



Co-funded by the  
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# Degree programme developed in the framework of Tempus Curricula Reform Joint project SAMUZ

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## Aim of project



- Promoting relevance and quality of agricultural higher education in Uzbekistan by modernisation of three level higher education system in the area of farm management and agricultural economics.
  - Development and modernization of State Educational Standards and curricula of BA program 5420100-“Farm management ” as well as syllabi is providing at following phases.

# Specific Project Objectives:



- Adjustment and newly development of curricula on BA and MA level and a newly creation of PhD school,
- Improvement of teaching competences and materials,
- Enhancement of university-business cooperation,
- Implementation of quality assurance policies and procedures according to European Quality Standards at all Uzbek Agricultural Universities by the end of the project.

# Phases



- Target comparison of qualifications of SES and curricula;
- Conducted a survey among students and employers on the qualification needs;
- Provision of workshops with EU partners on curricula development;
- Development of SES and curricula together with Uzbek partner universities and introduction for approval to MHSSE.

# Phases



- Establishment of working groups with participation leading academic staff from EU and Uzbek partner HEEs, development of curricula and introduction for approval;
- Development of modernized syllabi, teaching sets and Moodle online educational platform for General professional and special subjects of curricula of BA program and implementation to educational process at all Agrarian HEEs.

# I. Comparison of curricula and study plans of EU partner universities

HSWT		JLU		USC		MLU		AUTH		Writtle	
Triesdorf		Giessen		Sant.de Comp.		Halle		Thessaloniki		Writtle	
1 module = 5 ECTS		1 module = 6 ECTS		1 module = 4,5 or 6 or 9 ECTS		1 module = 5 ECTS		1 module = 5 ECTS		1 module = 7,5 credits (not ECTS)	
<b>Semester 1</b>											
Name of module	EC	Name of module	EC	Name of module	EC	Name of module	EC	Name of module	EC	Name of module	EC
Chemistry	7,5	Chemistry	6	Chemistry	9	Chemistry	10	Chemistry	5		
Anatomy und Physiology farm animals	5	Animal husbandry	6	Zoology and Animal Physiology	4,5	Zoology	5	Anatomy and Physiology of Farm Animals	5	Farm livestock management	7,5
Physical-tEchnical basics	5			Physics I	6	Basic Engineering for agricultural scientists	5	Physics	5		

## II. Survey among graduates and job market



The SAMUZ project has conducted a survey among students and employers on the qualification needs of graduates in the field of farm management and agricultural economics in a broader sense. The objective of the survey was to identify shortcomings in current curricula with regard to the professional content of existing study programmes as well as general key qualifications and skills – both from the perspectives of students/future graduates and representatives of the labour market. The survey has been answered by 175 students whereof 159 answered questionnaires were complete and usable for the analysis.



# III. Provision of workshops with EU partners on curricula development

## Consolidated proposal of EU partners

Semester	Module 1	Module 2	Module 3	Module 4	Module 5
1					
2					
3	Chemistry	Biology	Physics	Economics	Mathematics and statistics
4	Crops	Crops	Animal sciences	Economics	Animal sciences
5	Machinery	Management	Markets	Agrarian policy	Machinery
6	Crops	Crops	Animal sciences	Economics	Nature (ecology, soil, water)
7	Nature (ecology, soil, water)	Profile	Profile	Profile	Profile
8	Internship	Internship	Internship	Thesis	Thesis



Development of SES and curricula  
together with Uzbek partner universities  
and introduction for approval to MHSSE

- Learning outcomes in practice
- **Knowledge:** scope of the information that student should know and how deep should the knowledge be
- **Skills** (abilities): using the obtained knowledge in practice
- **Soft-skills** (social competences): creativity, independence of thinking, ability to work in the team, keeping deadlines, recognizing and valuing important ethic, social and professional issues, and taking responsibility for them, ..., (ability to lead a group, ability to make decisions, ...)

