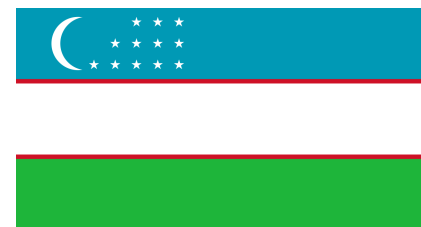


**Kick-Off Meeting
Berlin
4-5 March 2019**

**New and Innovative
Courses for Precision
Agriculture**



**NATIONAL UNIVERSITY OF UZBEKISTAN
NAMED AFTER MIRZO ULUGBEK**

Dr. RASUL RAKHMONOV

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

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





University Profile: Short History; Facts & Figures

**1918 –
Turkestan
People’s
University**

**1920 –
Turkestan
State
University**

**1923 –
Central
Asian State
University**

**1960 –
Tashkent
State
University**

**2000 –
National
University of
Uzbekistan**





University Profile: Short History; Facts & Figures

Scientific research institution

Kizilkum Oyokgetma science research station(1931)

Agricultural and geobotanic SRI

Pamir biostation science research institute(1931)

Central Asian geologic research Institute (1931) Tashkent

Mechanic-mathematician SRI (1941)

Chemical SRI (1943)

Geology-geography SRI (1943)

Biology SRI (1943)

History-philology SRI (1943)

Botanic SRI (1943)

Uzbekistan Academy of Science (1943)



THE GENEALOGIC TREE OF NATIONAL UNIVERSITY OF UZBEKISTAN



Universities

Tashkent State Institute of oriental languages(1991)

Tashkent State institute of Law (1991)

Kazakh high pedagogic educational Institute (1925) Tashkent

Tajik agronomy institute (1925) Dushanbe

Tajik rural agricultural institute (1931) Hojand

Turkmen zooveterinary institute (1930) Ashhabat

Tajik high educational institute (1932) Hojand

Central Asian cotton deal institute (1929) Tashkent

Central Asian silk institute (1931) Tashkent

Central Asian medical institute (1931) Tashkent

Central Asian Plan Institute (1931) Tashkent

Samarkand State University (1933) Samarqand

Tashkent state Pedagogic Institute (1935)

