





#### **Agenda**

- ▶ Peculiarities of different Education systems
- Trends and necessary changes in Education
- ▶ MIIGAiK one of the oldest university in Russia
- ▶ Economics and Land management Faculty
  - > Study Programs
  - > Student contingent
  - > Faculty's Departments
- ▶ Masters programmes in Russia
  - > Sate Educational standards of Masters programmes in Russia
  - > The curriculum of Master's Program
  - > Curriculum components
  - > Educational Methodology
- Innovative technologies for learning and management of education process
- ▶ Perspectives and current tasks



#### **Transition period**

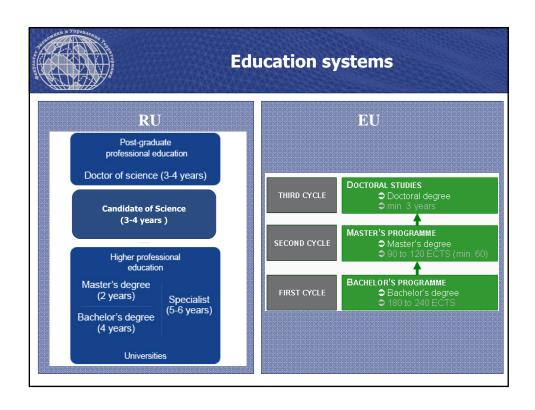
Bologna system of higher education

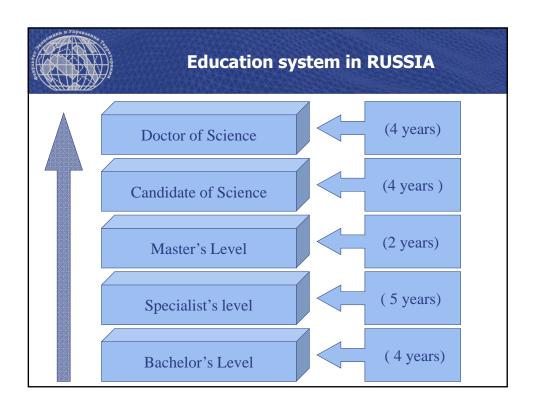
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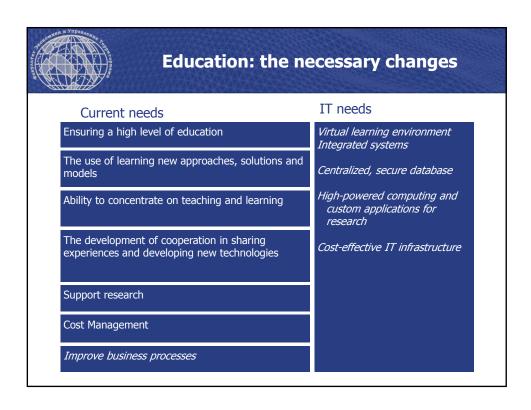


- Russian universities have finally switched over to a two-level bologna system of education.
- ► High schools has changed old curricula and developed new Bachelor's and Master's curricular.









# Текущие потребности Обеспечение высокого уровня образования Использование в обучении новых подходов, решений и моделей Возможность сосредоточиться на процессе преподавания и обучения Развитие сотрудничества в области обмена опытом и разработки новых технологий Поддержка научных исследований Поддержка научных исследований ИТ-потребности Доступ к виртуальной среде обучения из любой точки мира Встроенная Интернет-система, обеспечивающая лёгкий доступ и управление инструментами для обучения, циформацией об учащихся Централизованная безопасная база данных, предоставляющая лёгкий доступ к данным, учебным планам и инструментам для обучения Высокопроизводительные технические и пользовательские приложения для научных исследований



# Moscow State University of Geodesy and Cartography (MIIGAiK)

- MIIGAiK is one of the oldest universities in Russia
- MIIGAiK was established in 1779 by Ekaterina II
- MIIGAiK is leading surveying university in Russia and one of the largest surveying institutions of Europe.
- MIIGAiK consists of seven Faculties and trains almost 5000 students.
- MIIGAiK educates students in surveying, land management, real estate cadastre, geoinformation, land information systems