# Learning outcomes for the study program

Overall learning outcomes  
(for any study program / independent from  
the study program)

Learning outcomes for the  
specific type of studies

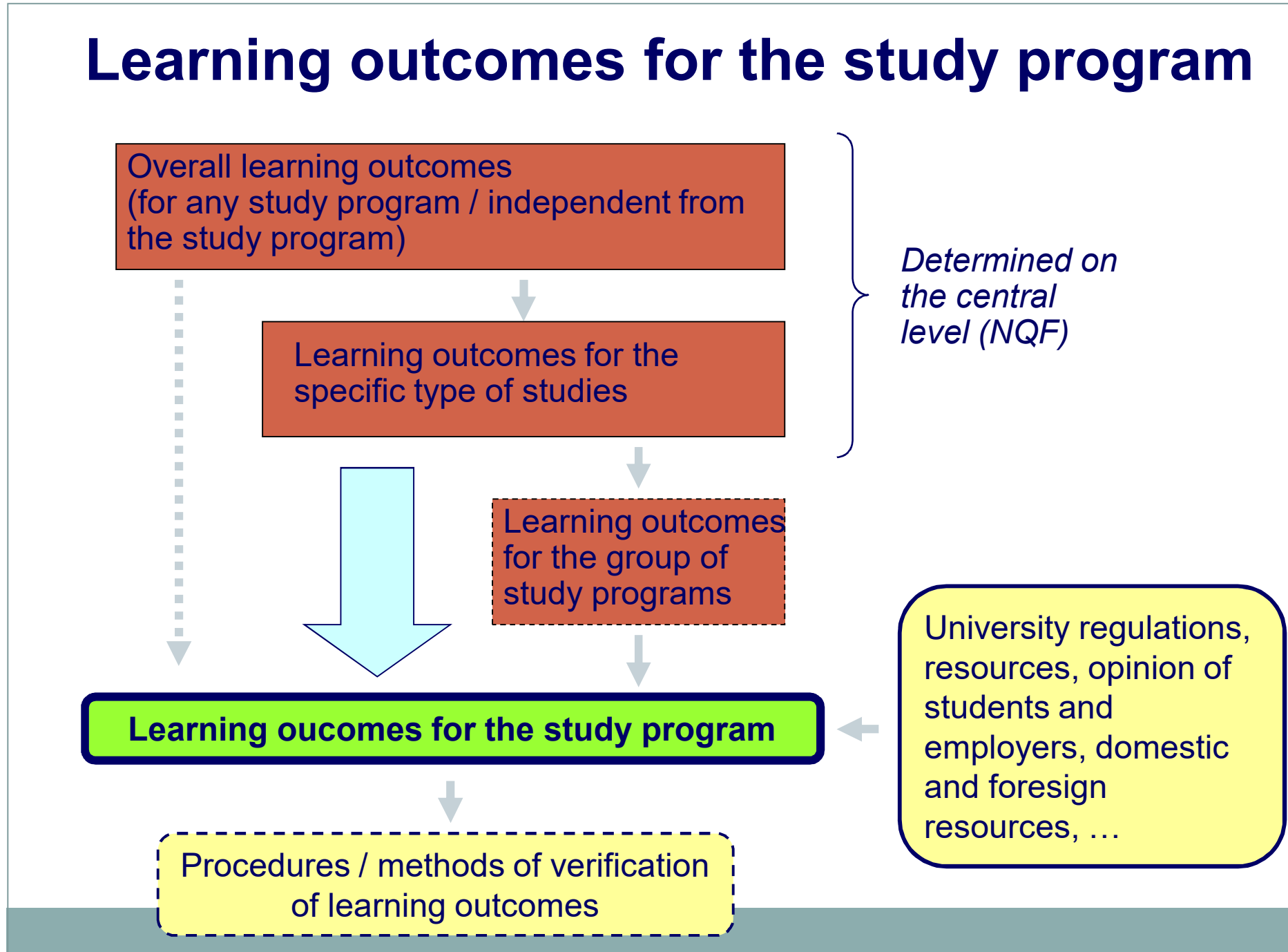
Learning outcomes  
for the group of  
study programs

