АККОРК

Агентство
по контролю
качества образования
и развитию карьеры

Approved by

Chairman of the Advisory Council

Shachikov, V.D.

REPORT
on the results of an independent evaluation of the main professional educational programme of higher education
38.03.05 Business Informatics
State Budgetary Educational Institution of the Higher Education
“SAINT-PETERSBURG STATE UNIVERSITY”

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Moscow – 2017

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REPORT ON THE RESULTS OF AN INDEPENDENT EVALUATION OF THE MAIN EDUCATIONAL PROGRAMME

The main educational programme "Business Informatics" is implemented within 38.03.05 "Business Informatics" field of study by the Saint-Petersburg State University and leads to the award of the bachelor qualification. The programme is run by the Head of Department of Information Systems in Economics Khalin, V.G., the scientific director of the main educational programme "Business Informatics" Ivanova V.I.

An independent external assessment of the educational programme has been conducted by AKKORK reviewers on the 17 - 18th January, 2017.

1. CURRENT STATUS AND TRENDS OF DEVELOPMENT OF THE REGIONAL MARKET OF EDUCATIONAL SERVICES IN THIS FIELD OF STUDY

Analysis of the role and place of the programme

According to the HeadHunter company (http://hh.ru/article/15097) and SuperJob hr-agency (http://www.superjob.ru/research/articles/111683/rynok-truda-moskvy-noyabr-2015/), now there is a great need for graduates of the "Business Informatics" educational programme in St. Petersburg.

As of 11.11.16:

- 172 vacancies published in the field of business analytics on HeadHunter, 8 vacancies - on SuperJob, 4 vacancies - on spb.rqabota.ru;

- 165 vacancies of Information Systems Specialist are on HeadHunter, 57 vacancies are on SuperJob.

Graduates of this programme are mainly focused on the labour market in St. Petersburg, so the need for neighbouring regions in graduates of this field has not been analysed.

In total, 12 universities provide educational services in the "Business Informatics" field of study in St. Petersburg, including:

University ITMO, budgetary places (2016) - 20

St. Petersburg State Polytechnic University. budgetary places (in 2016) - 24

St. Petersburg University of Aerospace Instrumentation, budgetary places (in 2016) - 10

State University of Telecommunications named after Bonch-Bruevich,

State University of Marine and River Fleet named after Admiral Makarov,

Petersburg State Transport University, (2016) - no budgetary places

St. Petersburg State Economic University, No budgetary places

St. Petersburg State Technological Institute. No budgetary places

The total number of students in the educational programme in St. Petersburg is about 600 people (budgetary and paid education places).

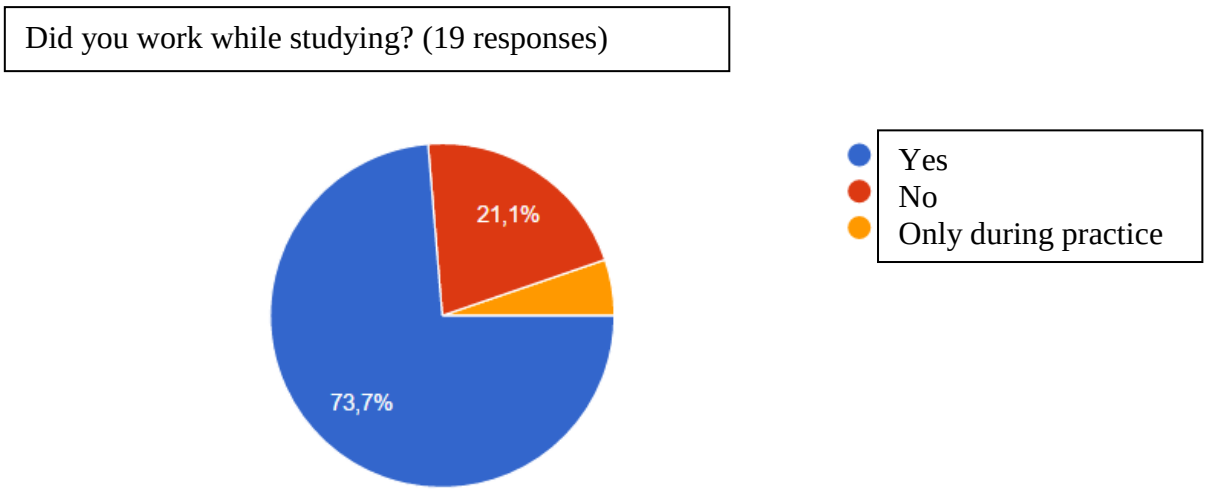
The annual monitoring of applicants entering the "Business Informatics" programme conducted by the SPSU Admission Board allows concluding that school leavers who choose St. Petersburg as the city of education prefer to receive an education in the field of study of bachelors "Business Informatics" in Petersburg State University. SPSU considers the Higher School of Economics (Moscow) as the main competitor of the main educational programme of Business Informatics in the Russian market of higher education services.

Analysis of informational indicators provided by the university (conclusions)

- *The Percentage of students combining an education with work on major*

The analysis of the survey of graduates and students showed that the first practical experience the students receive on summer paid internships after the third year, they start their permanent professional activity tentatively during the last semester.

According to the results of the questionnaire, 73.7% of graduates combined work with education in the last semester.



- *The Percentage of alumni contingent employed within one year after the end of the main education in the field of study (specialty) obtained as a result of training on the main educational programme.*

Monitoring of the graduates employment of the programme showed the following:

85% - found a job in their specialty during education;

10% - found a job in the specialty within 3 months after graduation;

5% - did not find jobs in their specialty, they are working in another professional field or in related fields.

- *The Percentage of alumni contingent, employed at the request of enterprises - **0%***
- *The Percentage of the number of students enrolled on order of employers, for example, on the basis of tripartite (target) Treaty - **1% (1 pers.).***
- *The Percentage of alumni contingent working on the profile of training in the region - **77%.***
- *The Percentage of alumni contingent working on the profile of training outside the region - **5%**.*
- *the number of complaints to the alumni - **0**.*
- *Number of positive feedback of organisation on the work of alumni - **6 reviews.***
- *The Percentage of the contingent of students within the main educational programme enrolled for studying on master programmes who have completed training in the bachelor programme.*