Экономичная ИТ-инфраструктура

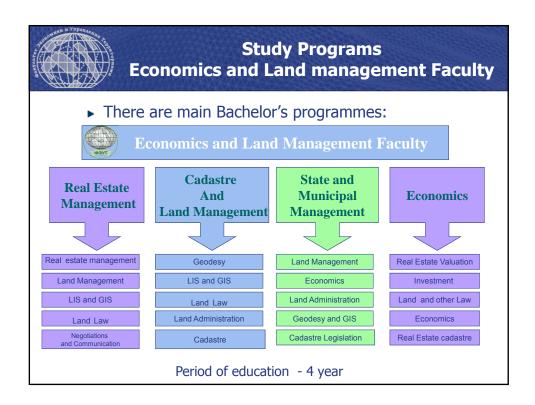




#### **Educational programmers**

## Economics and Land management Faculty, MIIGAiK:

- ▶ Bachelor programmes
- Masters programmes
- Retraining and postgraduate courses
- ▶ Long-life learning

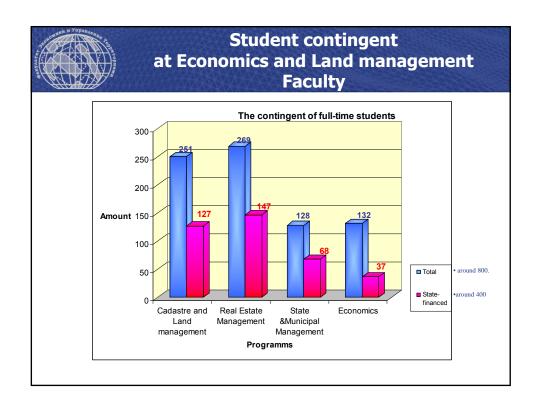




# Study Programs Economics and Land management Faculty

- ► There are main Master's programmes:
- Real estate planning and development
- ▶ GIS and LIS
- ▶ Land Cadastre, registration and administration
- ▶ Land management
- ▶ Real estate valuation and management

Period of education - 2 year

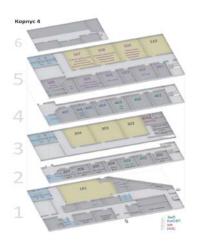




#### **Faculty's Departments**

Faculty consists of four main departments:

- Cadastre and Land Law Department
- Economics and Business Department
- Philosophy and social-economic sciences
- Real Estate Management and Development Department





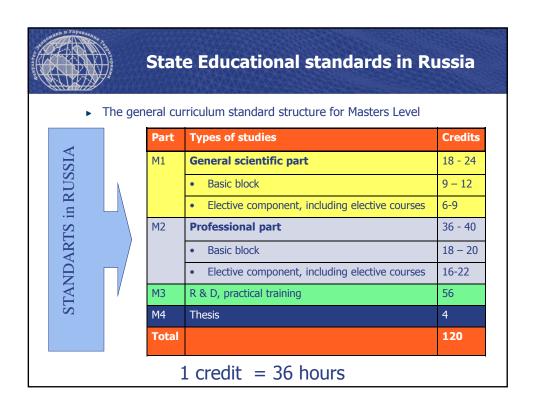
#### Master's programs

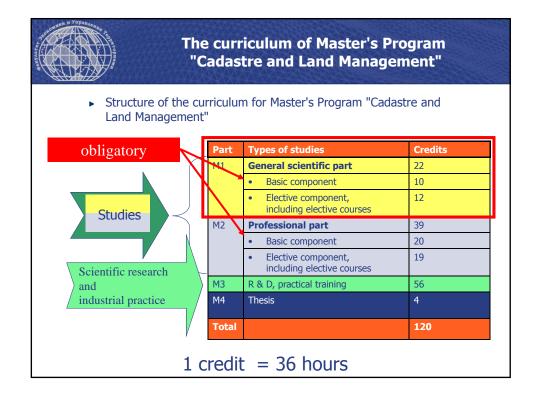
 Particular attention is paid to Master's level because it is new in Russia.