**Learning outcomes for the study program**

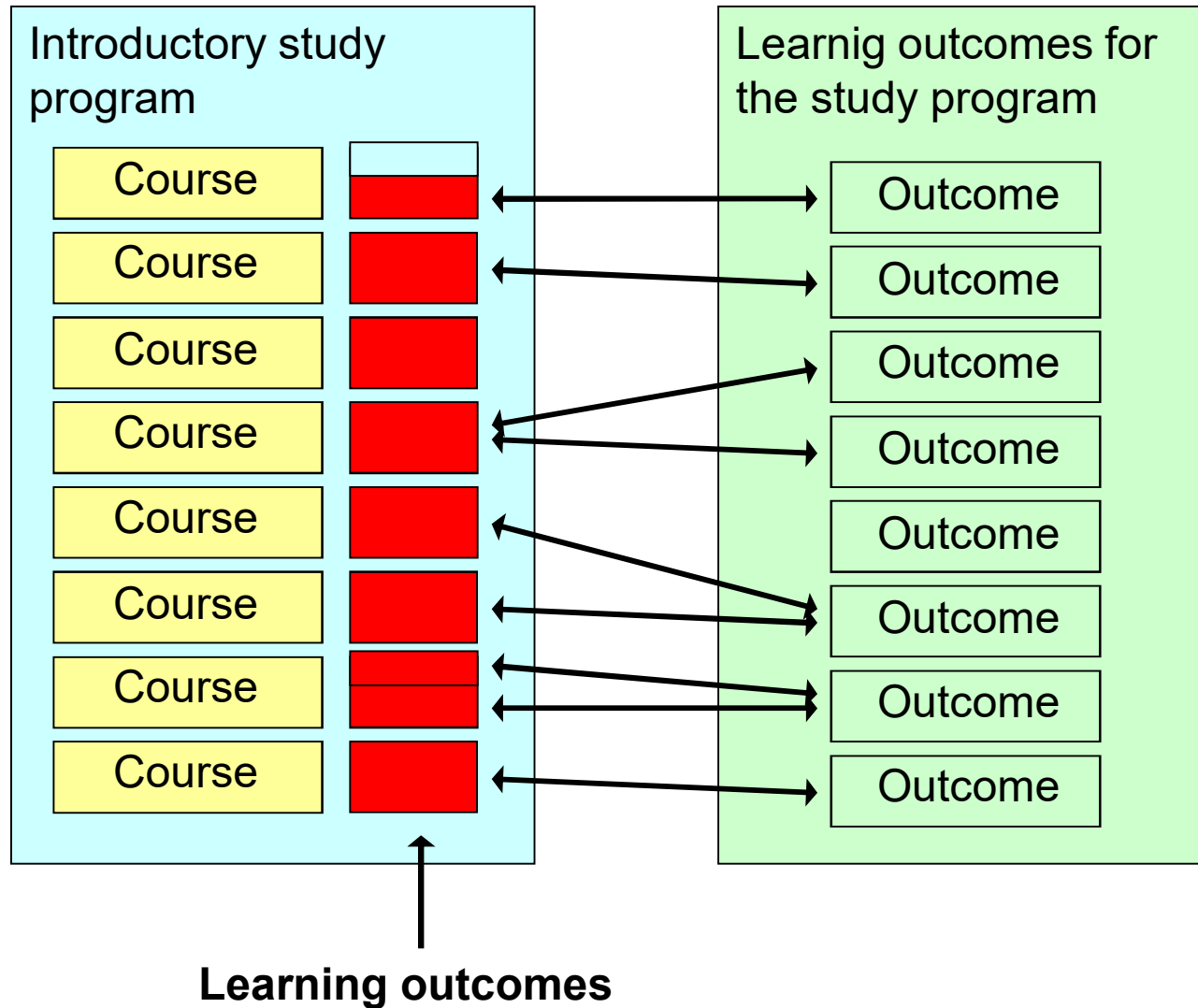
Procedures / methods of verification  
of learning outcomes