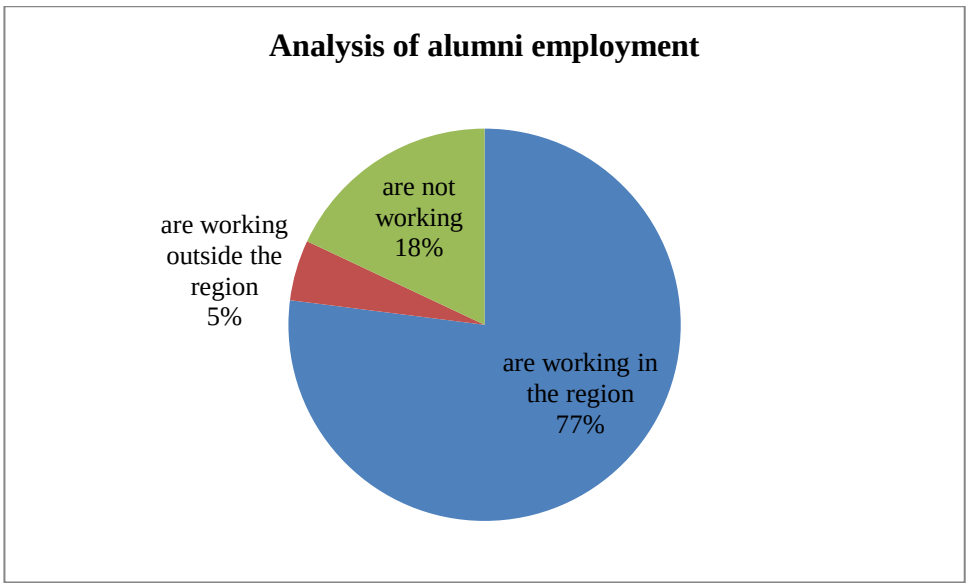
Issue 2015: 16 people, representing 70% of the issue

Issue 2016: 11 people, representing 50% of the issue

Overall: 60% of the 2015-2016 issue.

Additional material

As a result of self-assessment conducted by the educational institution, here are presented the data on the distribution of alumni (см. диаграмму). Data provided by the institution have been confirmed during the studying of the relevant documents and a survey of graduates conducted during accreditation events.


Analysis of alumni employment
are not working 18%
are working outside the region 5%
are working in the region 77%

2. SUMMARY OF THE PROGRAMME

Strengths of the programme

The key role in the design, implementation and definition of the development strategy of the educational programme is played by the Councils of Educational Programmes (boards of trustees), employers play an active role in the work of the Councils.

The "Business Informatics" educational programme for bachelors is distinguished by the high professionalism of the faculty. This programme is implemented by 72 professors, including 20 academics/ doctors of sciences (28%), 45 associate professors / candidates of sciences (63%) and 7 assistant professors / practitioners and assistants (9%).

Main educational programme "Business Informatics" of SPSU is deservedly popular among school leavers, as evidenced by the large admission competition and the high score of USE entrants (the average score of USE of students on a budgetary basis in 2016 was more than 90 points).

To conduct scientific and practical research by the academic community of the Faculty of Economics, which includes the administering department of the main educational programme "Business Informatics", the following research laboratories have been opened:

- Laboratory of economic growth research;
- Laboratory "Efficiency of the economy and the environment."

The content of the main educational programme "Business Informatics" is aimed at studying methods and tools of business analytics. Competences of the graduates of the programme meet the requirements of the regional labour market, as evidenced by the relevance of graduates of this field of study and presented to the reviewer with positive feedback from employers.

The flexible structure of the programme provides students with the opportunity of choice.

It should be noted also a rich library fund, which includes both Russian and foreign publications, including periodicals, and electronic resources available to students in the "Business Informatics" field of study of SPSU.

Weaknesses of the programme

According to the HeadHunter website (http://hh.ru), the business analyst must have the skills to conduct a survey, to identify and document requirements for business processes; to manage requirements at all stages of the life cycle of the project and consulting the project team; to develop conceptual models of the projected system, etc. Thus, the knowledge, skills of the graduate of the bachelor's main educational programme "Business Informatics" should not be limited by methods and tools of business analysis.

Main recommendations of the reviewer for the programme

In order to improve the quality of the main educational programme "Business Informatics", it is necessary to update its content, expand the range of professional disciplines by reducing the humanitarian and socio-economic disciplines. The total volume of basic disciplines of professional training should not be less than 4-5 credit units. It is necessary to introduce the discipline "Enterprise Architecture" into the educational programme, which is the basic discipline of professional training of "Business Informatics" bachelors.

To expand the composition of the studied modern information technology in professional disciplines, in particular, this should be reflected in the topics of course work.

To consider the possibility of further benchmarking of SPSU programmes with programmes offered by other institutions, for example:

- Survey of graduates. The annual survey of all graduates is needed to determine the number of employed, positions, wages, etc.

- Publication of the results of the students' progress (for example, the data on passing the exam, the level of achievement (in comparison with the next year or with programmes of higher education level), the final classification of grades (with homers / passed), and others.

To consider the possibility of implementing programmes to improve the skills with the issuance of a document on education in terms of teaching and pedagogics for professors.

To consider the possibility of developing strategies for education, teaching, and evaluating programmes within the profile institute. Particular attention should be paid to both qualitative and quantitative assessment and timely feedback on the evaluation.

Further development of the programme content on the following topics:

• Database

• System integration

• Servers (operating system modules)

• Data transfer (between systems)

It is recommended to identify clear learning outcomes for the programme and module, so that they adequately reflect the context, level, scope and content of the programme / module and were written using active verbs (Section 3.3 of the ECTS User Manual can help in this regard). 10-12 learning outcomes for the programme and 6-8 learning outcomes for the module is desirable.

To present and publish clear policies regarding access, transfer and education. This may include a policy for the recognition of prior learning (empirical and accredited).

It is recommended that the level of the Qualifications Frameworks in European Higher Education Area (QF - EHEA) be specified in the main educational programme.