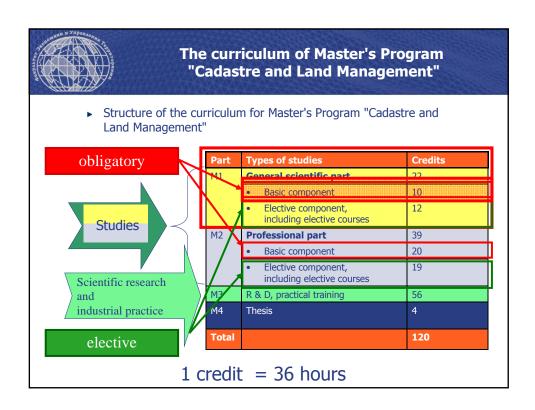
Master's level develops research skills
and give <u>a basis</u> for
Candidate of Science or Doctor of Science studies level.

• the formation of educational materials,

- establishing a scientific and educational base,
- establishing contacts with the industrial organizations as a scientific base for training undergraduates.







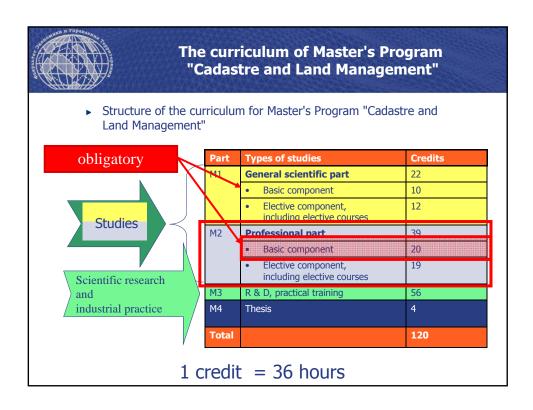
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#### M1 - General scientific part

► The purpose of General scientific part - to familiarize the student with the modern science schools, research methodology, computer technology in science and education, trends in the development of information systems and technology, legal aspects.

#### **Basic component** of the **General scientific part**

1 semester	2 semester	3 semester
Applied Mathematics  3 Credits	Legal support of innovation  2 Credits	Philosophy and Methodology of Science 2 Credits
Information Computer Technology 3 Credits		





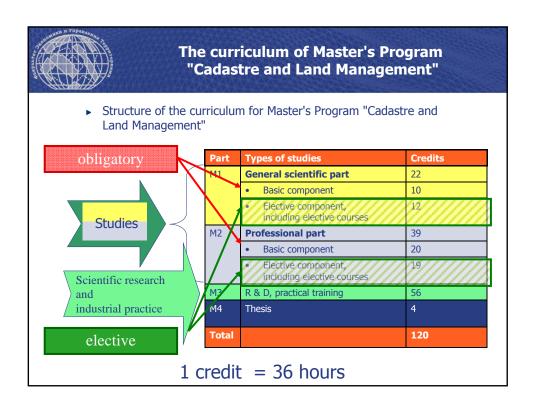
#### **M2 - Professional part**

The purpose of professional part:

- to develop the advanced competencies and skills in real estate cadastre, land monitoring, surveying and data processing of information,
- to investigate trends in GIS, LIS
- to examine methods of use of software and devices,
- to familiarize modern information technology in land management, cadastre, land monitoring.