*Determined on  
the central  
level (NQF)*

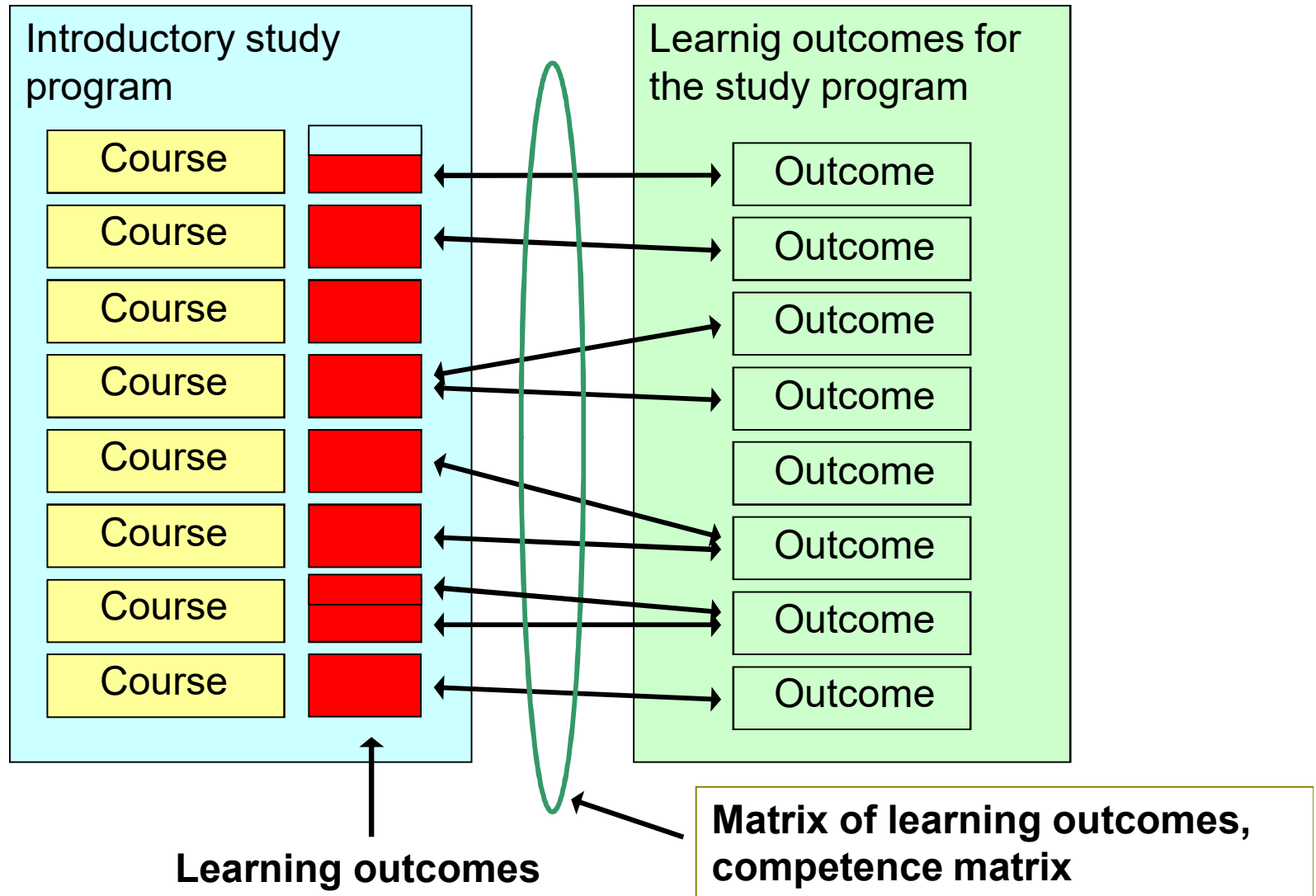
University regulations,  
resources, opinion of  
students and  
employers, domestic  
and foreign  
resources, ...