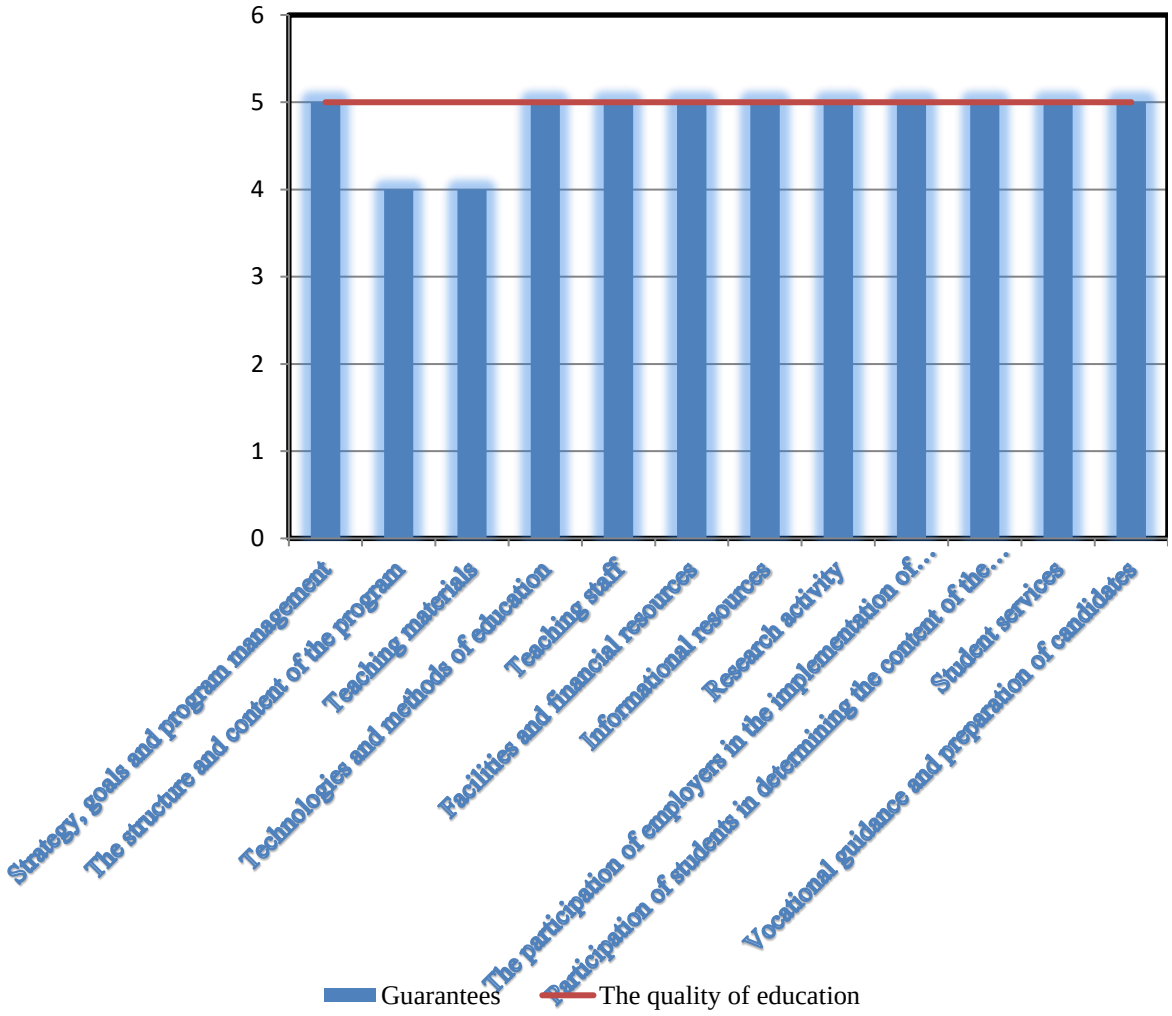
It is recommended that further opportunities be developed for deeper interaction with employers / industry regarding potential training programmes for employees, including part-time and flexible programmes.

Profile for learning outcomes assessment and education quality assurance

No	Criterion		Mark
I	**Quality of learning outcomes**		
	1.	Demand for graduates of the programme on labour market	*5*
	2.	Satisfaction of all customers	*5*
	3.	Results of direct assessment	*5*
II	*Quality assurance:*		
	1.	Strategy, goals and programme management	*5*
	2.	Structure and content of the programme	*4*
	3.	Teaching materials	*4*
	4.	Technologies and techniques of educational activities	*5*
	5.	Teaching staff	*5*

	6.	Physical facilities and financial resources	*5*
	7.	Information resources of the programme	*5*
	8.	Research activities	*5*
	9.	Participation of employers in the implementation of the programme	*5*
	10.	Students' participation in the programme management	*5*
	11.	Students’ services	*5*
	12.	Career guidance and preparation of applicants	*5*

Profile for learning outcomes assessment and education quality assurance



3. QUALITY OF LEARNING OUTCOMES

Direct assessment of competence by the reviewer

The direct assessment of competencies of graduates was conducted during the on-site visit. Fourth-year students took part in the direct evaluation, in the number of 23 people, which is 100% of the final course.

Measurement and control materials developed by the reviewers were used during the procedure of direct assessment of alumni.

The reviewer has chosen following competencies for the analysis of the competencies formation:

Competency code	Name and (or) description of competence
GC-7	Ability to understand the essence and significance of information in the development of society, is ready to use the basic methods and means of obtaining, storing, processing information, working with the computer as a means of information management, including in global computer networks, to comply with basic information security requirements, including Protection of state secrets
PC -6	Ability to conduct a survey of the activities and IT infrastructure of enterprises
PC -7	Ability to develop documentation for the created and / or implemented information system in accordance with state standards; To prepare and maintain contract documentation for the development, acquisition or supply of information systems / modules
PC -11	Ability to perform a feasibility study of projects to improve and regulate business processes and IT infrastructure of enterprises
PC -12	Ability to design and implement IT infrastructure components that ensure the achievement of strategic goals and support business processes, taking into account the requirements of Russian and international standards using common languages and modelling tools
PC -14	Ability to choose the optimal technologies for the development of professional information systems in accordance with the imposed requirements and operating conditions
PC -17	Possessing mathematical apparatus and tools for processing, analysing and systematizing information in the professional field
PC -19	Ability to advise customers on the improvement of business processes and IT infrastructure of the enterprise, on the creation and development of electronic enterprises

When implementing the procedure for direct assessment of competencies, the reviewer used the following test materials:

Assignment: Using any of the notations studied, to develop the following models of the projected information system of the Internet store for the sale of electronic publications:

Business process model;

Information model;

Model of IT infrastructure.

Based on the results of a direct assessment of competencies, the reviewer found that 100% of students coped with the assignment.

Level	Sufficient level (have managed with 80% of	Acceptable level (the percentage of solved	Low level (percentage of solved tasks is less

Students ratio	the proposed tasks)	tasks from 50 to 79%)	than or equal to 49%)
50%	+		
50%		+	

In assessing the quality of education, reviewer has acquainted with 3 graduate qualification work, representing 27% of the graduate works of the 2016 in this field of study. He has concluded that these graduate qualification works correspond to all the requirements stated below

GRADUATE QUALIFICATION WORKS

No	Objects of assessment	Comments of reviewers
1.	Subject of graduate qualification work corresponds to the field of study and modern level of science, technology and (or) software technology.	100%
2.	Tasks and contents of graduate qualification work are aimed at confirmation of graduate competences.	100%
3.	Utilization rate of materials collected or obtained during the passage of pre-degree practice and implementation of course papers in the graduate qualification work.	100%
4.	Subject of graduate qualification work is defined by demands of industrial organisations and tasks of experimental activities solved by faculty of the institution.	96%
5.	The results of graduate qualification work find practical application in the workplace.	83%
6.	Utilization rate of the results of research activities of the department, faculty, and third-party research and production and / or research organisations when performing independent research parts in the graduate qualification work.	10%

Conclusions and recommendations of the reviewer

Conclusions:

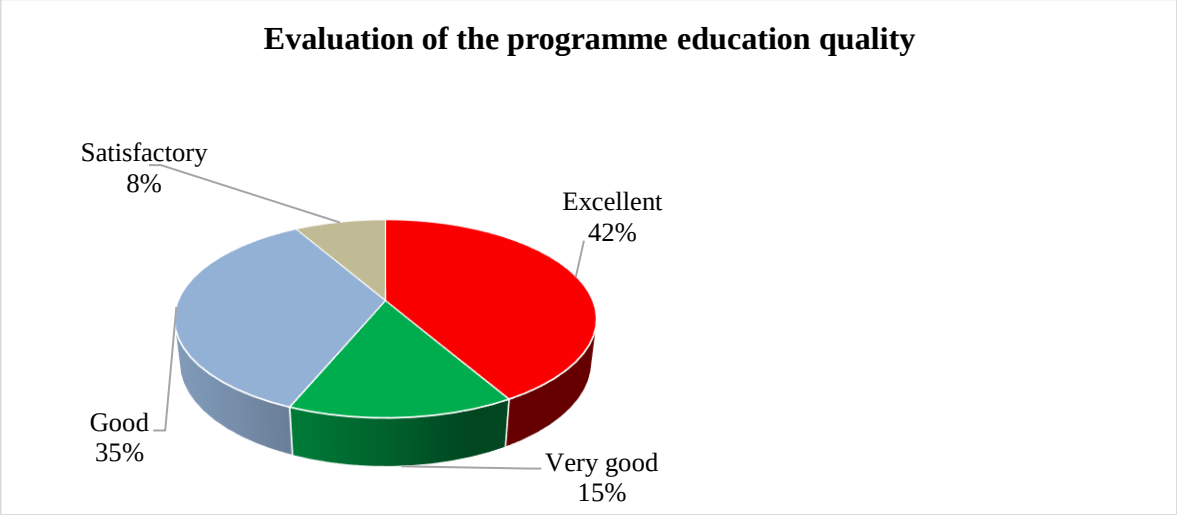
The subjects of the presented graduate qualification works correspond to the "Business Informatics" field of study and the current level of development of science and technologies in the field of the main educational programme. Based on the results of direct assessment of competencies, interviews with employers and analysis of the graduate qualification work, the reviewer assessed the "Quality of Education" criterion as excellent.

***Recommendations*:**

To ensure the practice-oriented nature of graduate qualification works and the use of modern technologies and solutions of the IT industry.

Additional information:

As a result of questioning of students, the data were represented by educational institution. These data have been verified by the reviewer during the on-site visit and were confirmed by the reviewer as a result of on-site visit.



As a result of the survey, 92% of students gave a high assessment of the quality of education, which allows the reviewer to draw conclusions about students' satisfaction with the quality of education.

4. EDUCATION QUALITY ASSURANCE

1. Strategy, goals and programme management
Evaluation of criterion: excellent

Strengths of the programme:

The development strategy of the main educational programme "Business Informatics" was developed taking into account the prospects for the development of the regional labour market, as well as general global trends in the application of IT in economic and managerial areas.

Four strategic directions are set within the framework of the development strategy of the main educational programme "Business Informatics":

1. System development and promotion of the educational programme with the orientation to the experience of leading Russian and foreign universities.
2. Ensuring the realisation of the creative potential of students, increasing the scientific activity of students.
3. Creating an enabling environment for the development of the professional, scientific and methodological potential of the faculty.
4. Orientation of the educational programme on the labour market.

The Board of the educational programme (the board of trustees), which includes employers and representatives of business communities, takes an active part in the definition and implementation of the development strategy of the main educational programme.

Quality control of education is performed using annual monitoring.

Recommendations:

To improve the quality of the main educational programme Business Informatics, it is necessary to open basic departments at the faculty, representing well-known foreign and Russian firms working in the field of development and introduction of information technologies. This will ensure the practical orientation of training, dynamically respond to all innovations in the field of IT, annually update the educational programme in terms of academic disciplines and their educational and thematic plans.

To consider the possibility of further benchmarking of SPSU programmes with programmes offered by other institutions, for example:

- Survey of graduates. The annual survey of all graduates is needed to determine the number of employed, positions, wages, etc.
- Publication of the results of the students' progress (for example, the data on passing the exam, the level of achievement (in comparison with the next year or with programmes of higher education level), the final classification of grades (with homers / passed), and others
- To consider developing strategies for teaching, teaching and evaluating programmes within the profile institute. Particular attention should be paid to both qualitative and quantitative assessment and timely feedback on the evaluation.

To present and publish clear policies regarding access, transfer and education. This may include a policy for the recognition of prior learning (empirical and accredited).

It is recommended that the level of the Qualifications Frameworks in European Higher Education Area (QF - EHEA) be specified in the main educational programme.