#### **Basic component** of the **Professional part**

	1 semester	2 semester	3 semester	4 semester
	Modern problems of Land Management		Modern problems of Land Management	Real Estate Planning
	and Cadastre		and Cadastre	and Development
l	6 Credits			4 Credits
			4 Credits	
		Real Estate Cadastre	Automated systems of	
		4 Credits	Cadastre ( GIS and	
l			LIS) <u>3 credits</u>	
ı				





- ▶ Real estate management and development
- ▶ LIS (Land Information System);
- ► Cadastre and Land Registration



#### **Elective component of M1 and M2 parts**

**Elective component** of the Master's Progamme "Real estate management and development"

1 semester	2 semester	3 semester	4 semester
Land Law and Administrative Law <u>5 Credits</u>	Land Information Systems 5 Credits	System of State and Municipal Management  3 Credits	Informational Technologies of Real Estate Management 3 Credits
	Land Monitoring and Build Environment 3 Credits	Valuation of Investments projects 3 Credits	Urban Infrastructure and Development  3 Credits



#### **Elective component of M1 and M2 parts**

**Elective component** of the Master's Progamme "LIS (Land Information System)"

1 semester	2 semester	3 semester	4 semester
Land Law and Administrative Law <u>5 Credits</u>	Land Information Systems 5 Credits	Corporate GIS  3 Credits	Informational Technologies of Real Estate Management 3 Credits
	Technologies of Database Development 3 <u>Credits</u>	Creating Spatial Data Information System for Cadastre 3 Credits	Operation of Distributed Data base  3 Credits



#### **Elective component of M1 and M2 parts**

**Elective component** of the Master's Progamme "Cadastre and Land Registration"

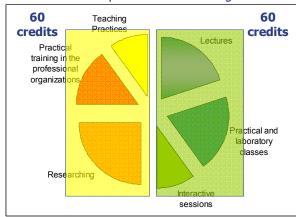
1 semester	2 semester	3 semester	4 semester
Legal basis of property rights registration <b>5 Credits</b>	Technology of state cadastral registration <b>5 Credits</b>	Registration system in foreign countries <b>3 Credits</b>	Preparation, evaluation and examination of materials for the registration of rights to immovable property 3 Credits
	GIS for cadastre  3 Credits	Valuation of Investments projects  3 Credits	Real estate transactions and their registration 3 Credits



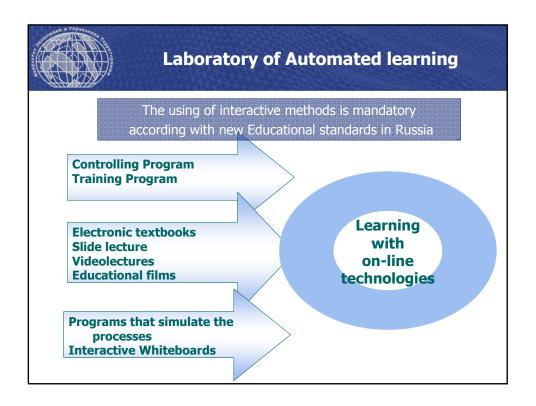
#### **Educational Methodology**

According with the standards in RF the educational process should be provided with different educational technologies.

Curricula provide the following educational parts:

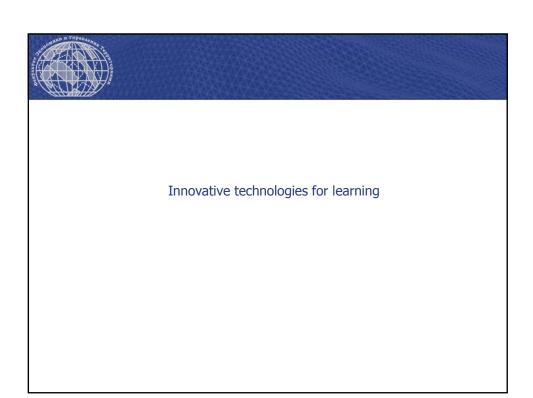


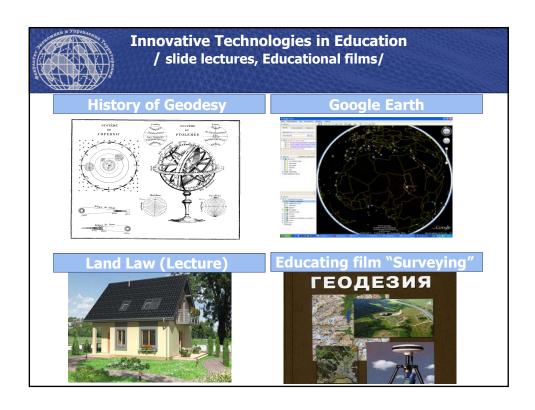
- Lectures (no more than 20% of all sessions);
- Practical and laboratory classes;
- Interactive sessions (in the form of discussions);
- Research in the laboratories of the University (simultaneously with studying);
- Practical training in the professional organizations (so simultaneously with studies, as in the summer time);
- Teaching Practices.



## Innovative technologies developed at Faculty

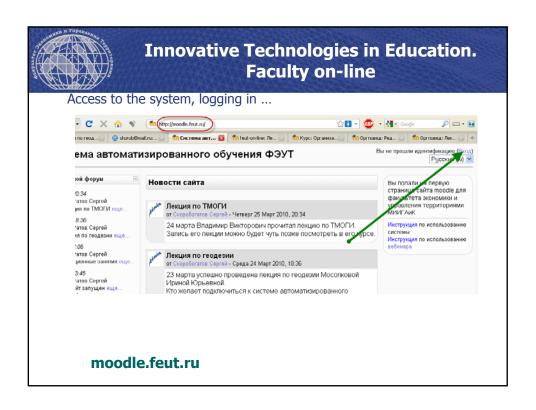
- ► MIIGAiK adopts an integrated approach, both in learning and management of education process.
- ► There two main parts of innovations:
  - > Innovative technologies for learning
  - > Innovative technologies for management of education process

