

Агентство по общественному контролю качества образования и развитию карьеры

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Approved by
Chairman of the Advisory Council
Shadrikov V.D.
, 2015

#### **REPORT**

on the results of the independent assessment of the basic professional educational program of higher education

38.03.01 «Economics»

Federal State Autonomous Educational Institution for Higher Professional Education of Moscow region Dubna International University for Nature, Society and Man

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#### I. GENERAL INFORMATION ABOUT THE UNIVERSITY

The founder of the university «Dubna» is the Ministry of Education of the Moscow Region Government. The university was founded in 1994 on the basis of the Higher military constructing command school of Volga of the Ministry of Medium Machine-Building Industry of the USSR. The university has a chain of branches formed in the Moscow Region in Dmitrov, Dzerzhinsky, Kotelniki and Protvino.

The university «Dubna» consists of 4 faculties, 26 graduating departments and 5 general education departments. About 4 thousand students of full-time course of study are studying for 35 specialties and directions. 2729 students of full-time course of study and 775 students of correspondence course of study are studying for 35 specialties and directions in the leading university. 232 students are studying at full-time course of study with full refund of studying costs. Besides, the university prepares graduate students in 13 specialties. Annually 120-130 people study at the postgraduate course.

The educational process in the university is organized in 5 educational buildings, gym, sports centre «Ruslan» (the total area of the educational and laboratory buildings is 45 576,4 sq.m). There are 5 gyms, lecture and dance halls. The area of the land plot is 13, 3436 hectares. The university uses 29 in-line lecture halls, 99 lecture halls for practical trainings and seminars, 25 computer class rooms, the library with reading-rooms, the indoor sport centre, administrative and service offices. 710 computers are used in the educational process. 667 computers are connected to the university network which has access to the Internet. In the university 16 servers are used for storing and providing access to the educational information.

The university has strategic partners such as: the United Institute for Nuclear Research, Scientific institute «Atoll», State Unitary Enterprise «A.Y. Bereznyak Machine-building design bureau «Raduga»», JSC «Special economic zone of technical innovation type «Dubna», State research centre «Institute of High Energy Physics», State Unitary Enterprise «Research Institute of Applied Acoustics», JSC «N.P. Fedorov Dubna Machine-building factory», «Progresstech-Dubna company», Close stock company «United design bureau «Aerospace systems».

The strategic development directions of the road map of the university «Dubna» include the development of the university as:

- the classic university, providing fundamental education on a wide range of areas and specialties (from natural sciences to the humanities);
- the research university where the integration of the educational and scientific activities takes place due to the strategic partnership with scientific organizations and enterprises of the high technology sector of the economy;
- innovative university which has a «girdle» of small businesses to commercialize the developed products and help graduates to establish their own companies;
- the international university which is practically integrated into the international educational space and has a significant share of students from the CIS and far abroad.

The university also announced the aim to increase the number of specialties of the university according to the needs of the resident organizations of the special economic zone [From the prospective plan of the development of the special economic zone of technical innovation type in Dubna (Moscow Region)].

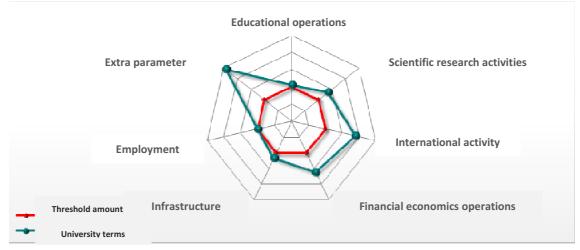
As of April 1, 2014 according to the Russian science citation index for Russian universities (http://elibrary.ru) the university «Dubna» stands leading positions in the universities rating for the vast majority of indicators (from 1-st to 10-th place for different indicators).

According to the All-Russian monitoring of the effectiveness of universities as of September, 2013 the university «Dubna» is the best university in the Moscow Region in the range of key indicators. The university «Dubna» and all its branches are recognized effective according to the monitoring of the effectiveness of higher education organizations. The leading university in Dubna and its branch «Protvino» showed the best results among the universities of

regional subordination: the threshold values are overcome in all indicators, which are used for the valuation of effectiveness of educational organizations.

#### The information about the indicators of the monitoring of the activity effectiveness

The university positions in key indicators of the monitoring in comparison with threshold values of the indicators



No	Indicator	Value of the indicator of the university	Threshold value
E.1	Educational activity	63,13	60
E.2	Research activity	69,4	51,28
E.3	International activity	1,9	1
E.4	Financial activity	2160,52	1327,57
E.5	Infrastructure	16,4	13,92
E.6	Job placement	98,553	98,516
E.8	Additional indicator	6,75	2,78

<sup>\*</sup> The method of calculating of the indicators for the monitoring of effectiveness of educational institutions of higher education <a href="http://miccedu.ru/monitoring/materials/inst\_110302.htm">http://miccedu.ru/monitoring/materials/inst\_110302.htm</a>

### II. REPORT ON THE RESULTS OF THE INDEPENDENT ASSESSMENT OF THE BASIC EDUCATIONAL PROGRAM

The basic educational program «Economics» is realized within the framework of the direction 080100.62 with the chair «Economics» and leads to the awarding the bachelor qualification. The management of the program is realized by Sergey Fedorovich Dzyuba the dean of the faculty «Economics and Management» and Stanislav Avrorovich Panov the head of the chair «Economics».

#### **Number of students**

Program	Students (full-time courses)	Budgetary financing	Special purpose financing	Extrabudgetar y financing
080100 - Economics	145	110	25	35

The independent external evaluation of the education program was realized by the experts of AKKORK in the period from January 15 to February 28, 2015.

## 1 CURRENT STATUS AND DEVELOPMENT TRENDS OF THE REGIONAL MARKET OF EDUCATIONAL SERVICES IN THIS AREA

#### 1.1. Analysis of the role and place of the program

- The need of the Moscow Region and neighboring regions in the graduates of this area (including the presence and characteristic of the monotowns, providing the job placement for graduates), according to the experts' valuation is 85%, vacancies in the labour-market according to the media is about 500-1000 people.
- The characteristic of the competitive environment for this area (number of universities in the region, training specialists in this area, their characteristic (status, property, number of students) etc.): Bachelors of state universities -62 people, private universities -64.

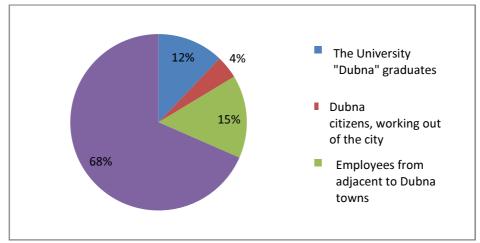
The training program is agreed with the representatives of the employers of the chamber of commerce and industry of Dubna; Special economic zone TVT «Dubna»; the largest enterprises: JSC «Instrument factory «Tenzor», State Machine-building design bureau «Raduga», JSC «N.P. Fedorov Dubna Machine-building factory»; JSC «Sberbank of Russia» and others, having their support and reworked in accordance with the needs of the developing manufacturing, banking and financial systems of management, development of scientific thought.

According to the statistical report concerning the job placement of the graduates of the University «Dubna», which was formed 3 months after the getting degree date, 386 people graduated in 2014. The information about the job placement is collected from 381 people. It amounts to 99 %. The gender distribution of the graduates is following: 224 females (59%) and 157 males (41%) graduated the university «Dubna» in 2014 (59 %). The place of residence distribution of graduates of the university «Dubna» in 2014 was following: 49% (187 people) are the residents of the Moscow Region, including 133 people (35%) living in Dubna, 23% (88 people) are the residents of the Tver Region, 28 % are the residents of other regions of Russia (Vladimir Region, Bryansk Region, Yaroslavl Region, Smolensk Region, Chuvashia and others)

and from abroad (mostly from Kazakhstan). The majority of applicants are the residents of the Moscow Region. 35% of the applicants are the residents of Dubna.

According to the prospective plan of the development of the special economic zone of technical innovation type in Dubna (Moscow Region) the labour resources of Dubna are estimated at 38,6 thousand people, or 62,8% of the town population. 81,9% (31,6 thousand people) of the labour resources are employed in the economy. The most employment takes place in the non-production sectors. 27,5% work in science sector. There is a high conentration of employees in industry, where every fourth of people working in the economy is employed. Every day about 1800 people (including 700-900 specialists) go to work outside the town (mostly in Moscow), and about 500 people from surrounding areas (mostly from the Taldom area) come to work in the town. The number of registered unemployed does not exceed 600 people.

As a result of the analysis of the role and place of the program and peculiarities of formation of the regional education market, and according to the data, provided by the educational institution, and on the basis of the interviews with students of the bachelor program, the enterprises of Dubna were declared as the typical choice of job placement, including the job on the territory of the special economic zone (SEZ), the territories to which the State give the special legal status and economic benefits to attract Russian and foreign investors to the Russian priority sectors. Currently the SEZ includes 100 enterprises, 1,2 thousand people are employed there, the need for 9 thousand jobs is announced for the nearest prospect. The overall assessment of the need of the organizations-residents of the SEZ in labor resources and the main sources of staffing are presented in the following diagram.

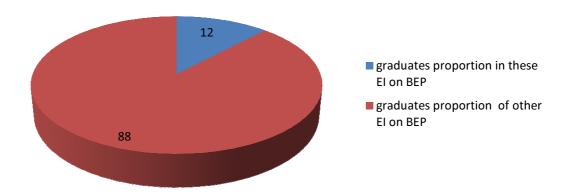


The assessment of the need in labor recourses and the sources of staffing of the special economic zone in Dubna

To provide the organizations-residents with specialists the organization of the interaction between the University «Dubna» and the leading universities (mostly in the high technologies area) of Russia and the CIS is provided. This scheme involves the creation of a system of selection of bachelors for further studying at the fifth and sixth year of the University «Dubna» with the simultaneous employment in the companies-residents.