Turkistan East Institute (1918) Tashkent



University Profile: Short History; Facts & Figures



Faculties- **14**



Academic research labs- **32**



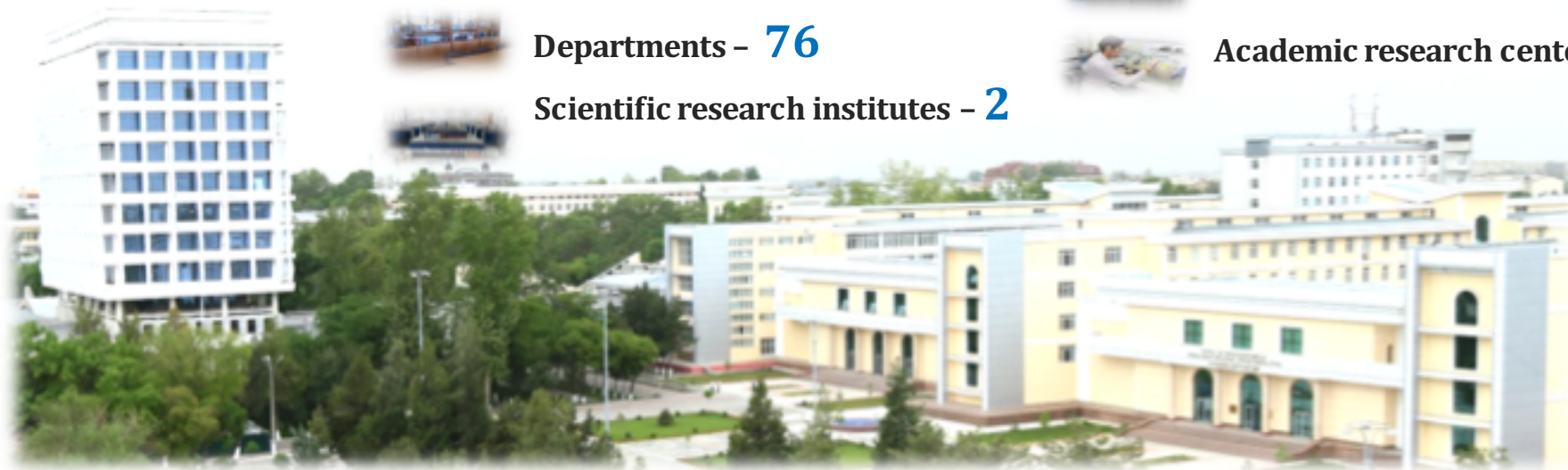
Departments - **76**



Academic research centers- **3**



Scientific research institutes - **2**



Rare objects - **2**



Library - **3,5** mln books and magazines



Museums - **5**



Lyceums - **2**



11 000 students

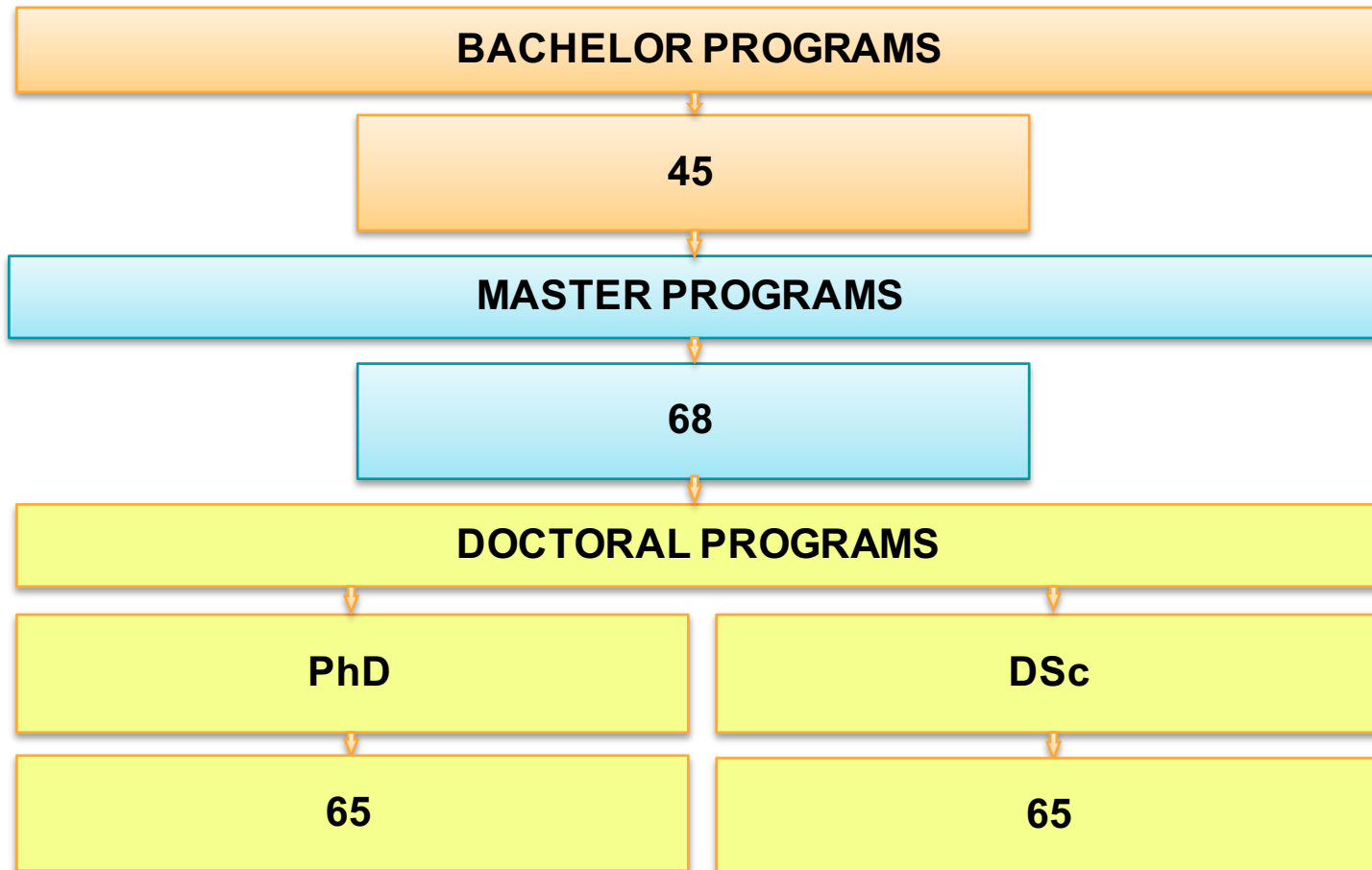
professors - **1000**

academicians - **34**;