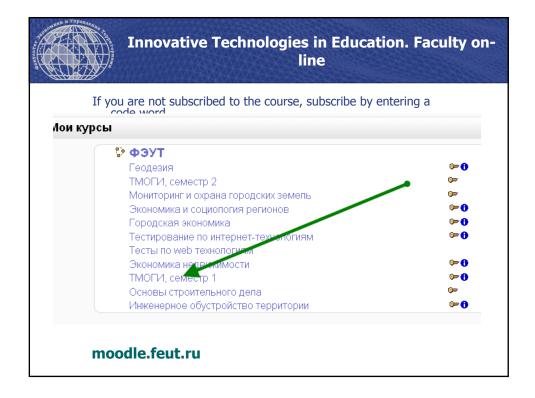










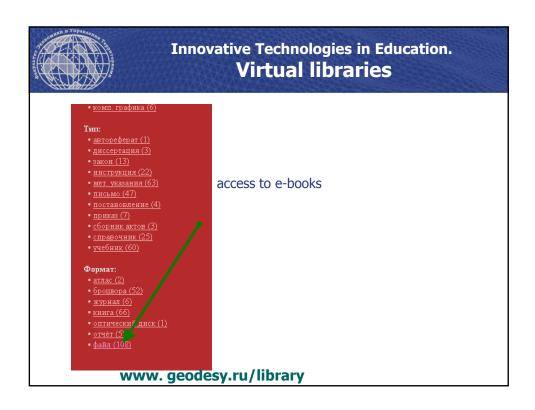


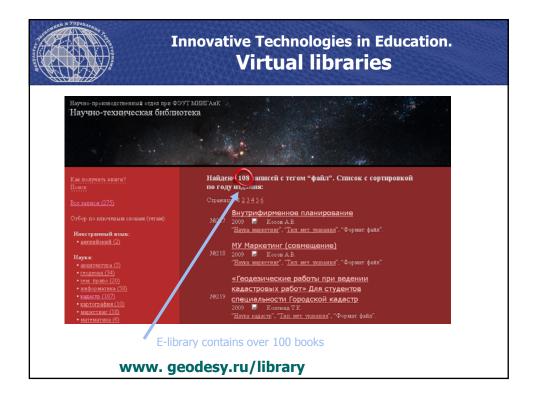




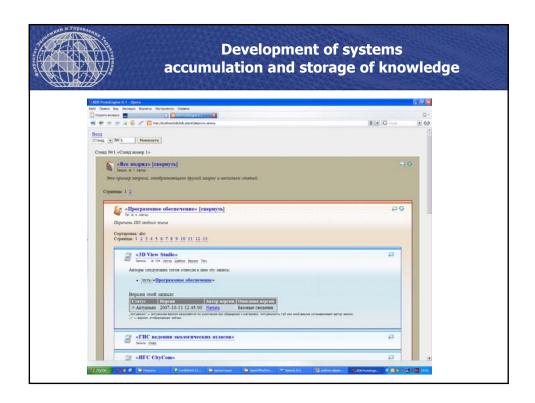


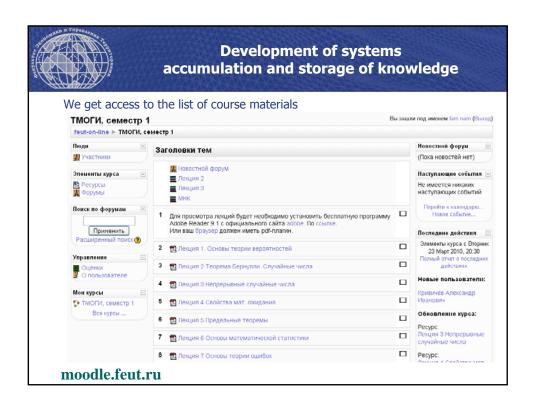


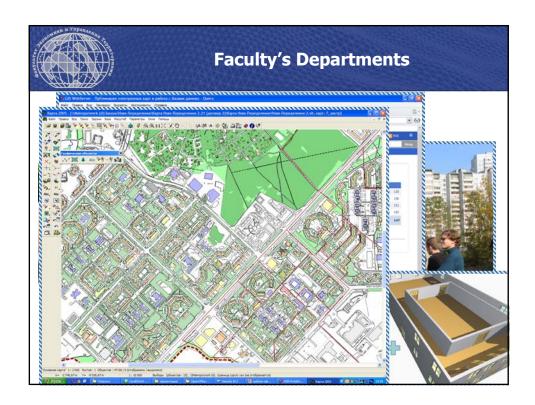














#### **Perspectives and current tasks**

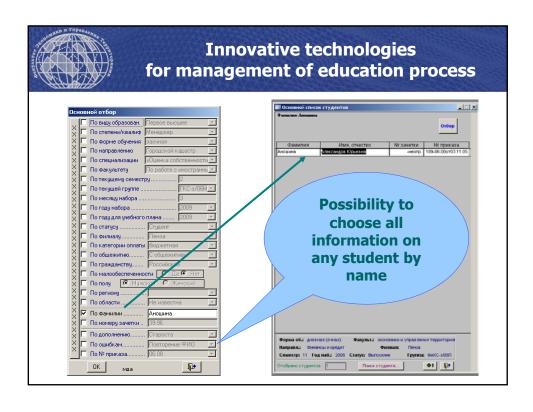
- to establish new laboratories for research activities,
- organization of the technical and informational support of the teaching process
- transition to blended learning
- increase of mobility of students, teachers and researchers
- creation of an integral system of education quality assurance
- development of cooperation in quality assurance with a view to develop comparable criteria and methodologies.
- provision of "comparability" of diplomas, separate courses, credits