As a result of the analysis of the role and place of the program and peculiarities of formation of the regional education market, and according to the data, provided by the educational institution the following diagram was created. It shows which percentage of the graduates this program has in the regional labor market.

# The role of the educational institution in the labor market formation



#### 1.2. Analysis of the information indicators provided by the university

More than 85 % of graduates of the university work in their specialty; about 40 % of graduates work in the science, education and high technologies spheres; about 50 % of graduates work in Moscow Region (including the science city Dubna).

The graduates work in innovative companies («The Scientific School of Sustainable Development» ltd. the small innovative enterprise, established on the basis of the sustainable innovative development chair and registered in the Ministry of Education and Science of Russia list of innovative companies), and state and business institutions: JSC «Transaero», JSC «TVEL», JSC «LOES», JSC «Tenzor», IT company «Media KST», Internet holding «RosBusinessConsulting», institutes of the Russian Academy of Sciences, Russian Academy of Natural Sciences etc. 8% of graduates are employed in the Moscow Region, 16% are employed in Moscow, 7% are employed in other regions of Russia.

All graduates of the educational program are employed in their specialty or continue their education. It should be mentioned that the majority of the bachelor graduates continue their education at Masters: only 5% of the graduates of 2014 didn't want to continue their education at Masters, having chosen employment.

			080100	Continues to study at the MA
Avtaykina	Natalia	Petrovna	Economics	course
			080100	Continues to study at the MA
Andropova	Irina	Dmitrievna	Economics	course
			080100	Continues to study at the MA
Bakova	Evgenia	Alexandrovna	Economics	course
			080100	Continues to study at the MA
Bardina	Ksenia	Mikhailovna	Economics	course
			080100	Continues to study at the MA
Vershinina	Irina	Alexandrovna	Economics	course
			080100	Continues to study at the MA
Vinogradova	Maria	Alexandrovna	Economics	course
			080100	Continues to study at the MA
Golenok	Anna	Olegovna	Economics	course
			080100	Continues to study at the MA
Davtyan	Tigran	Beniaminovich	Economics	course

			080100	Continues to study at the MA
Dolgikh	Maria	Andreevna	Economics	course
			080100	Continues to study at the MA
Konopelko	Tamara	Vasilyevna	Economics	course
			080100	Proprietary organization,
Malyshev	Nikita	Olegovich	Economics	Moscow
			080100	Continues to study at the MA
Omelchenko	Nikita	Ilyic	Economics	course
			080100	Continues to study at the MA
Pechenova	Maria	Olegovna	Economics	course
			080100	Continues to study at the MA
Sakharova	Ksenia	Mikhailovna	Economics	course
			080100	Continues to study at the MA
Serov	Maxim	Nikolayevich	Economics	course
			080100	Continues to study at the MA
Ustinova	Nadezhda	Ivanovna	Economics	course
			080100	Continues to study at the MA
Firsova	Alena	Igorevna	Economics	course
			080100	Continues to study at the MA
Khromova	Ekaterina	Alexandrovna	Economics	course
			080100	Continues to study at the MA
Tsupenkova	Yana	Andreevna	Economics	course
Erdny-			080100	Continues to study at the MA
Goryaeva	Olga	Vladimirovna	Economics	course
-			080100	Continues to study at the MA
Yakovetskaya	Lyudmila	Valeryevna	Economics	course

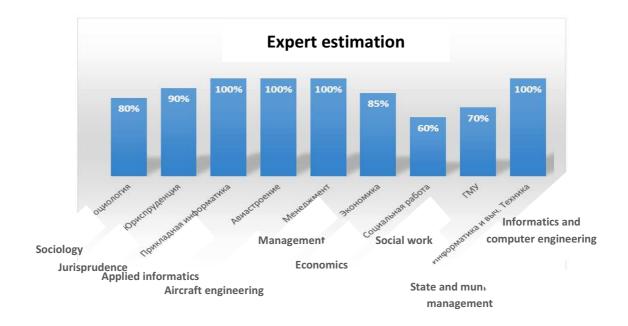
As a result of the self-examination provided by the educational institution, the information about the graduates' distribution is presented. The information provided by the educational institution was affirmed during the analysis of the corresponding documents.

- The share of the contingent of bachelor graduates who were employed within one year after the graduating the educational institution in the area of training (specialty) which was got in the result of the education at the basic professional educational program is 100% (95% study at Masters u 5% are employed). The share of students who were invited to work at the end of the practical work comes to 100%. The share of the bachelor course students considering the distance education is 63%.
- The share of contracts for education at the expense of legal persons (including the contracts about the intentional learning) is 17,1 %.
  - The number of reclamations to graduates: 0.
- The number of positive responses of organizations about the graduates' work. There are 5 responses as of today.

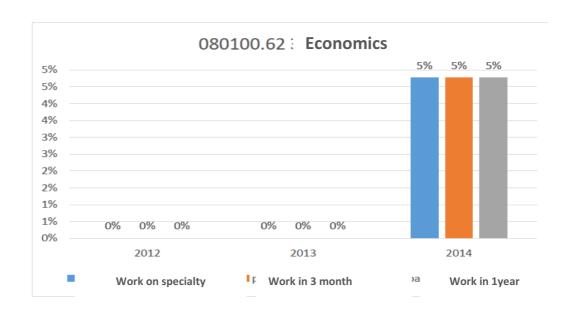
The results of the analysis of needs of regional and municipal labour markets for graduates of present directions (by results of the analysis of statistical data, data of research agencies, hr-agencies, regional authorities u etc.) are presented in the table and diagram.

Directions	Assessment of experts	Labour market (vacancies in media)	Need of the cluster "Dubna" (number of persons)
Sociology	80%	1-50	0
Jurisprudence	90%	50-100	0

Applied informatics	100%	100-500	20
Aircraft engineering	100%	50-100	110
Management	100%	>1000	6
Economics	85%	500-1000	5
Social work	60%	1-50	0
State and municipal	70%	There is no data	0
management			
Informatics and computer	100%	100-500	70
engineering			



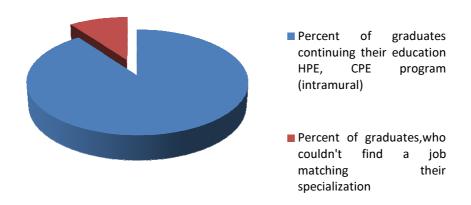
The statistical data (in the first three years) showing within which period of time the graduates of the program could to find a job in their specialty (in the context of the share of the employment in the region and outside the region) are presented in the diagram.



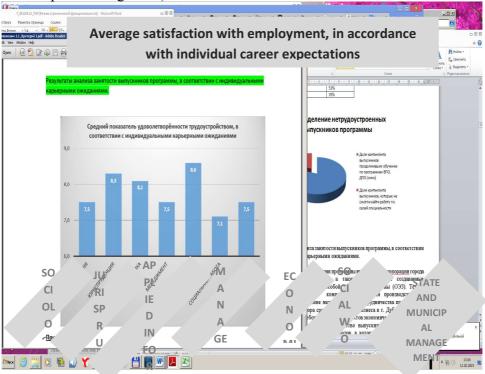
**Note**: the majority of graduates of the bachelor course continue to study at Masters.

The job placement in the specialty 080100.62 Economics in 2014 - 100% are not in Moscow Region.

# Distribution of unemployed graduates of the program



The results of the analysis of employment of the graduates of the program in accordance with the individual career expectations are presented in the diagram (the results are shown on the basis of the 10-point rating scale).



The graduates of the program are mostly employed in state corporations of Dubna, large enterprises, existing enterprises or enterprises being established on the territory of the special economic zone (SEZ). The representatives of large companies noted the presence of a master's degree as the main requirement to the qualification of potential employees. The speed of the

development of the industrial complex of the town and developing of the SEZ production sites, development of international cooperation of the companies of the town allow to conclude that there is demand for graduates of the MA course of the economic area in the regional labor market.

#### 2. RESUME ON THE PROGRAM

# 2.1. Expert's key findings and recommendations on the analyzed program

The program is well focused in accordance with the strategic goals of the university – to be the university which provides high quality educational services for Dubna and the region.

The academic skills and competence levels (for both of bachelor course and MA course levels) are absolutely adequate and completely agree with the Bologna standards. There is accurate separation of the content of the programs at the bachelor course and MA course levels.

The educational program is relevant and popular in Dubna and other regions. Is is practice-oriented and focused on the real needs of the labor market.

The program is provided with highly qualified staff which has the research work experience. 12 Doctors of Science, professors, 26 docents, candidates of science, 18 practical instructors, 2 post-graduate students participate in teaching the disciplines of the training area. The staff includes one Honored worker of science and technology of the Russian Federation, one laureate of Lenin Komsomol; one Honored worker of education of the Moscow Region; one winner of the Nemchinov award; three winners of the Potanin award; two honored professors of the University «Dubna»; five academicians and Corresponding Members of the Russian Academy of Natural Sciences and other academies; one Corresponding Member of the Russian Academy of Sciences (RAS). The education at this area is realized by the professors of the Lomonosov Moscow State University, the Bauman Moscow State Technical University, Moscow Institute of Physics and Technology, the Central Economic Mathematical Institute of RAS, the Institute of System Analysis of RAS, the Moscow Road Institute, the Moscow Engineering Physics Institute and other universities. The potential employers actively participate in the program.

The places for the practical work are: the Central Economic Mathematical Institute of RAS, the United Institute for Nuclear Research in Dubna, the Institute of System Analysis of RAS, P.P. Shirshov Institute of Oceanology of RAS, JSC «Instrument factory «Tenzor» in Dubna; JSC «N.P. Fedorov Dubna Machine-building factory»; JSC KB «Orient Express Bank», Moscow branch; JSC «Scientific and production complex Dedal», in Dubna; «Laboratory of network technologies» ltd. in Dubna; JSC «SEZ TVT Dubna» in Dubna; Interdistrict inspection of the Federal Tax Service of Russia for the Moscow Region; «Firm «IMA-PRESS-PRINT» ltd. in Dubna; JSC «RATA» in Dubna; JSC «Sberbank of Russia», in Dubna.