Doctors Sc.- **189**; PhD- **363**



University Profile: Short History; Facts & Figures





University Profile: Short History; Facts & Figures



148 MoU and Agreements with universities **32** countries



JOINT FACULTY AND DOUBLE DEGREE PROGRAMS

Present



NUU-MSU Scientific Educational Center, Training Center of Russian Language and Russian History, Law



Uzbek-Israel joint faculty of Innovational Technologies and Mathematic engineering with HIT



Joint Bachelor and Master Program with KFU: Cartography and Geoinformatics, Economic and Social Geography



Joint department with Moscow Timiryazev Agricultural Academy: Soil Sciences



Joint Master Program with MSU: Psychology, Sociology, Geodesy and Geodinamics



Joint Master Program with HIT: Digital Medicine



Joint Master Program with KFU: Bioinformatics and Molecular Biology



Joint Master Program with CBNU: Neurocomputing, Smart Management Systems



University Profile: Faculties



➤ **Mathematics**



➤ **Physics**



➤ **Chemistry**



➤ **Biology**



➤ **Geology and GIS**



➤ **Geography and natural resources**



➤ **Uzbek-Israel joint faculty of Innovative Technologies and Mathematic engineering**



➤ **Social Sciences**



➤ **History**



➤ **Journalism**



➤ **Economics**



➤ **Foreign Philology**



➤ **Taekwondo and Sport management**



➤ **Joint bachelor program "Geology" Kazan Federal University**



Faculties Participating in the Project

Faculty of Physics

Department of Semiconductors and Polymers Physics

Department of Astronomy and Atmospheric physics

Faculty of Geography and Natural Resources

Department of Geodesy and Geoinformatics

Department of Cartography

Faculty of Biology

Department of Soil sciences



BA/MA Programs Offered by the Faculties

Faculty of Physics

Agrometeorology

Condensed Matter Physics

Physics of Semiconductor devices

Agricultural Meteorology

Faculty of Geography and Natural Resources

Photogrammetry and Remote Sensing

Geographic Information Systems

Agricultural Mapping

Geoinformation Systems and Science

Remote Sensing

Spatial Data Models

Data Acquisition and Data Integration

Geo-Databases and Distributed Architectures

Cartography and Geovisualization

Spatial Analysis

Faculty of Biology

Soil and Agroecology

Soil Sciences and Soil chemistry

Agriculture

Melioration and Soil Hydrology

Innovative technologies in soil science

Soil and climate change

Soil cover monitoring

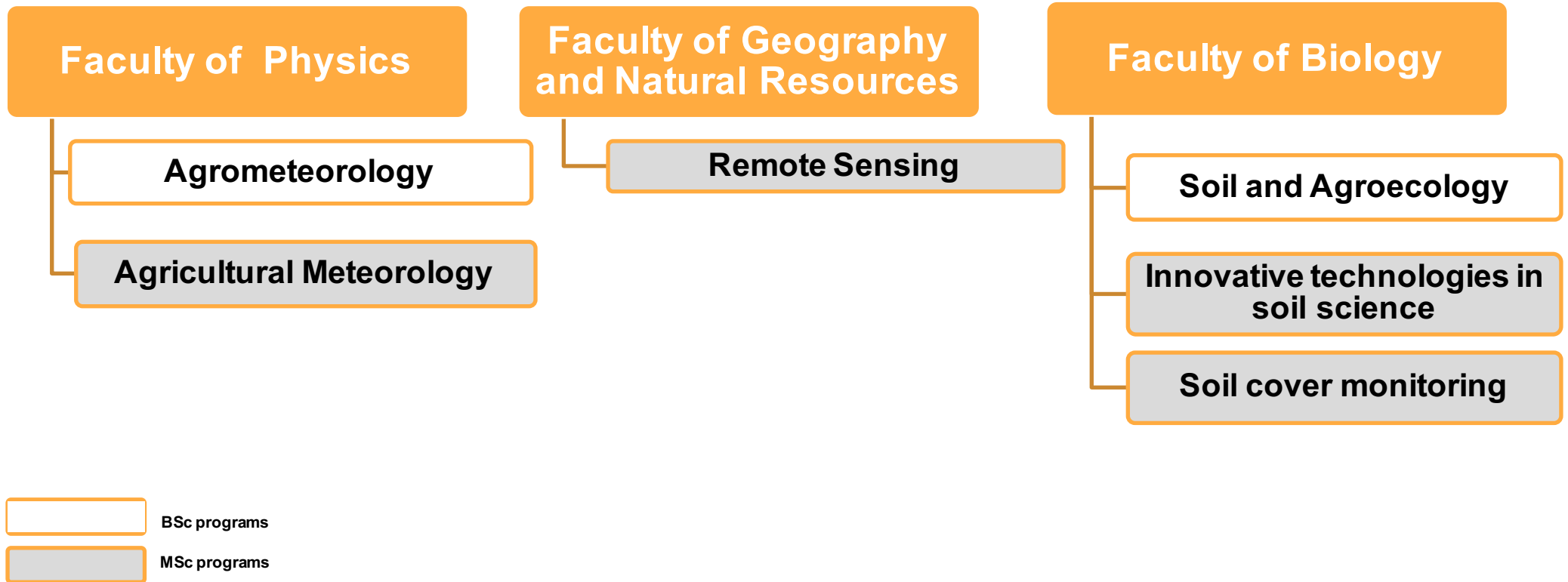
Qualitative soil assessment

BSc programs

MSc programs



Curricula/Modules Studied in the BA/MA Programs to Upgrade





New Curricula/Modules for BA/MA Programs

Faculty of Physics

Basics of the Precision agriculture – characteristics, technologies, economic efficiency, optimal use of resources

Yield sensors for Precision Agriculture

Soil physical properties and its measurement

Faculty of Geography and Natural Resources