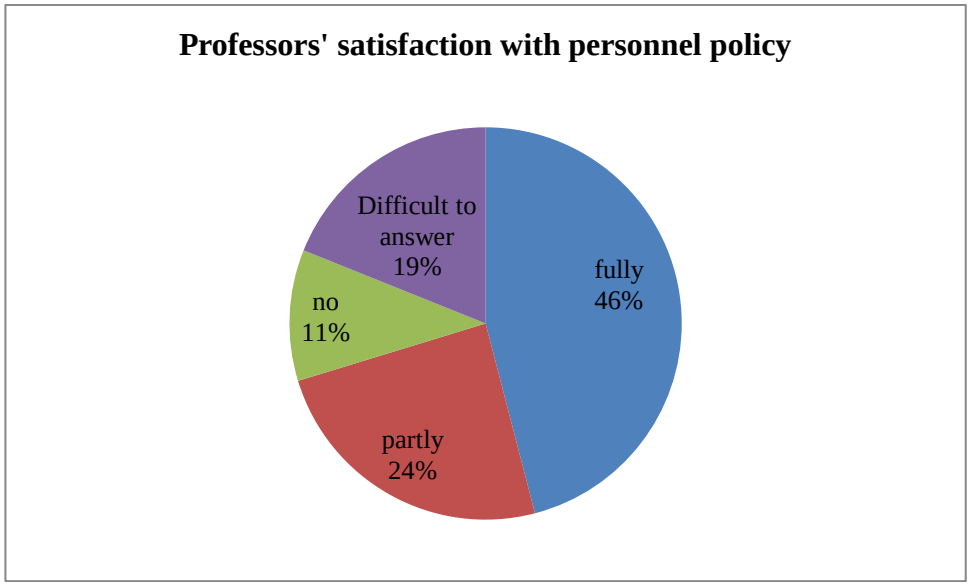
Additional material*:*

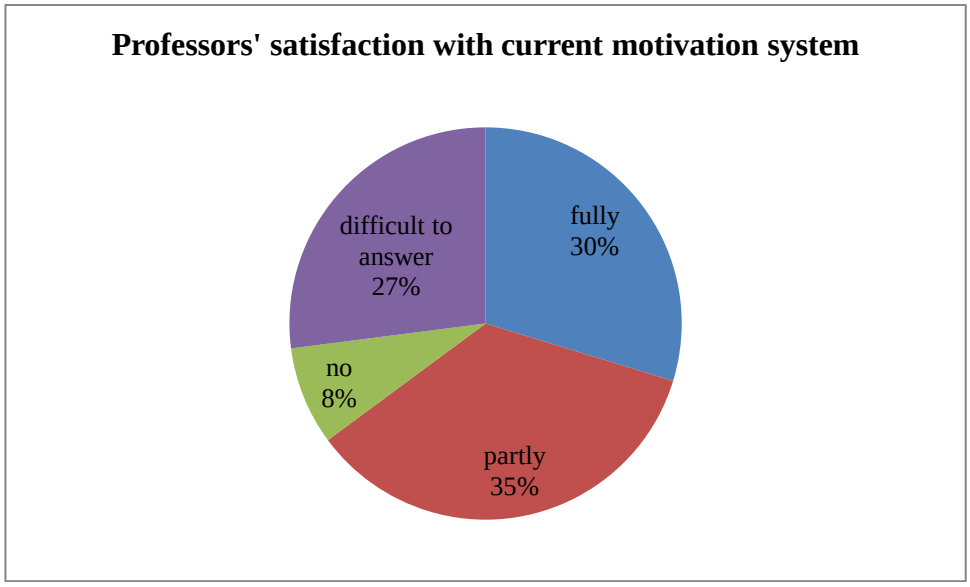
During the on-site visit, interviews of employers were conducted, by results of which it is possible to conclude that at the moment they consider the objectives of the educational programme are relevant to demands of the labour market.

During the on-site visit, the reviewer interviewed students, professors, employees and received data that allow the reviewer to conclude that the majority of students, professors,

employees aware of the development strategy of the educational programme, its goals and objectives.

During the self-assessment, the institution has presented data on the survey about professors' satisfaction with personnel policy, the existing system of motivation and loyalty of employees, the survey data are reflected in the diagrams below.





During the on-site visit, interviews were conducted among the professors involved in the programme implementation.

Following the results of the interview, the reviewer concludes that the professors are mostly fully or partially satisfied with the university's personnel policy (70%) and the current motivation system (65%).

At the same time, the practice of concluding agreements with professors for only a year at the university causes dissatisfaction with the teaching staff, and as a consequence, the need for annual participation of professors in the competitive selection for positions. This arrangement introduces uncertainty in the prospects for continuing the work of each of the professors at the university and is an obstacle to planning and implementing long-term scientific, educational, methodological work and, as a consequence, an obstacle to the implementation of the strategic goals of the main educational programme.

2. The structure and content of the programme
Evaluation of criterion: good

Strengths of the programme:

Competence model of graduate developed in the institution on the basis of the analysis of labour market requirements correlates with professional standards on specialties:

- System Analyst.
- Automated Control Systems Specialist
- Specialist on Information Systems
- Manager of Information Technology
- Database Administrator

Recommendations*:*

The main educational programme includes a large percentage of the humanities and socioeconomic disciplines which constitutes the main content of the educational process of the 1st and 2nd courses of the main educational programme Business Informatics. According to the results of student surveys, these disciplines are not of interest to them.

As a wish, graduates and employers also note that it is necessary to introduce in the main educational programme of Business Informatics practice-oriented disciplines aimed at mastering in-depth knowledge in the field of databases, enterprise architecture, programming, integration of corporate applications, and disciplines that provide graduates with the necessary practical skills in working with modern information systems (SAP, Oracle, Microsoft, IBM, 1C, etc.).

The total amount of hours for basic professional disciplines should not be less than 4 credit units.

It is recommended to identify clear learning outcomes for the programme and module, so that they adequately reflect the context, level, scope and content of the programme / module and were written using active verbs (Section 3.3 of the ECTS User Manual can help in this regard). 10-12 learning outcomes for the programme and 6-8 learning outcomes for the module is desirable.

Further development of the programme content on the following topics:

• Database

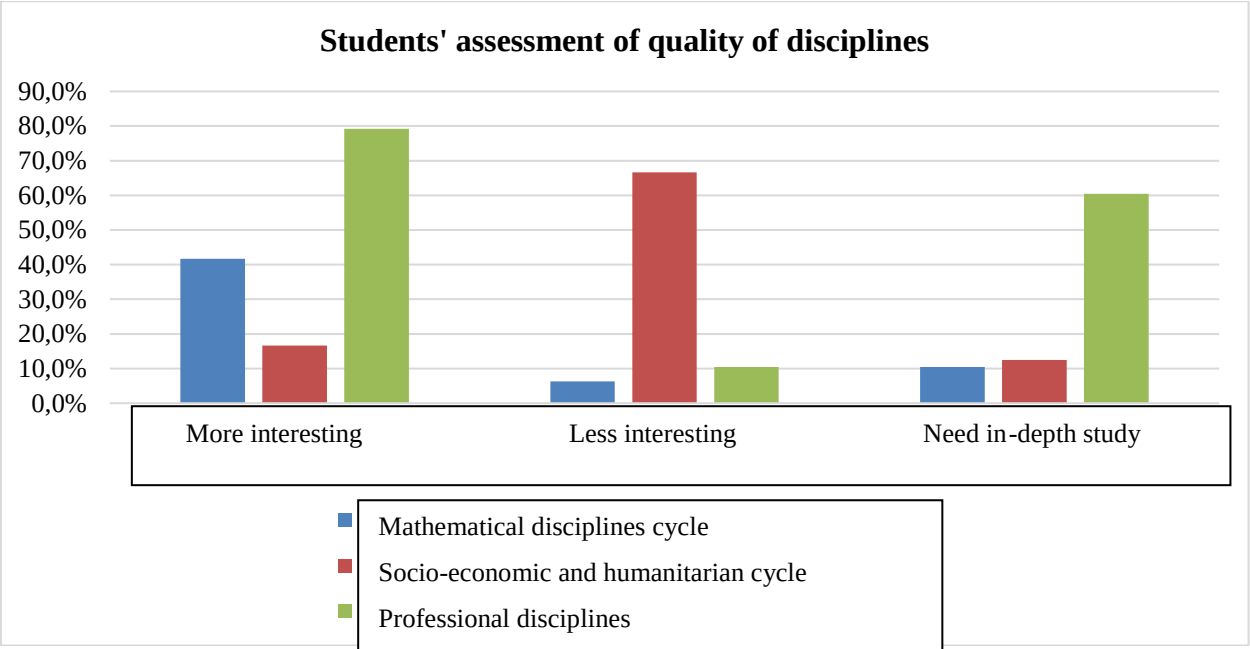
• System integration

• Servers (operating system modules)