# Verification of the study program



# Verification of the study program











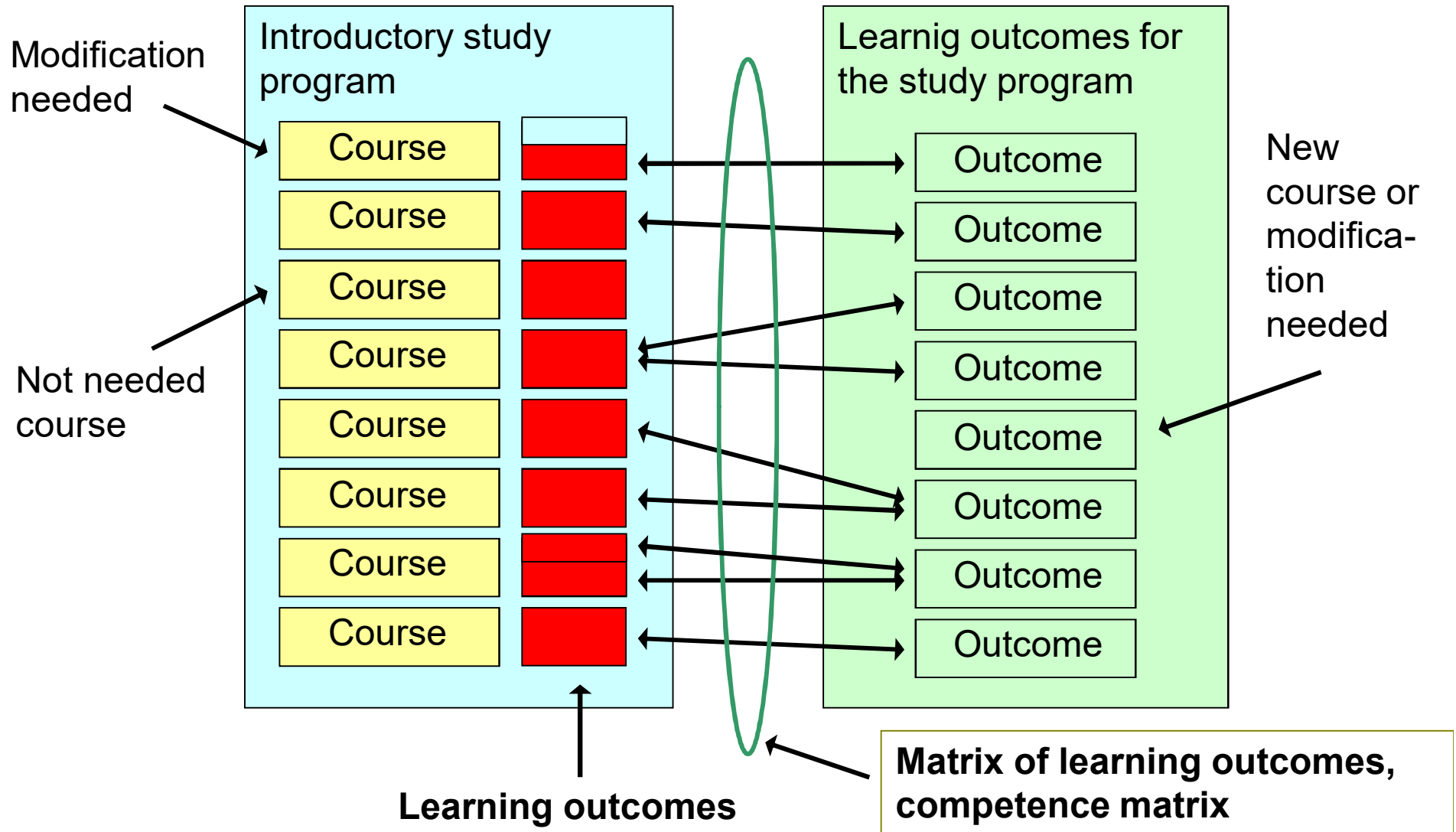


# Competence matrix



- Usefull tool for building and analysing study programs – at least 3 types:
  - A: for determination of competence / qualification level (for grading or for various study levels)
  - B: for checking if given qualifications exist in the study program
  - C: for checking expectations with respect to students and giving validation methods

# Verification of the study program





# Proposal on subject modules according to EU experiences

<b>Crops</b>	Botany, biology and crop physiology	Crop selection and seed breeding	Agricultural biotechnology and microbiology	Integrated crop protection	Fruit and vegetables	Plants and cotton
<b>Environment (soil, water,..)</b>	Chemestry	Physics and agrometeorology	Ecology and environmental protection	Crop husbandry and melioration	Soil sciences and agro chemistry	
<b>Production</b>	Life safety	Animal sciences	Agricultural mechanization	Agricultural products quality and marketing	Storage, primary processing technology and standardization of agricultural products	
<b>Economic</b>	Economics	Agricultural production economics	Farm enterprises and diversification	Agribusiness economics	Agrarian reforms and food security	
<b>Management</b>		Accounting and taxation at agriculture	Management and planning of investments in agriculture	Farm production organization	Farm management with empirical analysis	