Remote Sensing and Application of Earth and Environment related PA

Using of SENTINEL 1-2-3 imagery for agricultural field monitoring

Global Navigation Satellite Systems (NAVSTAR, GLONASS, GALILEO, etc.)

Optimizing computer vision algorithms and real-time implementations:

Faculty of Biology

Basics of the Precision agriculture – characteristics, technologies, economic efficiency, optimal use of resources

Soil physical properties and its measurement

Application of Precision Agriculture for crops growing

BSc programs

MSc programs



Working Group of the Project NICOPA

No.	Name; email	Role in project	Position
1.	Abdumanap Nasirov aanasirov1962@mail.ru	National Coordinator and contact person of the project (WP1.2 Preparation, WP2.1, 2.2, 2.3, 2.5, 2.6 Development, WP3.1 Quality, WP4.1, 4.3, 4.4, 4.5, 4.6 Dissemination, WP5.1, 5.2 Management)	Associate Professor, Head of Department of Semiconductors and Polymers Physics
2.	Rasul Rakhmonov rrakhmonov@nuu.uz	Administrative Staff (WP1.2 Preparation, WP4.1, 4.2, 4.6 Dissemination, WP 5.2 Management)	Vice-rector for International Relations
3.	Tulkin Abdullaev t.abdullaev@inbox.ru	Project Advisor (WP3.1 Quality, WP4.4 Dissemination)	Associate professor, Department of Geodesy and Geoinformatics
4.	Tokhtasin Abdrakhmonov soilecology@yandex.ru	Academic leader (WP1.1, 1.2. Preparation, WP2.1, 2.3, 2.4 Development, WP3.1 Quality, WP4.5 Dissemination)	Dean of the faculty Biology and Soil Sciences
5.	Mashkura Fakhrutdinova mashkura.fakhrutdinova@mail.ru	Researcher (WP1.1, 1.2. Preparation, WP2.1, 2.3, 2.4 Development, WP3.1 Quality, WP4.5 Dissemination)	Associate professor, Department of Soil Sciences
6.	Pavel Parchinskiy pavelphys@mail.ru	Researcher (WP1.1, 1.2. Preparation, WP2.2, 2.4 Development, WP3.1 Quality, WP4.4, 4.5, 4.6 Dissemination)	Associate professor, Department of Semiconductors and Polymers Physics
7.	Ilkhomjon Abdullaev ilkhomjon.abdullaev@gmail.com	Project Manager (WP1.1, 1.2 Preparation, WP2.1, 2.2, 2.3, 2.4, 2.5, 2.6 Development, WP3.1 Quality, WP4.3, 4.4, 4.6 Dissemination, WP5.1, 5.2 Management)	Associate professor, Department of Geodesy and Geoinformatics
8.	Bakhtiyar Kholmatjanov b.kholmatjanov@gmail.com	Researcher (WP1.1, 1.2. Preparation, WP2.1, 2.2, 2.4, 2.5, 2.6 Development, WP3.1 Quality, WP4.1, 4.2, 4.3, 4.4, 4.5 Dissemination)	Associate professor, Department of Astronomy and Atmosphere Physics
9.	Azizjon Ruziev azizjon.ruziev84@gmail.com	Teacher (WP1.1, 1.2. Preparation, WP2.1, 2.2, 2.4, 2.5, 2.6 Development, WP4.6 Dissemination)	Senior Lecturer, Department of Geodesy and Geoinformatics
10.	Abdujalil Muminov mominov010@gmail.com	Teacher (WP1.1, 1.2. Preparation, WP2.1, 2.2, 2.4, 2.5, 2.6 Development, WP4.2, 4.3 Dissemination)	Teacher, Department of Cartography
11.	Bezkod Rakhmonov bezkod_13@bk.ru	Technical Staff (WP2.2, WP4.1, 4.3 Dissemination);	Accountant