The master classes with the representatives of the Central Economic Mathematical Institute of RAS in the current year were organized during the scientific seminar «Problems of modeling and development of production systems through the organization of personal meetings and online conferences». Among them: the master class of the Corresponding Mamber of the RAS G.B. Kleiner in September, 2014; 2 master classes of the academician V.M. Polterovich («Where to go: 24 theses») in December, 2014.

There is accurate differentiation between the bachelor and Master's levels in relation to the academic needs and methods of teaching and education.

Strong emphasis in education on the mathematical and econometric methods and their application in practice with the use of standard software tools deserves worth appreciation.

Providing of the educational program is kept at at high technical level. During the classes the modern information technologies are used. 603 computers are connected to the university network which has access to the Internet

The system of the internal education quality monitoring which is realized through opinion polls of students and their participation in assessment of the program allow to improve it according to the students' expectations and needs of the labor market.

The analysis of course works, reports on practice and final qualifying works allow to draw conclusions about the high quality of the organization and realization of students' practices, practice orientation of the chosen subjects of final qualifying works which allow to strengthen theoretical knowledge in practice.

The bachelor course students actively participate in conferences of the university.

The assessment of the graduate's competence model allows to conclude that the competencies of students are relevant, demanded and facilitate the maintenance of the high level of knowledge and skills on the program.

The implementation of the e-learning at the program level is the part of the quality and accessibility of education increasing strategy of the university. The university is developing the distance courses both for the students of full-time course, correspondence course and students of extension courses on the basis of the Centre of the distant education of the university «Dubna» <a href="http://sdo.uni-dubna.ru/">http://sdo.uni-dubna.ru/</a>.

#### Recommendations:

- 1. It should be noticed that the decrease of the share of graduates of the University «Dubna» working in the financial and insurance from 9% to 5% is shown in the Information-statistical report about the job placement of graduates in 2014. Consequently the graduates of the program will need additional professional competencies which allow to extend the range of potential employers. As of today there are open positions on the territory of the special economic zone (SEZ) in "Lit-Trust" ltd., «RUKARD-AURA» ltd., «Roand-Techno graphics» ltd., «NTIZ ApATeK-Dubna» ltd., however potential employers note the following requirements to knowledge and skills: CAD/CAM programs knowledge: NX(UG), CATIA, Kompas; ACAD programs, SOLID WORCS,HATYA, LIKA, SCAD,FEMAP,NASTRAN; computer languages C#, SQL; database MS SQL.
- 2. The management of universities should revise priorities concerning the economic education area. Currently the goals and strategies of the university rely on the technical area of education as the main. It constricts the the opportunities of the program realization.
- 3. As extension of professional competencies based on the prospective requirements of employers it was recommended to include the course of lectures of teaching of the basis of the tender procurement in the curriculum of the educational program of the bachelor course, to extend the teaching for forming the intercultural competencies including to add the discipline «Foreign language» into the plan of education of the senior courses, to add the disciplines: international marketing, international law, international financial accounting, international economics. These requirements are caused by the extension of the international cooperation of large companies of Dubna and changes of the economical activity realization of large enterprises.
- 4. For providing practical training of bachelors and based on the requirements of employers to increase the number of practical classes and trainings for the discipline «1C-accountancy», especially its practical modification. To add the course «audit» to the curriculum of the bachelor course.
- 5. For prospective satisfaction of the needs of middle and small business organizations on the territory of the Special economic zone in Dubna and for extension of the range of potential employers among middle and small business organizations to include the

courses of lectures about acquaintance with the peculiarities of sales, methods of teaching of active, passive and direct sales (because as of today there is a lack of 60% of sales managers in middle and small business), the Tax Code of Russia course, the enterprise management risks, creation of CVs in the curriculum.

- 6. To emphasize on the development of the distant and electronic education forms. It is important because of the relative remoteness from the centre of Dubna.
- 7. In the context of the development of collaboration with employers to organize probations of bachelors in the companies of the town including the territory of the SEZ.
- 8. To develop the initiative of the participation of employers in paying to students (for instance, 50% of payment with making the contract).
- 9. To extend the cooperation in the educational process with employers including through the organization of the course of lectures by leading scientists in first years of bachelor courses. To attract employers, business to the dialog, informal meetings with students of first courses in order to give them an opportunity to get some idea about the chosen profession. The practice of getting into contact between students and employers in the first years of bachelor course should be extended (through probations, job fairs, excursions in companies, longer probations, presentations and invitation of speakers from companies concerning their recruitment requirements etc.).
- 10. Employers should provide regular training to students on how to write a convincing CV and how to prepare for an interview.
- 11. To extend collaboration between the teaching staff of the chair and large companies of Dubna in the frameworks of joint research works including with the participation of students and to provide financing of research works by partner companies of the university. Joint research work should become a priority direction for the teaching staff in the nearest future. It will be useful not only for the research activity of professors but for further matching of competencies and skills of students with the changing needs of the companies of Dubna and the region in general.
- 12. Extend the publication activity of bachelors in the framework of participation not only of internal conferences, but also in Russian and international conferences and seminars.
- 13. In order to strengthen the skills acquired from the program there is a recommendation to the university to examine the opportunity of buying, installing and teaching of the basic business analytics software such as Oracle Hyperion, Sap BO, IBM Cognos, SAS; project management Oracle PRIMAVERA; corporative management systems demanded by main graduates' employers such as SAP, ORACLE E Business Suite, 1C Enterprise etc.
- 14. To create the system of motivation of the teaching staff on the basis of the activity assessment system. To encourage the participation of the teaching staff in the research activity and methodical work.
- 15. To systematize the work of uploading the educational methodical complex (EMC), update the educational methodical materials according to the requirements of the educational standard, include the methodical development in the areas of independent works, laboratory works and interactive forms of education in the EMC for all disciplines. To divide the presentation material into two information presentation forms: electronic course book including basic definitions, theses and visualization excluding excess text information.
- 16. To create an opportunity for distant training of applicants in mathematics, social science, economics, informatics etc. to use electronic forms of teaching and career-guidance through organizing the video lecture course of famous scientists attracted to the educational process on the university website. It will allow to increase the education quality and popularity of the educational program. More activities should be realized to attract more students to the university outside Dubna in order to prepare more graduates for local companies.
- 17. To record and upload into the university website or popular social networks (including YouTube) video from popular master classes and special courses which are conducted by invited lectors or make electronic author's educational courses for the purposes of education,

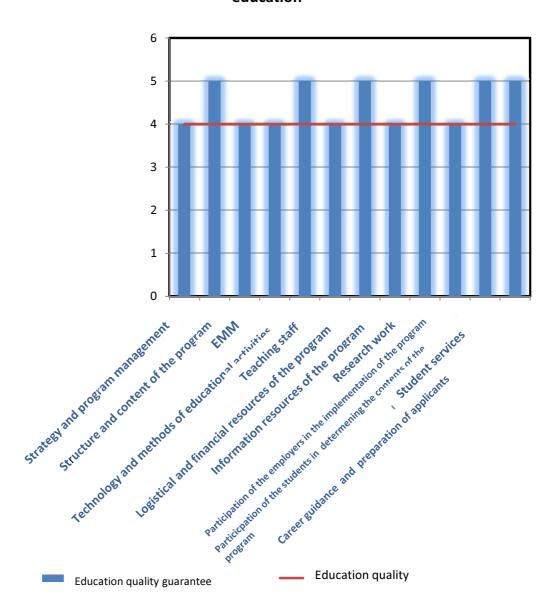
attracting wide range of people, increase of popularity of the university not only in the nearest regions.

- 18. To include the conditions taking into account the peculiarities of these procedures for disabled people in the organization and conduct of the State final examination on the bachelor course programs условия.
- 19. To organize in student dining rooms the reduced price nutrition, to provide financing of sanatorium-and-spa treatment.

# 2.2. Profile of the assessments of the education results and assurances of the quality of education

№	Criterion		Mark
I		Quality of education outcomes	
II		Assurance of the education quality:	
	1.	Strategy, goals and management of the program	4
	2.	Structure and contents of the program	5
	3.	Teaching materials	4
	4.	Technology and methods of educational activities	4
	5.	Teaching staff	5
	6.	Logistical and financial resources of the program	4
	7.	Information resources of the program	5
	8.	Research work	4
	9.	Participation of the employers in the implementation of the program	5
	10.	Participation of the students in determining the contents of the program	4
	11.	Student services	5
	12.	Career guidance and preparation of applicants	5

## Profile assessments of learning outcomes and quality assurance of education



#### 3. QUALITY OF EDUCATION OUTCOMES

#### 3.1. Direct evaluation of competencies by the experts

During the visit of experts the assessment of graduates' competencies was carried out. 37 students (86% of the course) of groups 1031-1033 of the 1-st course attended during the direct valuation.

During the procedure of direct estimation the checking materials, elaborated by the educational institution were used as these materials are considered valid.

For the analysis of formation of competencies the following competencies were chosen:

- 1. able to analyze and interpret the data of domestic and foreign statistics of the social economic processes and phenomena, to find tendencies of social economic indicators changing (PC-8);
  - 2. able competently use the language of the subject (PC-17);
- 3. able to transmit the results of economical mathematical and applied researches in the form of concrete recommendations, expressed in terms of the subject of the studied phenomenon (PC-22).

During the direct evaluation of competencies the following questions were used использовались следующие вопросы:

- main factors determining the choice of business decisions in market conditions;
- the most widespread mistakes in choosing business decisions;
- model of rational consumer choice and its application;
- consumer's profit and general welfare;
- gross, average marginal product: concepts and curves, differences and relationships;
- perfect competition in the short term: the conditions of profit maximization, supply, equilibrium, producer's benefits;
  - imperfection of the market organization of the economy and its state regulation.