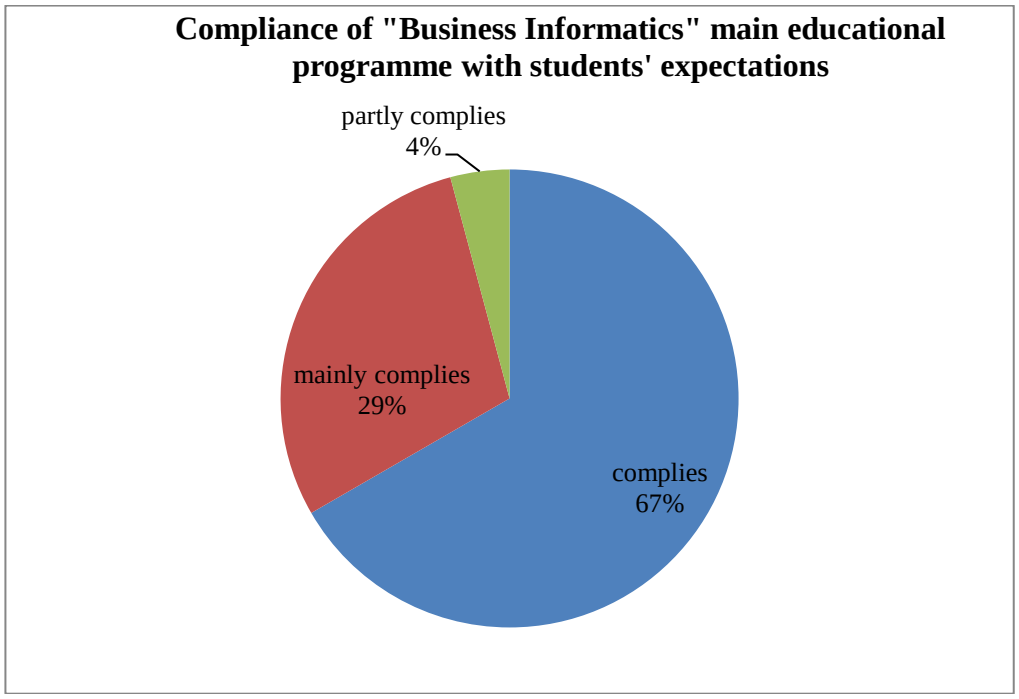
• Data transfer (between systems)

Additional material:

During the full-time visit, the reviewers met with the students of the programme being evaluated. One of the issues discussed is disciplines quality. According to the results of the meetings, the reviewer concludes that Bachelor students of "Business Informatics" prefer professional disciplines and are interested in their in-depth study.



The next of the issues discussed is the relevance of the structure and content of the programme to the expectations of direct consumers of programme (students). Data collected on the basis of the survey results are presented in the diagram. They allow the reviewer to conclude that the majority of students (96%) are satisfied with the quality of the educational programme.



3. Teaching materials
Evaluation of criterion: good

Strengths of the programme:

SPSU independently develops educational standards, in accordance with which educational programmes for the preparation of master's and bachelor's degree are then formed.

Recommendations:

It is necessary to regulate the frequency and methodology of updating teaching materials in accordance with changing conditions in the federal, regional and local labour markets and internal

monitoring of the quality of education, and it is necessary to establish the procedure for coordinating teaching materials in main professional disciplines with employers.

It is necessary to update the content and recommended literature of working programmes of professional disciplines.

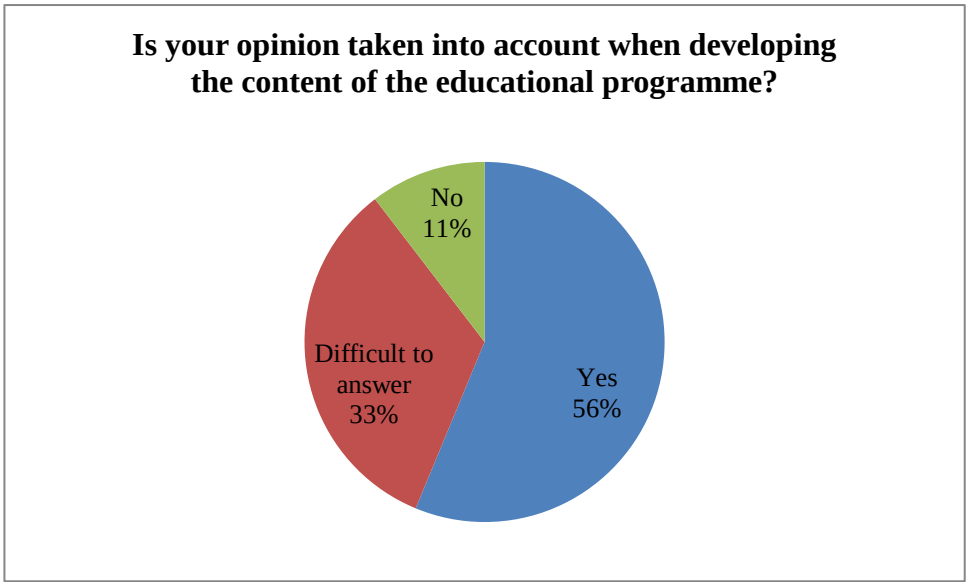
***Additional material**:*

When conducting the on-site visit, the reviewer got acquainted with the educational materials developed in the educational institution.

The reviewer concludes that the main recommended literature is partially outdated.

During the on-site visit, the reviewer analysed test materials used by the educational institution for ongoing monitoring of academic performance. This allowed the reviewer to conclude that the main form of current knowledge control is testing.

According to the results of the questionnaire submitted by the educational institution, the results of which were confirmed during the on-site visit, the majority of students (56%) believe that their opinion is taken into account when developing the content of the educational programme.



4. Technologies and techniques of educational activities
Evaluation of criterion: excellent.

Strengths of the programme:

13 disciplines of the professional cycle are conducted by employers, which is 13.4% of the total number of disciplines.

***Recommendations**:*

To use more actively interactive learning technologies, cases and practice-oriented tasks, modern IT solutions in the education process. For example, ERP systems of leading SAP vendors and Oracle. See Criterion 6.

***Additional material**:*

During the on-site visit, the reviewer visited the lesson, the analysis of which is presented below.

Full name of the professor: Associate Professor, Candidate of Physical and Mathematical Sciences Gadasina Lyudmila Viktorovna

Group BI-4 (Business Informatics, 4th year of study)

1. Discipline Business analysis of information

2. Type of training

□ lecture
□ seminar
□ laboratory work
□ practice
□ integrated lesson
□ other Pre-examination consultation

3. Lesson Focus: Repetition of theoretical and practical topics of the "Business analysis of information" course

4. The purpose of the class: Improve the quality of students preparing for the exam on "Business analysis of information" course