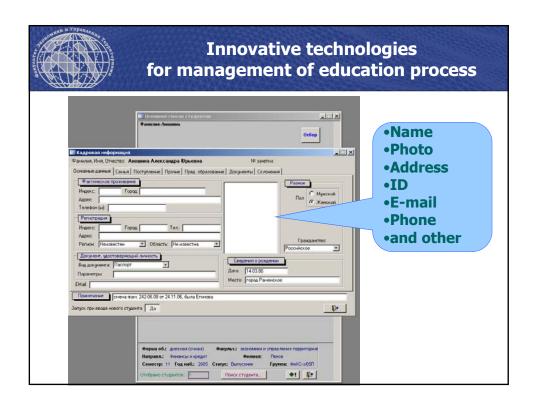


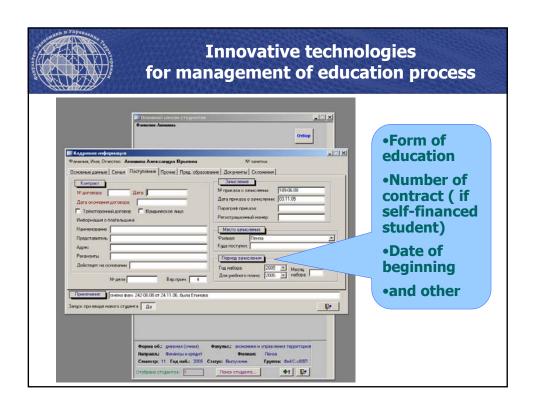


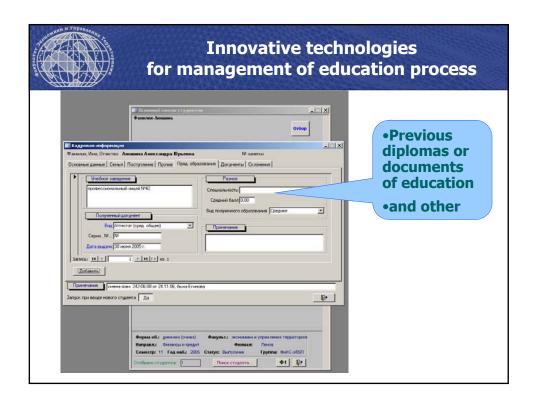


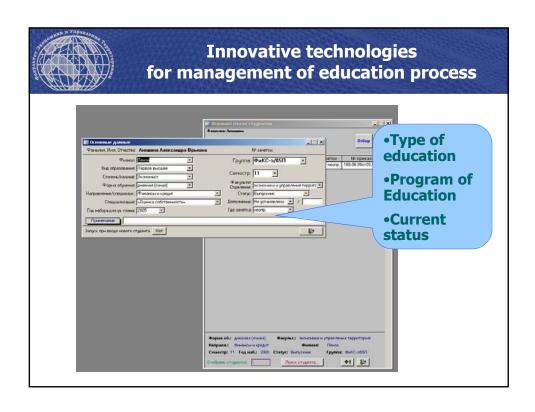
Innovative technologies for management of education process