The results of the direct assessment of competencies show that the majority of students have a high level of knowledge in the estimated issues:

Share of students	Sufficient level (more than 80% of exercises were done)	Acceptable level (from 50% to 79% of exercises were done)	Low level (from 0% to 49% of exercises were done)
81%	30	-	-
11%	-	4	-
8%	-	-	3

OC4, OC1 – the use of model approaches for the analysis of demand and supply on the labor market, behavior of the main economic agents (trade unions, employees and state).

PC 11, OC11 – the use of analytical tools and methods in the context of the labor market analysis.

For the direct assessment of competencies procedure the following questions were used:

- the analysis of incoming, intermediate and final indicators during the calculation of the number of the unemployed getting unemployment compensation.
  - formation of the relationship between the blocks of indicators of supply and demand.
- formation of the algorithm of the system of interrelated indicators using the method of unemployment compensation calculation.
- how can costs influence the employer's decision to change the demand for labor (model approach).
- what importance in the labor economics models does the category of payment have? How can the answer to this question be formulated with the use of the demand and supply models?
- how does the type of competition on the production market influence the situation on the labor market.

The results of the direct assessment of competencies show that the majority of students have a high level of knowledge in the estimated issues.

Share of students	Sufficient level (more	Acceptable level	Low level (from 0%
	than 80% of exercises	(from 50% to 79% of	to 49% of exercises
	were done)	exercises were done)	were done)
82%	12		
12%		2	
6%			1

The final result of the formation of competencies will be got after the examination on this discipline.

The direct assessment of the graduates competencies was realized for the discipline «**Financial analysis**». 27 students (87% of the number of the final year students) of groups  $N_{\odot}$  4031-4032 of the fourth course attended the assessment.

During the procedure of direct assessment the results of the oral survey of students and conduction and check of the test of financial analysis on the theme #4 «Analysis of financial coefficients».

For the analysis of formation of competencies the following competencies were chosen:

- OC-12. Able to form, find and competently use necessary information for solving tasks and use the available knowledge sources (databases, Internet, scientific-technical literature).
- PC-4. Able to make complex economic analysis of functioning and projectible companies and interpret the results.
- PC-5. Use the mathematical software for solving the discipline tasks on a computer and the Internet tools as well.

For the direct assessment of competencies procedure the following questions were used

- To give a definition and classification of financial coefficients used in Russian practice for industrial companies.
- Sources of information for the financial analysis.
- Features of the calculation of the coefficients of financial stability (on a practical example).
- Features of the calculation of the coefficients of business activity (on a practical example).
- Features of the calculation of the liquidity and solvency coefficients (on a practical example).
- Features of the calculation of the coefficients of profitability (on a practical example).
- The basic software for the analysis of financial coefficients of industrial companies.

- The Microsoft Excel tools for the calculation of the financial coefficients of a company (on a practical example).

The results of the direct assessment of competencies show that the majority of students have a high level of knowledge in the estimated issues.

Name	Sufficient level (more than 80% of exercises were done)	Acceptable level (from 50% to 79% of exercises were done)	Low level (from 0% to 49% of exercises were done)
81,5 %	22		
14,8%		4	
3,7%			1

Valuating the quality of education the experts examined 15 course works. It is 48% of graduates' course works of this direction. Having observed the themes of the course works and having attended their defence the conclusion that all examined works comply with all requirements can be drawn.

Themes of course works:

- 1. Financial analysis of the organization activity on the basis of financial coefficients on a practical example.
- 2. Financial analysis of the organization activity with the help of the method of chain substitutions on a practical example.
- 3. Financial analysis of the organization activity with the help of the integral method on a practical example.
- 4. The company profit analysis on a practical example.
- 5. Financial and operating leverage in the organization activity on a practical example.
- 6. Predicting of probability of the organization bankruptcy by procedure of FFMS on a practical example.
- 7. Predicting of probability of the organization bankruptcy by procedures of foreign scientists (Lisa, Tuffler, Altman etc.) on a practical example.
- 8. Predicting of the financial results of a company on a practical example.
- 9. Factor analysis of the profitability of the organization on a practical example.
- 10. Analysis of the financial stability of the organization on a practical example.
- 11. Financial analysis of the organization activity with the help of the index method on a practical example.
- 12. Formation of the cash flow statement with the help of different methods on a practical example.
- 13. An analysis of the liquidity and solvency of the organization on a practical example.
- 14. Predicting of the organization activity results with the help of economic and mathematical methods on a practical example (econometric, optimization, methods of game theory).

The final result of formation of competence will be obtained after the examination in the discipline.

Valuating the quality of education the experts examined 10 graduation theses. It is 20 % of all last year graduation theses of this

#### **GRADUATION THESES**

№	Objects of valuation	Experts' comments
1.	The themes of graduation theses correspond to the direction of preparation and modern level of science development, technics and (or) technologies in the sphere of the program	Correspond totally
2.	Tasks and contents of the graduation theses serves as the confirmation of the formation of a graduate's competencies	100% correspond
3.	The degree of use of the materials collected or obtained during the pre-diploma practice and preparing course projects during the elaboration of independent research parts of the graduation thesis.	As a rule the materials of pre- diploma practice in the company are used
4.	The themes of the graduation theses are determined by demands of organizations and companies, oriented to the graduates of the program.	Most of works are connected with solving production tasks of companies-employers, for instance: analysis of accounting of JSC «N.P. Fedorov Dubna Machine-building factory», development of business plan of small business company (on the example of the cosmetics store «L*Grass»), analysis of non-cash factors of consumer behavior on the real estate market on the example of Dubna, complex economic analysis of business activity of the «Volga» ltd.  The share of graduate theses oriented on the solving tasks elaborated on demands of employers is 38,6 %.
5.	The share of graduation theses (master's theses) the results of which are practically used by companies and organizations / from them – graduation theses which are practically used by the middle and small business	Correspond
6.	The degree of use of results of the research work of a chair, faculty and exterior research organizations during the independent research parts of the graduation thesis	Insufficiently high

### 3.2. Conclusions and recommendations of experts

#### 3.2.1. Mark: good.

#### 3.2.2. Strong points

1. The themes of graduate theses are practical oriented and correspond with the direction of activity during the pre-diploma practice. The practical experience is used during the preparation

of a graduate thesis. The share of graduate theses oriented on solving tasks elaborated on the basis of employers' requests is 38,6%. The choice of real tasks to solve in a graduate thesis increases the job placement chances of graduates in the companies where they got practice.

- 2. Realizing the monitoring of students' satisfaction of the knowledge they got allows to correct the program.
- 3. Participation of chiefs of companies, authorities in the graduate theses as scientific advisers allows to get additional professional experience.
- 4. The results of the surveys among graduates show that 80-85% of them are satisfied of the results of education and suppose that the level of their skills corresponds with the labor market requirements.

#### 3.2.3. Areas to improve

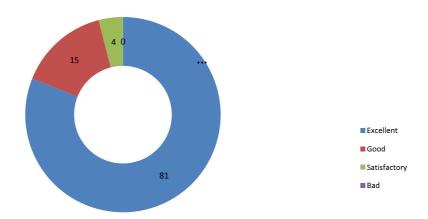
- 1. To maintain the methodology «education during the whole life» and induce the employees of the companies of the town and graduates of the university to improve their qualification, discounts for the graduates of past years on the qualification improve and professional retraining can be provided.
- 2. In the frameworks of academic mobility to organize international probations for bachelors in order to extend the range of their competencies in research activity. For the program «Economics» the university doesn't organize the programs of international probations. It doesn't allow to provide academic mobility of bachelors.
- 3. In the context of the collaboration with employers to organize probations of bachelors in the companies of the town including on the territory of the SEZ.
- 4. To focus more attention to the social competencies oriented on the development, maintenance and improvement of business communications,, skills of organization and time management.
- 5. More rapid response to changing requirements for the competence of graduates by employers.
- 6. Consideration of the requirements for the competencies of graduates from small and medium-sized businesses.

Following the results of the survey of the students of the program the educational institution provided data which has been checked by experts during the visit.

The data provided by the educational institution has been confirmed by experts during the visit during the random polling.

It allows experts to make conclusions about good preparation of students on the disciplines.

# Students' assessment of the education quality in general



#### 4. ASSURANCE OF THE EDUCATION QUALITY

#### 4.1. Strategy, goals and management of the program

#### 4.1.1. Valuation of criterion: good.

#### 4.1.2. Strong points

- 1. The University management supports the experience of individual teachers to improve the control system of educational process on the basis of implementation of rating technology.
- 2. Cooperation treaty-making (Central Economics and mathematics Institute RAS, System analysis Institute RAS).
- 5. The issues of monitoring the demand for graduates is addressed by the Analytical center "Education and career", modified from the department "Labour market analysis and career planning", founded in 2001 (Order 245 of 21 May 2001).

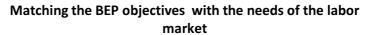
#### 4.1.3. Areas for improving

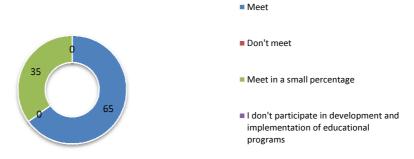
- 1. To include in the structure of the University (at the level of implementation of the program) basic departments of leading employers.
- 2. More efforts should be made in the University to attract more students outside Dubna for the purpose of obtaining the required number of graduates for local businesses.

During the face-to-face visit employers questionnaire (interviewing) was held, the results of which were compiled the chart.

The meeting was attended by representatives of Rosbank, the pension fund, the educational training centre, OJSC "Dubna machine-building plant named after N. P. Fedorov", OJSC "Special Economic Zone of technical innovation type "Dubna", Rosatom and others.

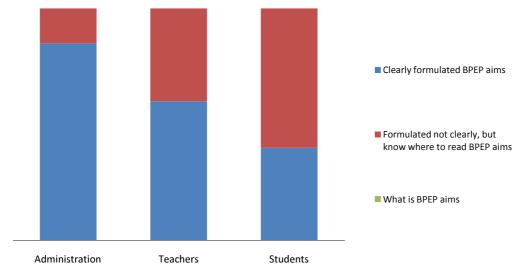
The data presented on the chart, enable experts to conclude that the goals of the BEP meet the needs of the labor market.