- The number and volume of subjects on humanities and science (1 and 2 parts of study plan) have not been changed, structural changes on 2 part;
- Subjects of General professional and special blocks merged and number of compulsory subjects decreased from 50 to 39;
- **In order to ease exchange of students, workload of subjects adjusted into ECTS (30 hours=1 ECTS);**
- Title and content of special and professional subjects adjusted to EU partners curricula.

## Initial results



- Title of BA program 5420100-Farm management changed to “Management in Agriculture” and added to State classifie.
- Study plan and SES, modernized in frame of project, has been approved by MHSSE.
- 1<sup>st</sup> year students of Tashkent state agrarian university, Samarkand agricultural institute and Andijan agricultural institute are studying with updated curricula (600 students).

## Study plan of BA: before and after reform

1.00	Humanitarian and social and economic disciplines	1704		Humanitarian and social-economic subjects	1704
2.00	Mathematical and natural-science disciplines	1173	2.00	Mathematical and natural subjects	1140
2.01	Higher mathematics	108	2.01	Higher mathematics	120=4 kt
2.02	Computer science and information technology	234	2.02	Informatics, information technologies	240=8 kt
2.03	Physics	116	2.03	Physics and agrometeorology	180=6 kt
2.04	Chemistry	274	2.04	Chemistry	240=8 kt
2.05	Biology and genetics	204	2.05	Botany, biology and plant physiology	240=8 kt
2.06	Ecology and agricultural meteorology	136	2.06	Ecology and environmental protection	120=6kt
	Disciplines for choice	101			