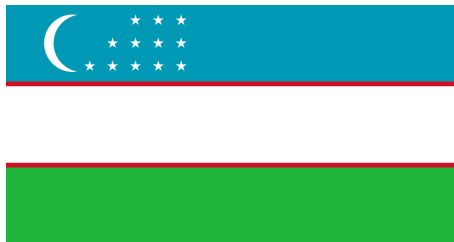
Work Plan of the University (1)

WP	Activities	Start	End
WP 1.1	Review of the current curricula for BA/MSc in target area in PC HEIs.	15.11.2018	30.04.2019
WP 1.2	Agreement on instructional strategy and guidelines for BA/MSc curricula design including the use of new Educational Technologies	15.11.2018	31.03.2019
WP 2.1	a) Prepare a set of new core curricula and transferable modules inclusive innovative teaching/ learning facilities; develop syllabi; b) adopt on institutional level c) accredit on national level	a) 01.12.2018 b) 01.10.2019 c) 01.10.2020	a) 30.03.2020 b) 30.09.2020 c) 31.08.2021
WP 2.2	a) Prepare a set of documentation for PAGIS and VCR; b) purchase the equipment incl. software; install the equipment	a) 01.02.2019 b) 01.03.2019	a) 30.09.2019 b) 30.01.2020
WP 2.3	a) Casting criteria for participants and retraining program for academic teachers. b) Retrain academic teachers in new curricula using innovative teaching/ learning facilities and agreed instructional strategies	a) 01.01.2019 b) 01.09.2019	a) 30.03.2019 b) 31.08.2020
WP 2.4	To update the current BA/MSc curricula/create updated programs in the target area according to the Bologna requirements and the new developments	01.04.2019	30.09.2020



Work Plan of the University (2)

WP 2.5	Master Classes in new curricula /pilot operation of PAL and VCR	01.09.2020	30.04.2021
WP 2.6	Pilot teaching/operation of PAGIS and VCR	01.08.2020	14.11.2021
WP 3.1	The Quality assurance strategy/Q Plan of each PC university including internal/external Quality evaluation/reports according to Q Plan	15.11.2018	14.11.2021
WP 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
WP 4.2	Full media coverage of the project activities inclusive developing and maintenance of Joint WEB based platform	15.11.2018	14.11.2021
WP 4.3	Develop a set documentation on PASO with stakeholders support /purchase /install equipment /establish	01.02.2019	30.04.2020
WP 4.4	Staff training for PASO, establishing Regional /International PASO network, pilot operation	01.04.2020	30.09.2021
WP 4.5	Refresh training courses for graduates in PASO	01.09.2020	31.07.2021
WP 4.6.	International BA/ MSc Summer Schools	01.04.2020	31.04.2021
WP 5.1.	Management of the project including Project management online, daily project administration and coordination	15.11.2018	14.11.2021
WP 5.2.	Coordination meetings	15.11.2018	14.11.2021



Thank you for you attention!



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Dr. RASUL RAKHMONOV
Vice-rector for International Relations

rrakhmonov@nuu.uz