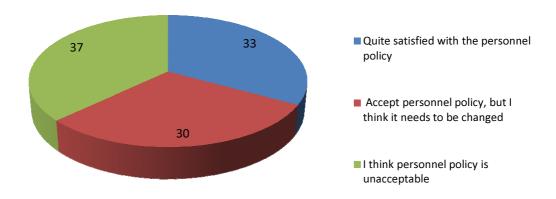
During the face-to-face meeting experts held interviews of students, teachers, staff and obtained the data, which allow to conclude that respondents have a clear idea of the objectives of the programme. As a recommendation may be noted the need for lighting purposes BPEP and opportunity to participate in its improvement on the website and information boards of the University.



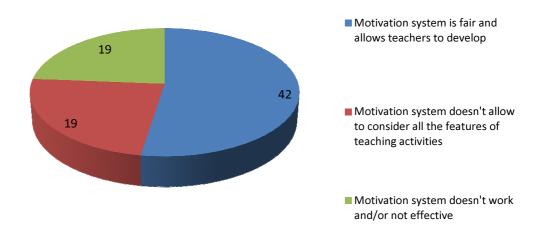


In the process of self-examination, educational institution presented data on the teachers satisfaction of personnel policy and the current incentive program.

### Personnel policy satisfaction

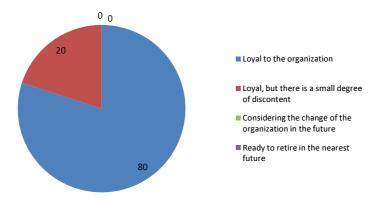


#### Satisfaction with the current motivation system



During the face-to-face meeting interviewing and questionnaire of teachers, participated in program realization, were held. The results of interviewing are presented in the chart "The level of employee loyalty".

#### The level of employee loyalty



According to the results of these two charts analysis, the experts conclude that the majority of teachers are satisfied with personnel policy, however, consider incentive program is not sufficient. As a recommendation should be noted the need to reward teachers' methodical work, publications in foreign magazines, conducting research activities.

#### 4.2. Structure and contents of the program

#### 4.2.1. Valuation of criterion: excellent.

#### 4.2.1. Strong points

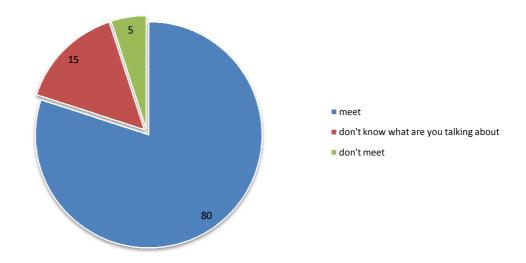
- 1. A strong emphasis in the training on mathematical and econometric methods and their application in practice with regard to the use of standard software tools deserves evaluation.
- 2. All the content of the relevant economic programs at the levels of bachelor's and master's degree is included. There is a clear structure from basic to advanced level. Teaching and certification methods reflect the difference in the relevant skills and levels of competence.
- 3. The University's partners are such organizations and employers, as the Administration of Dubna, OJSC "Sberbank of Russia", MUE "Municipal improvement", Pension Fund of the Russian Federation, highly intelligent enterprises: Joint Institute for Nuclear Research (JINR), the Institute of market problems of the RAS. MUE "Direction of science city program development", FSUE "Institute for scientific research of applied acoustics", OJSC SRI "Atoll", OJSC "Dubna machine-building plant named after N. P. Fedorov", OJSC State machine-building development laboratory "Raduga", CJSC "Experimental Design Bureau "Aerospace systems", LLC "Hi-Tech park "Dubna", OJSC "Instrumental plant "Tenzor", LLC "RSC "Atom", OJSC "RATA", and many others.
- 4. Pre-graduation practical training is at the enterprises of Dubna, in the public authorities, what is reflected in the theme of graduate qualification work.

#### 4.2.2. Areas for improving

- 1. Based on the results of interviews with employers-representatives of big business and state corporations of Dubna, it is required to include in the curriculum a course of lectures on learning the basics of tender procurement, to expand training of building intercultural competences, to include the discipline "Foreign language" in the plan of training of senior courses, to include the following subjects: international marketing, international law, international accounts, international economics. To increase the number of workshops and training sessions on the discipline "1C: accounting", especially its practical modifications.
- 2. Based on the results of interviews with employers-representatives of small and medium business, it is required to include in the curriculum lectures on introduction with the specifics of sales, training methods of active, passive and direct sales (as at the moment the lack of sales managers in SMB is 60%), the tax code studying, the risks of doing business, resume writing.
- 3. To add in curriculum of bachelor's programme course "Audit".
- 4. To include in the organization and realization of the State Final Examination in bachelor's programme conditions, taking into specifics of these procedures for disabled persons and individuals with disabilities.
- 5. Potential employers of Dubna note necessity for students to have knowledge of CAD/CAM programs: NX(UG), CATIA, Kompas; programs: ACAD, SOLID WORCS,HATYA, LIKA, SCAD,FEMAP,NASTRAN; programming languages C#, SQL; data bases MS SQL.

During the face-to-face visit, the experts held meetings with students of the programme being evaluated. One of the issues discussed: the structure and content matching the programme with the expectations of direct consumers of the program - students. Data collected on the results of the interviewing are presented in the chart and enable experts to conclude that 80% of students expressing the opinion on compliance of the structure and content of BEP to the expectations of the students.

# Matching the BEP structure and content with students expectations



#### 4.3. Teaching materials

#### 4.3.1. Valuation of criterion: good.

#### 4.3.2. Strong points

- 1. Reviewing programs BPEP HE for 2014 were held by Honored economists of Moscow region the President of the CCI of Dubna Bobrov V.N. and General Director of LLC "ICC Dubna" Klymenko N.D.
- 2. EMM developed in conjunction with leading scientists from universities and scientific centers textbooks, collections of practical tasks, tests, lecture notes.

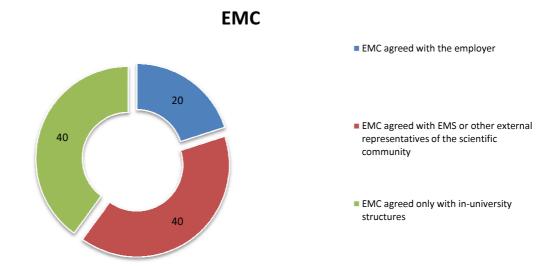
#### 4.3.3. Areas for improvement

- 1. To systemize works on EMC renewal, to update EMM in compliance with the requirements of changes in educational standards, to include in EMC of all disciplines the curriculum methodological developments in the conduct independent work, laboratory practicals, interactive forms of education.
- 2. To generate questions and tasks FSC, the fund of test tasks intermediate knowledge control, business cases with the active cooperation with potential employers in compliance with real practical (production) situations.
- 3. To update BEP in compliance with employers' opinion.

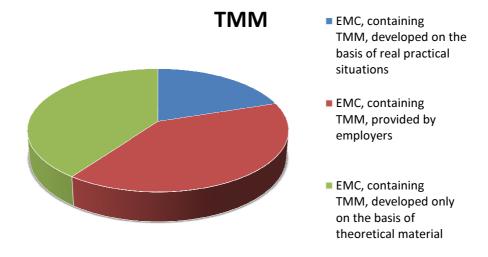
During the face-to-face visit experts reviewed teaching materials developed in an educational institution. According to the results of 20 teaching materials research, compiled the following chart.

These data allow experts to conclude that in the process of EMM harmonization employers and representatives of external organizations participate not actively.

40% EMM adjusted and developed in compliance with employers' opinion.

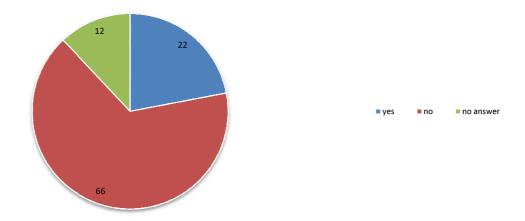


During the face-to-face visit experts analyzed control and measuring materials, which are used for ongoing monitoring of the progress. The results data of test materials analysis are presented in the following chart. This enabled to conclude low employer's involvement in the process of TMM development. It is also necessary to add in the EMC, containing TMM, business cases, tasks with the real production situations data usage.



According to the results of the questionnaire presented by the educational institution, the results of which were confirmed during the personal visit, the majority of students believe that their opinion is not taken into account when developing and updating EMM. The University conducted the enquiry about satisfaction with the program, however, students' comments are not considered. As a result, experts recommend actively attract students to participate in the EMM development.

#### Students' voices consideration in the EMM developing and updating



#### 4.4. Technology and methods of educational activities

#### 4.4.1. Valuation of criterion: good

#### 4.4.2. Strong points

- 1. Practice-oriented nature of tasks, case studies, courseworks.
- 2. Sufficient consideration of mathematical models and methods in various fields of knowledge, including problem-solving in the available software tools.
- 3. Master classes in the current academic year was held with representatives of CEMI RAS was conducted in the framework of the scientific seminar "Problems of modeling and development of production systems, through personal meetings and online conferences arrangement". Among them: September 2014, corresponding member RAS G.B. Kleiner; December 2014, academician V. M. Polterovich ("Where to go: 24 thesis") 2 master classes.
- 4. Very good combination of teaching and methods of assessment, this ensures good learning outcomes.

#### 4.4.3. Areas for improvement

- 1. Trainings extension on 1C products, accounting and audit trail as actual skills in the labour market.
- 2. To divide presentation material in two forms of presentation electronic textbook with the inclusion of basic definitions, regulations and visualizations, eliminating the redundancy of text information.
- 3. To expand the practice of distance training.

During the face-to-face visit experts visited a lesson, analysis of which is presented below.