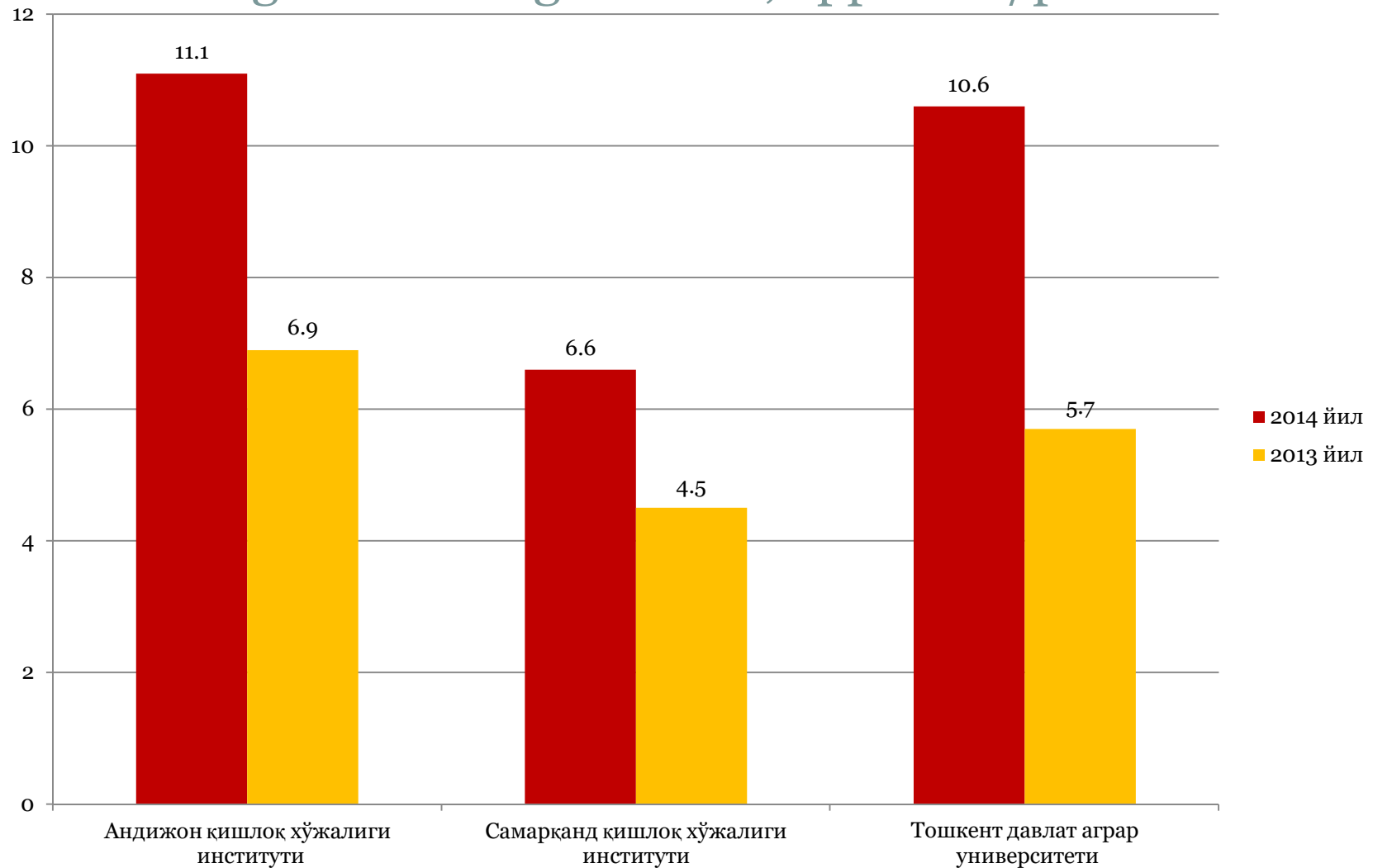
3.01	Micro-economics and macroeconomic	152	3.01	Agricultural economics	120=4 kt
3.02	Book keeping and audit	102	3.02	Infrastructure of agriculture	90=3kt
3.03	Small-scale business and business	30	3.03	Book keeping and taxation in agriculture	270=9kt
3.04	The international economic relations in agriculture	102	3.04	Management and planning of investment processes in agriculture	270=9kt
3.05	The analysis of activity of the enterprises and a statistics basis	168	3.05	Agricultural products quality and marketing	150=5kt
3.06	Taxes and the taxation	65	3.06	Agrarian reforms and food security	180=6kt
3.07	Bases of modern office-work	102	3.07	Organization and management of diversified farming	180=6kt
3.08	Investment and the design analysis	152			
3.09	Logistics	102			
3.10	Foreign experience of farms	112			
3.11	Agriculture infrastructure	112			
3.12	Business planning of activity of farms	102			
3.13	Soil science and agro chemistry	152	3.08	Soil sciences and agrochemistry	180=6kt
3.14	Botany and physiology of plants	152	3.09	Integrated crop protection	270=9kt