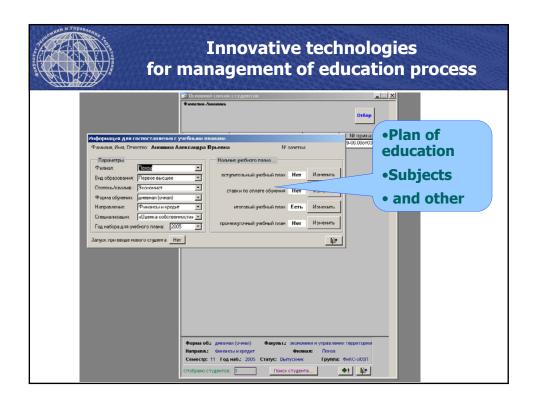


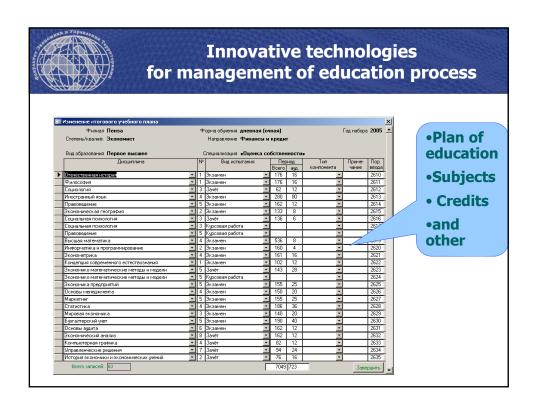


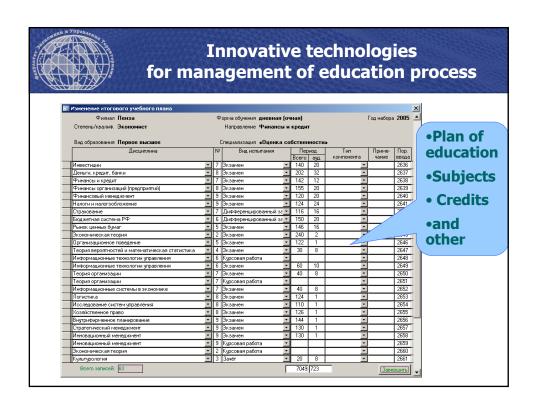


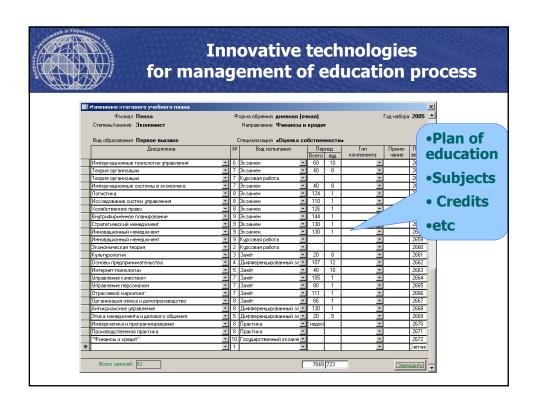


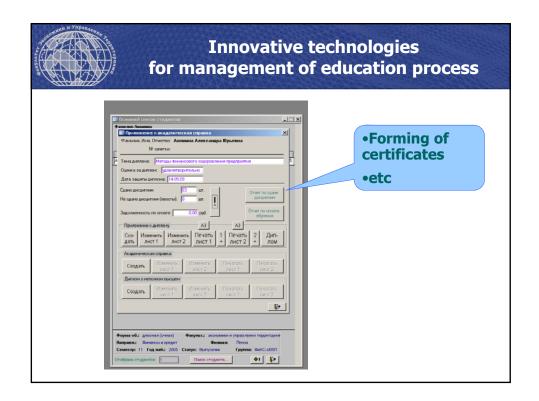


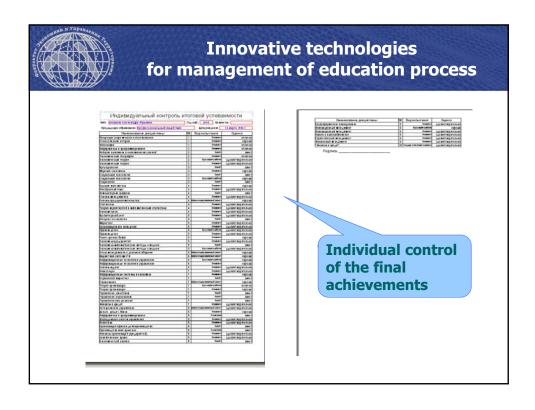
























- ▶ promote the exchange of ideas and experiences among educational schools and Universities in surveying, real estate planning and development, land law in land management and administration
- discuss global trends, technical, social and economic aspects of education in surveying and real estate management field and ways of convergence in Surveying Education to generate sustainability of real estate
- help strengthening the networks between educational system and state authorities or business society to the benefit of a better education for all

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- **▶** Submission of papers
  - > Abstract (max. 1000 words) 15 July 2012
  - > Full paper (max. 5000 words) 31 August 2012

#### **▶** Registration

- > Early Bird Registration before 20 July 2012 190 EUR
- > Normal Registrationfrom 21 July 2012 to 26 September 2012 240 EUR

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- Museum "Gold Rooms" in MIIGAiK is former
   Demidov house, an architectural monument of the
   18th century
- ► Exclusive tour "One day in Star City"

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