Teacher's full name Samoshkov Artem Konstantinovich Group /specialty 3031-3032

- 1. Subject/module: Industrial organization (IO)
- 2. Type of lesson: lecture
- 3. Theme of the lesson: Methodology and history of IO
- 4. The purpose of the lesson: To acquaint students with the methodology and history of the theory of industrial organization
- 5. Objectives of the lesson: To give the knowledge of IO, definition, purpose, object, subject, tasks. Harvard and Chicago school of research. The history of IO.
  - 6. Logistical support of the lesson presentation MS PowerPoint, laptop, projector.

#### 7. Point out:

No॒	KSs, which are planned to form on lesson	Forms, tools, methods and
$\Pi/\Pi$	and competences, the formation of which is	techniques to be used on lesson for the
	impacted of these KSs (are to be announced	competence formation
	by teacher)	
1.	GP-1	Discussion with the students on the
	GP-21	main issues, themes, lectures, seminars,
		independent work.
2.	To know: the economic foundations	Lectures, group discussions
	of industrial organization, methods and	
	principles of analysis of market structures.	
3.	Be able to: characterize industrial	Lectures, group discussions
	markets, conduct industry analysis.	
	To possess: economic IO	
	terminology and vocabulary, skills of	
	working with educational literature.	

### TEACHER EVALUATION

Nº	Analysis criterion	Index	Mark (0,1,2)
1.	Observance of classes rules	Well-timed lesson beginning and ending, time balanced sections	2
2.	Organizational moment	A greeting. Theme threads, goals (communication goals formed with competencies)	2
3.	Attendees motivation on the forthcoming activities	An indication of the relevance, formed professional and/or social and personal competences	2
4.	Psychological climate in the classroom	The presence of positive emotional interaction between teacher and students; mutual goodwill and engagement	2
5.	Exposition quality	The material structuring; the clarity of the current problems notation; presentation consistency and availability; the presentation adaptation to specific audience; the presence of examples, relevant facts	2
6.	Content matching with the course program	To compare with WPD (EMM)	2
7.	Visual materials usage	Tutorial, workshop, handouts, tables, pictures, etc.	0
8.	Declamatory skills	Audibility, clarity, euphony, literacy, pace of speech, facial expressions, gestures, pantomimic; the emotional intensity of the speech	1
9.	Sensitivity to the audience	The ability to react on perception changes in the audience.	1
10.	Civility to students		2

11.	Methods of attention organization and	The interest increasing of the audience (the original examples, humor, rhetorical devices, etc.);	2
	students' behavior	students' involvement in dialogue, in the process	
	regulation	of assignments, etc. But not: an open call to the	
		audience attention; disapproval demonstration;	
		psychological pressure, blackmail	
12.	Maintaining a "feedback"	Material learning control	2
	with the audience during		
	the class		
13.	Activities summarizing	The reflection organization, in which students are	2
	(reflection organization)	actively discussing the results	
14.	Reputation	Corporate style observation, presentability,	2
		charismaticness	
15.	Summative assessment		2
16.	Experts' notes and suggestions		
	Strong points:		
	<ul> <li>There was a clear link with the related disciplines.</li> </ul>		
	<ul> <li>Key points highlighting, discussion.</li> </ul>		
	<ul> <li>Questions to the audience on the previous material.</li> </ul>		
	- Writing the information on the board, which allows to focus on the material		
	Recomendations:		
	- To reduce the amount of text material on the slides, moving it into the material of the		
	electronic textbook, lectures in electronic form.		
	- To combine groups in	- To combine groups in the streaming lectures – the presence was 18 students	

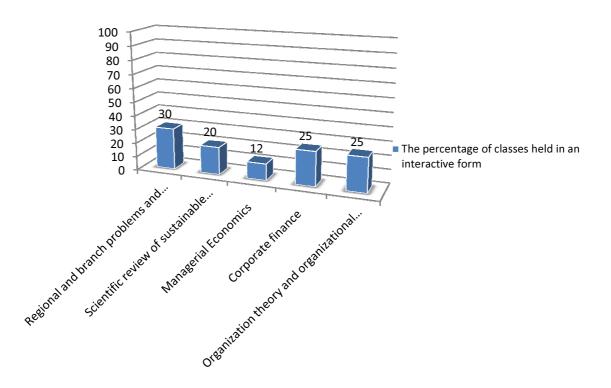
When cameral analysis of self-examination report, the analysis of the curriculum and class schedules, experts have determined that the percent of lesson realization in an interactive way for the whole program is 22%. During the personal visit EMC of five disciplines were studied. Data of lessons conducted in an interactive form in the context of the studied teaching materials are presented below.

As a part of the educational program special courses can be marked:

- Regional and branch problems and mechanisms of development management (trainings proportion 30%);
- Scientific review of sustainable innovative development projects (trainings proportion 20%)
- Managerial Economics (trainings proportion 12 %);
- Corporate finance (trainings proportion 25 %);
- Organization theory and organizational behavior (trainings proportion -25%).

On their basis, the experts conclude about the need to expand these forms in these disciplines and inclusion in other disciplines of the program.

#### The percentage of classes held in an interactive form



#### 4.5. Teaching staff

#### 4.5.1. Valuation of criterion: excellent.

#### 4.5.2. Strong points

- 1. In teaching major disciplines take part: 12 doctors, professors, 26 associate professors, Philosophy Doctors, 18 practitioners, 2 postgraduates. Have the honorary degree of Honoured master of sciences and engineering of the Russian Federation 1, 1 recipient of Lenin Komsomol prize; 1 honored educator of Moscow region; 1 recipient of Nemchinov prize; 3 recipient of Potanin prize; 2 honorable and distinguished Professor of the University "Dubna"; 5 academicians and corresponding members of RANS and other academies; 1 corresponding member RAS RF. Teaching in this area is carried out professors of Lomonosov Moscow State University, Bauman MSTU, MIPT, CEMI RAS, ISA RAS, MADI, MEPHI, and other universities. In the program are actively involved Potential students' employers are actively involved in the program.
- 2. High quality in research and teaching.
- 3. At the department part-time practitioners are employed, who are constantly involved in internal examination courses 4 people, teachers from other universities (Bauman MSTU, MEPHI, MSU, MSUPA), employees of existing commercial and public organizations.

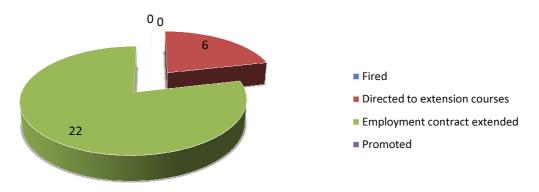
#### 4.5.3. Areas for improvement

41% of teaching staff are older than 56 years, most of them are Doctors of Science. There are necessary measures for the selection and retention of young scientists in teaching staff, motivation and prosperity qualification growth of the department teachers.

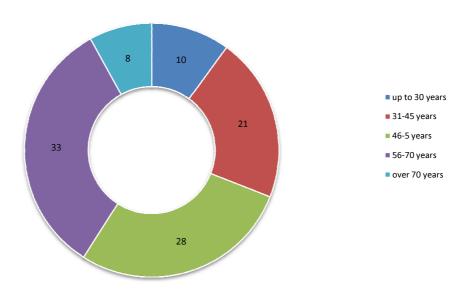
Analyzing the facts stated by the educational institution in the statement of self-examination, the experts came to the conclusion that the presented data is relevant and reliable. The results of the integrated assessment of teaching staff (the last year) and the age structure of teachers participating in the program presented in the following charts.

Upon the review of the presented data, the experts conclude about the high level of human capacity and the problem of aging and recommend to the program managers to take steps to preserve human resources programs, the training of young candidates and Doctors of Science.

# According to the results of a comprehensive assessment of teaching staff within the framework of implementation of the BEP



Full-time teachers' age structure



#### 4.6. Logistical and financial resources of the program

#### 4.6.1. Valuation of criterion: good.

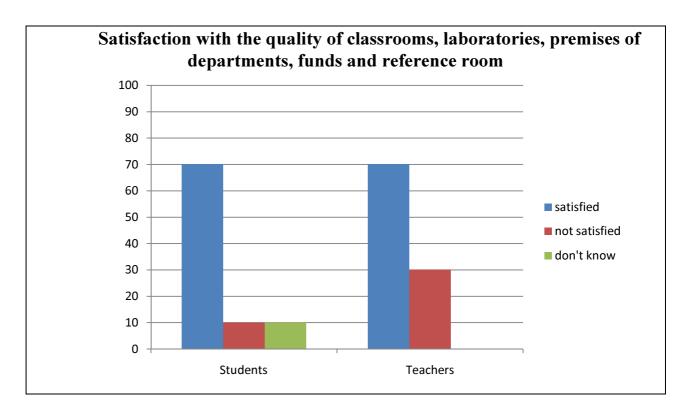
#### 4.6.2. Strong points

- 1. The educational program support is on the high technical level. During the classes modern information technologies are used. Excellent conditions of sporting complex.
- 2. In 2014 an unexampled volume of educational building repair was performed, all windows were replaced, in-line audience were renovated. A number of classrooms equipped with multimedia technology is growing.
- 3. Participation in the staff training and professional development for the bunch (Innovative territorial bunch "Nuclear physics and nanotechnology bunch in Dubna", governmental regulation of the Moscow region dated 23.09.2013 No.755/42).
- 4. 2 laboratories (rooms), fitted with the equipment and/or supplies at the expense of the social partners (employers).

#### 4.6.3. Areas for improvement

- 1. To create an additional motivation program for teaching staff on the basis of measurement system. To encourage the participation of teachers in research activities and methodical work.
- 2. To extend the cooperation of the department teaching staff with the large enterprises of Dubna in the framework of the cooperative research activities, including the students involvement, and to provide budgeting for research activities from the partners of the University.
- 3. To develop initiatives of employers participation in the studentship payment (for example, 0.5 payment with an agreement on contract work conclusion).
- 4. To create more conditions for students' with disabilities education: (ramps at the entrance, elevators in all buildings, a special place for a sign language interpreter, sound signals for the hearing impaired, etc.).