3.15	Agriculture	126	3.10	Selection and seed-growing of agricultural crops	180=6kt
3.16	Melioration and land management	212	3.11	Agricultural biotechnology and microbiology	150=5kt
3.17	Protection of plants	148	3.15	Agriculture and melioration	270=9kt
3.18	Selection and seed-growing of agricultural crops	152			
3.19	Agricultural production mechanization	202	3.12	Agricultural mechanization	210=7kt
3.20	Bases of zootechnics	104	3.13	Animal sciences	180=6kt
3.21	Veterinary science bases	104	3.14	Sericulture	150=5kt
3.22	Sericulture	72	3.15	Storage, primary processing technology and standardization of agricultural products	150=5kt
3.23	Technology of storage and preprocessing of agricultural production	156			
3.24	Bases of marketing, standardization, metrology and certification in agriculture	152			
3.25	Safety of ability to live	94	3.16	Life safety	90=3kt
	<b>Subjects for choice</b>	<b>156</b>		<b>Elective subjects</b>	<b>240=8kt</b>

<b>4.00</b>	<b>Special disciplines</b>	<b>734</b>	<b>4.00</b>	<b>Special subjects</b>	<b>720</b>
4.01	The agricultural production organization	130	4.01	Management in agriculture	180=6kt
4.02	Contractual relations in agriculture	50	4.02	Organization of production in agriculture	150=5kt
4.03	Management of farms with bases of scientific researches	134	4.03	Plant and cotton growing	150=5kt
4.04	Plant growing and cotton growing	150	4.04	Fruit and vegetable growing	150=5kt
4.05	Fruit growing	103		<b>Elective subjects</b>	90=3kt
4.06	Vegetable growing	103			
	Disciplines for choice	64			
<b>5.00</b>	<b>Additional disciplines</b>	<b>450</b>	<b>5.00</b>	<b>Additional disciplines</b>	<b>450=15 kt</b>
5.01	Military preparation	450			
	<b>Total</b>	<b>7344</b>		<b>Total</b>	<b>7344=245 kt</b>

# Changes and applications for enrollment to BA program Management in Agriculture, applicant/place ratio



## Inter –university working groups by subjects

	TSAU	SAI	AAI	TIMI	TerSU
Agricultural economics	Saidakbarov	Murtazaev	Shermatov	Yunusov	Nurmatov
Agricultural infrastructure	Pulatova	Ahrorov	Abdullaev	Yunusov	
Agrarian policy and food security	Saidova	Ganiev	Iminov	Yunusov	
Book keeping and taxation in agriculture	Dusmurodov, Mengliqulov	Alikulov	Hojiboev	Ibragimov	Tulakov
Management of investment processes and busyness planinning in agriculture	Mardiev	Ibragimov U	Hojiboev	Hudaynazarov	
Quality assurance of agricultural products and marketing	Gulamov, Adilov	Tursunov	Nosirov	Tabaev	Kuzkarov
Farm diversification and management	Pulatova	Rahmonov	Mahmudov	Rashidov	Avazov
Agricultural Management	Dehqonova	Ibragimov G	Safina	Rashidov	
Organization of production in agriculture	Siddiqov	Qozoqova	Usmonov	Rashidov	

## Next stages



V. Establishment of working groups with participation leading academic staff from EU and Uzbek partner HEEs, development of curricula and introduction for approval;

VI. Development of modernized syllabi, teaching sets and Moodle online educational platform for General professional and special subjects of curricula of BA program and implementation to educational process at all Agrarian HEEs.



*Thank you!*