсоров.

PASO - офисы могут рассматриваться как составная часть новых или действующих в ВУЗах студенческих инновационно - внедренческих бюро (напр., студенческое конструкторское бюро, студенческое научное бюро) бизнес-инкубаторов, технопарков или их подразделений, возможно

создание PASO-бюро на базе создаваемых по проекту новых лабораторий с целью расширения их возможностей.

PASO-бюро могут оказывать услуги, базирующиеся на глубоком освоении учебных материалов, создаваемых в рамках проекта новых курсов, дисциплин; инженерно-технические работы по запросу / заказу заинтересованных лиц/организаций.

Стратегическая задача PASO – создать условия для развития результатов проекта после его завершения и способствовать поступлению финансовых средств для поддержания и развития созданной проектом лабораторной базы.

Организационно - правовая форма PASO может быть различной: от структурного подразделения университета до самостоятельного юридического лица.

Модель бизнес развития сервис-офиса (СО)

1. Анализ окружающей среды

Идентификация целевых групп потенциальных пользователей

напр., студенты, преподаватели, работодатели, предприятия, различные социальные группы (школьники, абитуриенты, выпускники ВУЗов, профессиональные работники, безработные, пенсионеры, домохозяйки,...)

2. Анализ/поиск/привлечение источников финансирования деятельности

напр., бюджет ВУЗа, спонсоры, выполнение услуг для целевых групп

3. Вовлечение студентов в активности СО

4. Обмен информацией, планирование/согласование совместных мероприятий с СО других ВУЗов консорциума



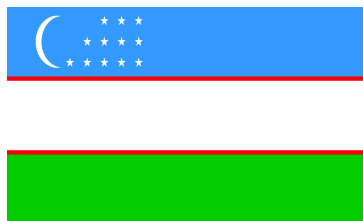
Communication

For communication following technics are using:

- E-mail, Skype, ZOOM, IMO, Telegram, WhatsApp (with EU, CA and UZ partners),
- Telephone (with UZ partners)

There are no problems with communication





Thank you for you attention!



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