During the face-to-face visit, the experts conducted interviews with students and teachers participating in the program, with a view to the satisfaction of the auditorium fund. The obtained data are presented in the following chart, and allow experts to conclude that, totally teachers and students are satisfied with the quality of classrooms, reading room fund.



#### 4.7. Information resources of the program

#### 4.7.1. Valuation of criterion: excellent.

#### 4.7.2. Strong points

- 1. Good accessibility to economic-oriented software products, there are computer labs and library resources.
- 2. Library resources are considered as adequate for teachers and students regarding the quality and quantity of textbooks and electronic resources (journals, textbooks  $\rightarrow$  including EPSCO database).
- 3. While teaching different disciplines at the University "Dubna" such software products as 1C:Enterprise8.0.8.7, AdobePhotoshopCS6, CorelGraphicsSuiteX4, MapInfo Professional 7.5.0.22, MatLab R2011a, Mathematica 7, Microsoft Office, Statistica, Garant, the Intelligence Simulator, Consultant plus, etc.
- 4. As part of the construction of university campus Prototyping Centre in the University "Dubna" server hardware Cloud computing center was set. The center is assigned to provide access to the licensed software for employees of small and medium enterprises, as well as computer labs of the University "Dubna".
- 5. Three classrooms of the University "Dubna" was fitted with multimedia equipment to improve the quality of the educational process. Smart boards, combining the unique capabilities of interactive work with the projected were installed. As well, equipment which enables to make Web-seminars with unlimited number of connections was installed.

#### 4.7.3. Areas for improvement

- 1. To include in the University's electronic resources access to professional databases cash flow analysis with statistics of Western and Eastern Europe (SPARC, RUSLAN, AMADEUS, ORBIS).
- 2. To consolidate the skills and abilities gained on the programme, the University should consider the possibility of buying, installing and learning the basic software of business intelligence analysis, such as, for example, Oracle Hyperion, SAP BO, IBM Cognos, SAS;

project management Oracle PRIMAVERA; corporate management systems, popular between main employers of graduates, such as SAP, ORACLE EBusiness Suite, 1C, etc.

#### 4.8. Research work

#### 4.8.1 Valuation of criterion: good.

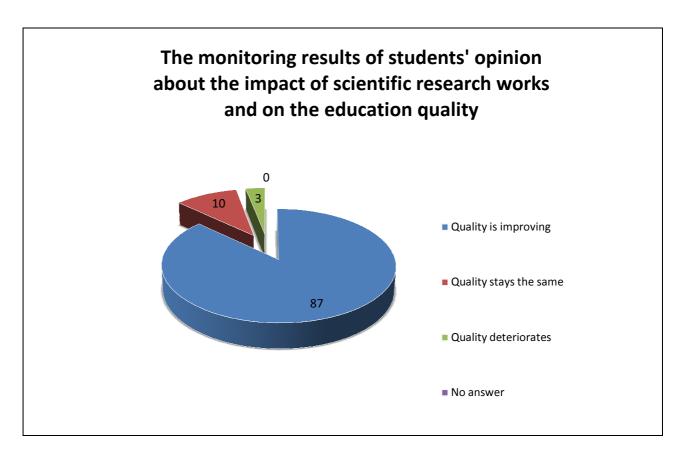
#### 4.8.2 Strong points

- 1. Many staff members have published textbooks and other learning materials, some of which have been noted in other Russian universities.
- 2. 4 scientific groups were organized under the leadership of Ph. D. In Economics, associate professor Samoshkov A.K.: "Economic-mathematical modeling of social and economic processes at the regional level; Ph. D. In Economics, associate professor Shokin, Y.V.: "Investigations of the influence of cashless factors of consumption at the regional level"; Doctor of Economics, professor Pakhomova E.A.: "Assessing the university impact on the effectiveness of regional development"; Doctor of Economics, professor Y.Y. Shitova: "GIS modeling and complex analysis of space structure and flows pendular migrants in the region."

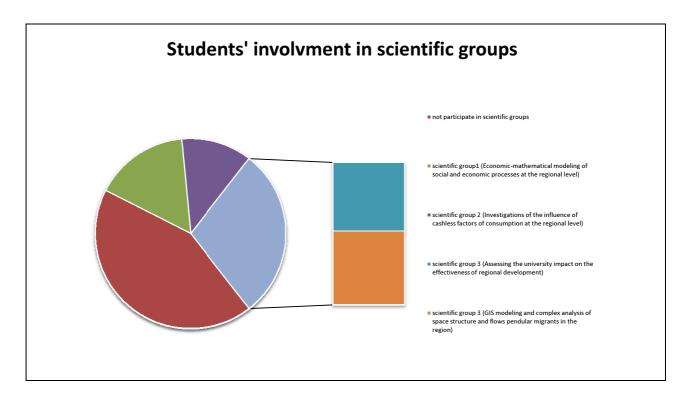
#### 4.8.3 Areas for improvement

- 1. To organize the work for attracting external source of support for research, especially from partner companies.
- 2. To create motivation system for teaching staff on the basis of the performance assessment system. Amount of scientific research can be increased through financial incentives, participation in conferences and publications of scientific articles and monographs. Experts have learned that such incentives scheme in the process of implementation; it should be considered as a priority in the future staff development.
- 3. To make a treaty for research results actualization in the real sector of the economy.
- 4. Joint scientific research work with local companies should be a priority for the faculty in the nearest future. This will not only benefit teachers for the research activities and also for further students' competencies and skills adjustment with the changing needs of companies.
- 5. To organize work on the scientific research results commercialization, to create conditions for material stimulation of the activity of teachers and students, the use of research results at the national and international level.

In the self-examination documents the educational institution presented the information on the results of monitoring the students' opinion "The impact of research work on the quality of education". This diagram illustrates data certified by the experts during the face-to-face visit. This enables to make a conclusions that the students participate themselves in scientific conferences, workshops, reporting the results of their work in the classroom. What is more, students noted that the teachers use and discuss with students the scientific achievements and the results of their research at the lessons.



Students' involvement in scientifics groups was analysed. For students of the evaluated programme operates 4 scientific groups under the leadership of Ph. D. In Economics, associate professor Samoshkov A.K.: "Economic-mathematical modeling of social and economic processes at the regional level"; Ph. D. In Economics, associate professor Shokin, Y.V.: "Investigations of the influence of cashless factors of consumption at the regional level"; Doctor of Economics, professor Pakhomova E.A.: "Assessing the university impact on the effectiveness of regional development"; Doctor of Economics, professor Y.Y. Shitova: "GIS modeling and complex analysis of space structure and flows pendular migrants in the region." By results of scientific circles work, students prepare publications, reports, include the results of the study in GQW.



# 4.9. Participation of the employers in the implementation of the program

#### 4.9.1 Valuation of criterion: excellent.

#### 4.9.2 Strong points

- 1. Among practice bases are: CEMI RAS, Joint Institute for Nuclear Research, Dubna, ISA RAS, FSIS the Oceanology Institute of Shirshov P.P., OJSC "Instrumental plant "Tenzor", Dubna; OJSC "DMBP" named after Fedorov N.L., Dubna; -OJSC TB "Orient Express Bank", Moscow branch; OJSC "Scientific-production complex Dedal", Dubna; LLC "Laboratory of network technologies", Dubna; OJSC "SEZ Dubna", Dubna; Interdistrict IFTS of Russia in the Moscow region; LLC "Corporation "IMA-PRESS-PRINT", Dubna; OJSC "RATA", Dubna; OJSC "Sberbank of Russia", Dubna.
- 2. A good well-established links with employers, the extensive list of practical bases on the largest enterprises of the city and in the administration ensures the consistency of the educational program objectives in accordance with the demands of the labour market. The employers representatives are involved in the development of BPEP: SEZ "Dubna", Pension Fund of the Russian Federation, CCI of Dubna.
- 3. Master classes in the current academic year were held with representatives of CEMI RAS was conducted in the framework of the scientific seminar "Problems of modeling and development of production systems, through personal meetings and online conferences arrangement". Among them: September 2014, corresponding member RAS G.B. Kleiner; December 2014, academician V. M. Polterovich ("Where to go: 24 thesis") 2 master classes.

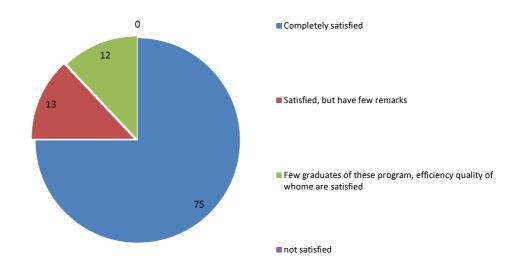
#### 4.9.3 Areas for improvement

To involve employers at all stages of the educational process: curriculum formation, training courses, lesson organization, topics and tasks development for the courseworks and graduate qualification works, all kinds of practices. To attract employers for formation test tasks fund for the medium control, business cases. To attract employers, representatives of the business community to the dialogue, to informal meetings with junior students, so they can get an idea about their chosen profession.

Thus, employers indicated that graduates have not enough developed competence in the field of international cooperation - foreign language skills, international negotiations, international law. Also due to public corporations transition, mainly represented as graduates employers, on tender procurement, competences in the field of organization and holding of tenders are required. Also with representatives of small and medium businesses, including presented in the SEZ, the lack of the graduates' competence in the field of sales was marked.

This allows us to recommend the inclusion in the curriculum of the bachelor educational program lectures on learning the basics of tender procurement, to expand training in the formation of intercultural competence, to include the discipline "Foreign language" in the plan of senior courses, to include the following subjects: international marketing, international law, international financial reporting, international Economics. These requirements caused by the expansion of international cooperation of large enterprises of Dubna and the change in the business activities of large enterprises. It is necessary to organize international internships for students in Economics, which is not provided the University.