5. The aims of the class: Answer the questions of students arising during the preparation for the exam

6. Facilities: Computer class with RStudio installed software.

7. Specify:

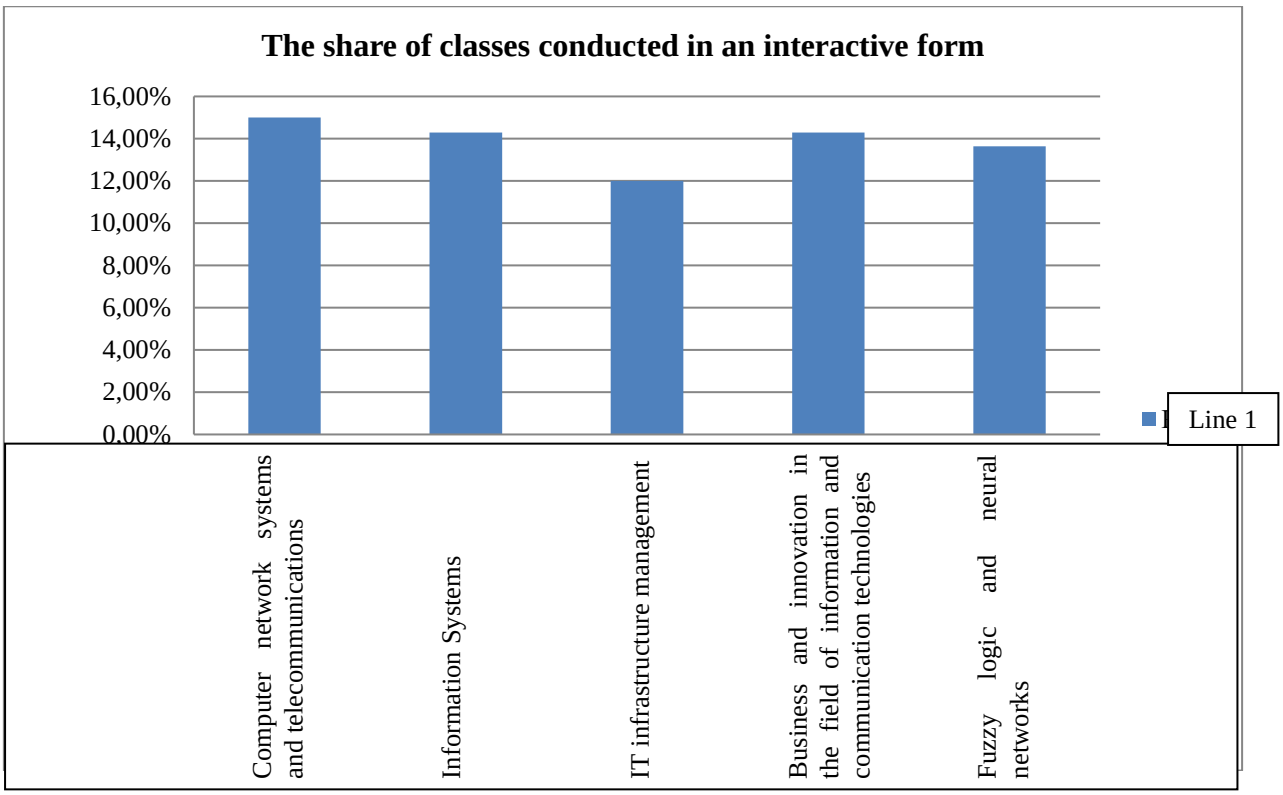
No	The knowledge and skills which are planned to generate in class and competences, which affect the formation of the knowledge, and skills (must be announced by lecturer)	The forms, tools, methods and techniques used for the formation of competence in class
1.	Ability to analyse and summarize information Knowledge and skills are formed on the basis of the competence of GC-3: possessing a culture of thinking, ability of perceiving, generalizing, analysing information, setting goals and choosing ways to achieve it, is able to analyse philosophical, ideological, socially and personally significant problems	debate, discussion of certain issues from the list issued by the exam
2.	The ability to collect and analyse data Knowledge and skills are formed on the basis of competence PC-17: possessing a mathematical apparatus and tools for processing, analysis and systematization of information in the professional field	Analysis and discussion of practical assignments completed during the semester
3.	Ability to ask questions Knowledge and skills are formed on the basis of the GC-3 competence	discussion

THE EVALUATION OF A LECTURER

No	**Criteria of analysis**	**Index**	**Mark (0,1,2)**
1.	Compliance with employment regulations	Timely start and end of lesson, balanced time of sections.	2
2.	Organisational process	Greeting. Informing about topics and target (connection between target and evolving competences).	2

3.	Motivating students for the upcoming activities	Indication of urgency, of formed professional and / or social and personal competencies.	2
4.	Classroom climate	Presence of a positive emotional interaction between lecturer and students; mutual goodwill and audience participation.	2
5.	The quality of presentation	Structured material; clarity of designations of current tasks; consistency and availability of presentation; adaptation presentation to the specific of the audience; examples of relevant facts.	2
6.	Compliance with the content of the course programme	Compare with study programmes of the disciplines (teaching materials).	2
7.	The use of visual aids	Textbook, workshop handouts, tables, figures, etc.	2
8.	Oratory	Audibility, intelligibility, euphony, literacy, rate of speech; facial expressions, gestures, pantomime; emotional intensity performances.	2
9.	Sensitivity to the audience	The ability to react to changes in the perception of the audience.	2
10.	Correctness to students		2
11.	Methods of attention organisation and student behaviour regulation	Increasing the interest among the audience (the original examples, humour, rhetorical devices etc.); Involving the audience in a dialogue, in the process of performing tasks, etc. However, do not: open call to the attention of the audience; demonstration of disapproval; psychological pressure, blackmail.	2
12.	Feedback during the lecture	Control of material learning	2
13.	Summing up (organisation of reflection)	Organisation of reflection in which students are actively discussing the results	2
14.	Image	Compliance with corporate identity, presentable, charisma	2
15.	Final evaluation		*excellent*
16.	Comments and suggestions of reviewers:		

As a result of analysis of desk review of self-assessment, curriculum and class schedules analysis, the reviewer determined that the Percentage of classes conducting in an interactive way for the whole programme is 20-25%. During on-site visit, teaching materials of five subjects were studied. Data on these classes conducting in an interactive way in the context of the teaching materials studied earlier are presented below.



5. Teaching staff
Evaluation of criterion: excellent

Strengths of the programme

This educational bachelor educational programme is implemented by 72 lecturers, including 20 academics / doctors of sciences, 45 associate professors / PhDs, 7 senior lecturers / practitioners.

The entire teaching staff is working on effective contracts and their high professional qualification is confirmed with each passing competitive selection.