#### **Employers satisfaction with graduates efficiency quality**



# 4.10. Participation of the students in determining the contents of the program

#### 4.10.1. Valuation of criterion: good.

#### 4.10.2. Strong points

- 1. Students have opportunities to influence on the program content. Students regularly participate in the program content monitoring in accordance with the requirements of the legislation.
- 2. Students' questionary "How do you estimate the course you have listened?" is conducted. The questions are formulated in such a way that enable students to participate in the process of improving the discipline, thereby, influencing and improving the operation of educational institutions in general.
- 3. In the Analytical centre "Education and career" students conduct interviews and surveys among employers about the quality of graduates' education.

4. Students are the part of the Academic Council, where they have a voice in making University decisions on monitoring the implementation of the educational process, and represent the students' interests in addressing issues in the field of quality of their learning.

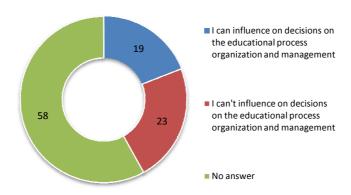
#### 4.10.3. Areas for improving

- 1. To expand the practice of students grading the content, organization and quality of the educational process in general and of dedicated disciplines (modules) and practices, as well as the work of individual teachers.
- 2. To consider the students' opinion on extension workshops on a range of subjects associated with the development of modern information systems: 1C, business analysis, project management.

During the face-to-face visit, experts have analyzed students' participation in students' selfgovernment. The chart presents data, reflecting student employment.

Based on the analysis of the presented data, the experts conclude that the students have the opportunity to influence on such decisions.

#### Students' participation



#### 4.11. Student services at the program level

#### 4.11.1. Valuation of criterion: excellent.

#### 4.11.2. Strong points

- 1. Additional scholarships for students who demonstrated excellence in studying, scientific research activities, public and cultural activities, sports achievements.
- 2. At the University "Dubna" organized work of creative, sporting associations and collectives, students and teachers associations with the same interests through active support of the already established associations with the possibility of implementation on a University-wide urban, regional activities. Among creative associations and clubs: Sports club, which has sportsmass work in 11 areas and develop the following sports: volleyball (men and women), basketball (men), streetball (female), mini-soccer, swimming, table tennis, chess, powerlifting, weightlifting, ultimate frisbee; Theatre "Talion"; the Cinema Festival "Gudwin"; the Camp of the asset; Ecoschool; Students Council; Students scientific society, etc..
- 3. Students free access to learning resources network is organized EI, legal base, scanning of necessary materials or downloading information; wireless connection is organized (Wi-Fi).

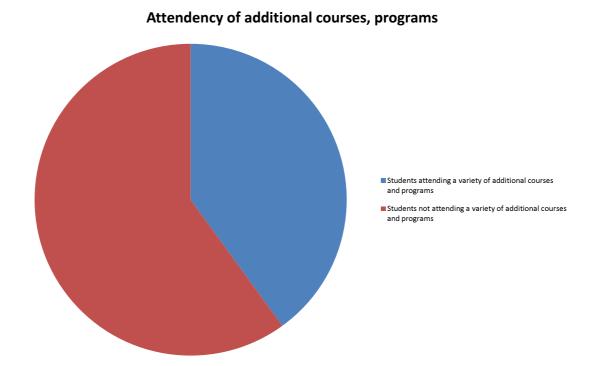
#### 4.11.3. Areas for improvement

1. To organize food at subsidized prices in the canteen, to provide the payment of sanatorium treatment.

- 2. Actively use a form of moral encouragement, diplomas, letters of appreciation, honours boards, photo-reports, ratings.
- 3. To add open classes at the undergraduate on foreign language.

During the face-to-face visit, the experts were presented with the documents confirming that students attend additional courses and programs.

Based on the presented data analysis, the experts conclude a fairly good level of this work.



### 4.12. Career guidance. Evaluation of preparation quality of applicants

#### 4.12.1. Valuation of criterion: excellent.

#### 4.12.2. Strong points

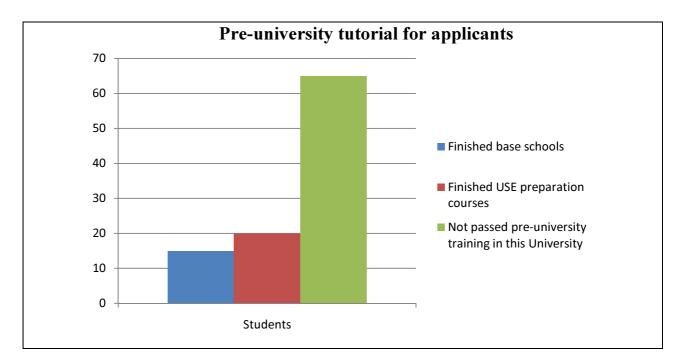
- 1. There is well-functioning practice of making meetings between teachers, students and parents in the schools of the region.
- 2. For potential applicants attraction the University organized a cooperation with educational institutions and PED Dubna, Protvino, Kotelniki, Taldom and the Taldom district, Dmitrov and Dmitrovsky district of Moscow region, Kimry, Kashin, Kalyazin, Konakovo of Tver region, Uglich and Yaroslavl of Yaroslavl region, Kolchugino of Vladimir region. During the year representatives of the department and faculties conduct proforientatinal trips with presentations on educational courses and the admission conditions at the State University "Dubna".
- 3. From 2010 State University "Dubna" has been participating in United Interuniversity Mathematical Olimpiad conducting, which is included in the Federal List of Olympiads for pupils.
- 4. By efforts of the spesialized departments University Olympiads in informatics, economics, ecology, chemistry, social science are held.
- 5. Lessons in mathematics, physics, chemistry, biology, computer science and ICT, social studies, history, English and Russian languages on the evening courses, weekend courses and part-time courses (duration 8 months) are organized for pupils of 10-11 classes.

#### 4.12.3. Areas for improvement

- 1. To attract students, spending in schools and in the University open classes or themed events. To organize the issue of a departmental newspaper, telling about the best graduates and their achievements. In the newspaper excerpts of the best courseworks or graduate qualifying works, photographs and reports from meetings with the experts of the city enterprises can be published.
- 2. To pay attention on the work with parents of prospective students, to submit materials, professionally orienting students on electronic platforms.
- 3. To create an opportunity for graduates remote training in mathematics, social studies, economics, computer science, etc., to use the electronic forms of education and proforientation that will improve the quality of their education, will increase the popularity of the educational program.
- 4. To create an opportunity for graduates remote training in mathematics, social studies, economics, computer science, etc., to use electronic forms of education and proforientation, through the organization on the University's portal video lectures course by eminent scientists engaged in the learning process that will improve the quality of their education, will increase the popularity of the educational program.

During the analysis of the bachelor's program, experts have prepared a chart that analyzes the system of pre-university bachelors training. The chart represents the result of pre-university training at the results of the last year.

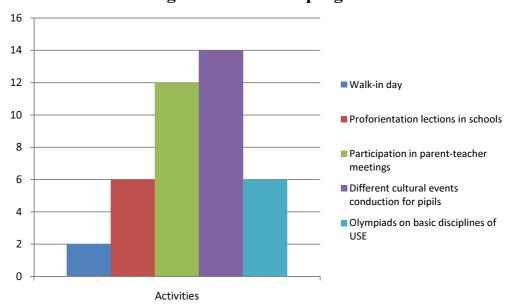
On the basis of data experts recommend to strengthen contact with base schools, including remote forms of education.



6. According to the documents analysis and interviews with programme managers, experts have prepared a chart illustrating the number of activities carried out during the past academic year. For potential applicants attraction the University organized a cooperation with educational institutions and PED Dubna, Protvino, Kotelniki, Taldom and the Taldom district, Dmitrov and Dmitrovsky district of Moscow region, Kimry, Kashin, Kalyazin, Konakovo of Tver region, Uglich and Yaroslavl of Yaroslavl region, Kolchugino of Vladimir region. During the year representatives of the department and faculties conduct proforientatinal trips with presentations on educational courses and the admission conditions at the State University "Dubna".

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# Data on proforientation activities number carried out by research and teaching staff within the program set



### CVs of experts

### Expert's name: Elena V. Vasilieva

Work place, position	FSBEI HPE The State University of Management
	Deputy Head of Information Systems Department for scientific work
	Head of Examination Centre Cambridge IT Certification Center (SUM-Cambridge)
Academic degree, academic title	Ph.D. in Economics (080013) associate professor
Deserved titles, degree	
Education	Higher
Professional achievements	Certificates of appreciation for conscientious attitude and professionalism
Area of expertise	Main educational programs: Economics, Management
Practical experience in the direction of the program, subject to examination	12 years

### Expert's name: Evgeny Yu. Rogozhin

Work place, position	The Chairman of the Dubna branch of "OPORA ROSSII"	
Academic degree, academic title		
Deserved titles, degree		
Education	Higher	
Professional achievements	The winner of the contest "The best entrepreneur of Moscow" in the category "Trade" in 2009	
Area of expertise		
Practical experience in the direction of the program, subject to examination	Conducting educational activities in the Moscow region within the state contest "Promotion of entrepreneurship among young population"	

### Expert's name: Andreas Knorr

Work place, position	Speyer University
	Full professor
Academic degree, academic title	Professor, Ph.D. in Economics
Deserved titles, degree	Honorary Doctor
Education	Higher economic (Master)
Professional achievements	Member of the Board of scientific leaders of the Federal Ministry of transport and digital infrastructure
Area of expertise	Transparent economics, international economics, economic policy, competition policy, the policy of building the company reputation
Practical experience in the direction of the program, subject to examination	Advising companies, government agencies and institutions

### Expert's name: Andrey I. Aksyonov

Place of work, position	Russian Economics University n.a.
	Plekhanov, student (General Economics
	Faculty)
Degree, title	n/a
Rank	n/a
Education	Not finished higher education
Professional achievements	
Sphere of scientific interests	
Experience of practical work in the direction	
of program under the expertise	