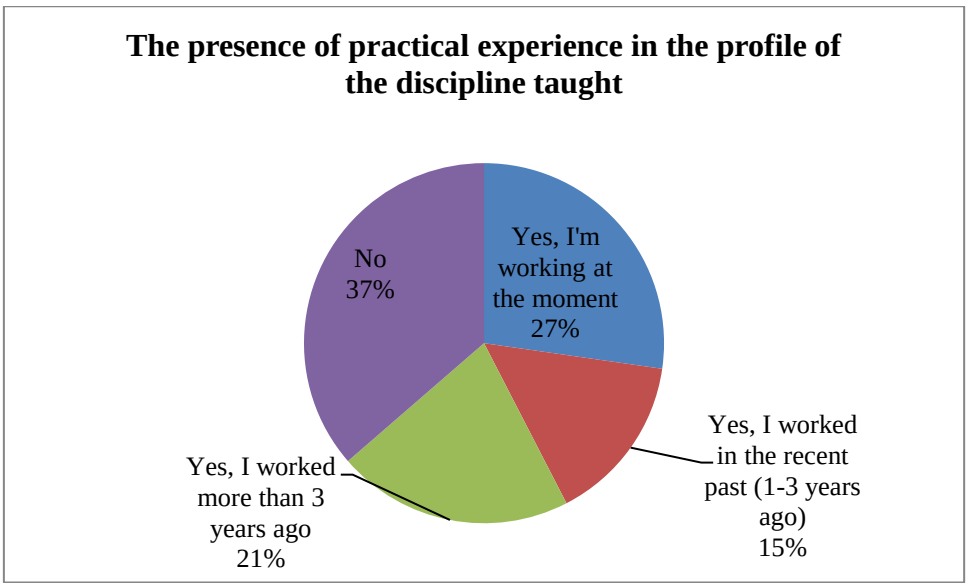
Recommendations:

To increase the duration of the terms of employment contracts for professors. To introduce more actively motivational technologies in the university practice for attracting talented youth to the teaching work.

To consider the possibility of implementing programmes for the development of skills with the issuance of a document on education in terms of teaching and pedagogy for professors.

Additional material

According to the results of the survey, 63% of the 34 professors interviewed confirmed the existence of practical experience in the profile of the discipline taught.



Analysing the facts set out by the educational institution in the statement of self-examination, the reviewer concluded that the data are relevant and reliable.

Based on the results of the analysis, the reviewer concludes: the staff and financial policies of the university are documented and fully transparent for professors, working conditions are satisfied professors, so they are interested in continuing work in SPSU.

6. Material and technical and financial resources of the programme
Evaluation of criterion: excellent

Strengths of the programme:

In 2014, modern high-tech equipment used in SPSU to conduct basic and applied research, and its operations were merged into a single structure - the SPSU Science Park, available for research in all areas of training.

Financial support of federal state budgetary educational institution of higher education "Saint-Petersburg State University" (hereinafter - SPSU) is implemented within the budget provided in accordance with the laws on the federal budget, and funds from income-generating activities within its kinds provided by the Charter.

Recommendations:

To provide funds for the purchase of licensed software for studying modern IT solutions (e.g. ERP systems of global vendors) by "Business Informatics" students.

Additional material:

During the on-site visit, reviewers have conducted interviews with students and lecturers participating in the programme on satisfaction with the quality of classroom fund, funds and the reading room of the library, laboratories and its facilities of departments. 100% of students and professors have expressed complete satisfaction with the material base of the educational programme.

This allows the reviewer to make a conclusion about the high level of material and technical and financial support of the main educational programme Business Informatics.

7. Programme's information resources
Evaluation of criterion: excellent

Strengths of the programme:

SPSU has created all the necessary infrastructure for effective creation, storage and delivery of educational content to students:

Access to electronic informational resources from the SPSU subscription is implemented through website of the SPSU Scientific Library.

Access to the service Bloomberg Professional for professors and students allowing real-time monitoring and analysis of the movement of the financial market is possible in a specially created and equipped laboratory.

Access to modern scientific computing infrastructure is possible in 25 resource centres united in Science Park.

Faculty, staff and students can share information with each other and work with online - resources through the Blackboard system.

Recommendations:

Actively use the Blackboard system for informational support and students' independent work.

8. Research activity
Evaluation of criterion: excellent

Strengths of the programme:

Currently, SPSU Science Park includes 27 resource centres (hereinafter, RC) (4 of which were established in 2015). Size of Science Park facilities is 30 000 sq.m. The number of instrument complexes is about 300, all the equipment for more than 6 thousand units. Volume of investments in equipment amounted to about $ 180 million.

In 2015, SPSU amounted to 1,660,168.2 thousand rubles in the total volume of research, development and engineering works (hereinafter R & D), while counting on one academic worker the amount of funds totaled 374.23 thousand rubles per year.

Number of publications of SPSU workers in 2015 (as of April 1, 2016), indexed in the Web of Science, was 2215 units, in Scopus - 2918 units.

For the previous 2015 - 2016 academic year, the professors of the "Business Informatics" educational programme have implemented:

223 publications in peer-reviewed journals indexed in scientometric databases RSCI, Web of Science and Scopus;

121 Report on the international and national conferences;

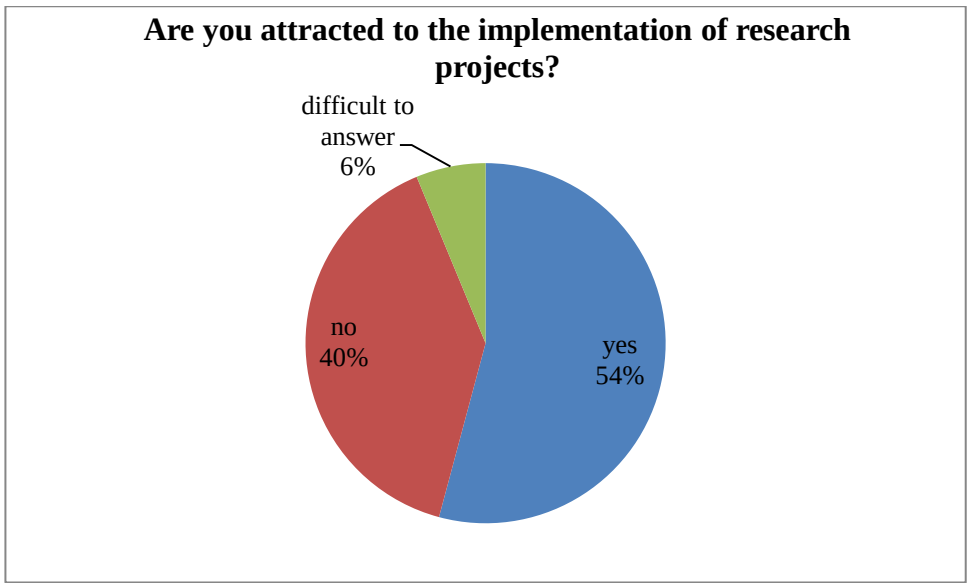
19 lecturers participating in the international and Russian external research grants and projects.

Recommendations*:*

To develop more actively the students' science, attracting students to participate in scientific conferences and research projects, writing scientific articles and abstracts.

Additional material*:*

The educational institution provided information on the results of monitoring the opinions of students "Are you attracted to scientific research?" in the self-assessment documents. The results of the survey are shown in the diagram:



Thus, more than half of the interviewed students (54%) positively answered the question about their participation in the research work.

9. Participation of employers in programme implementation
Evaluation of criterion: excellent

Strengths of the programme:

In 2016, Business Informatics students took part in 30 master classes and meetings with potential employers. Including:

1. Career Day. November 19th, 2016.
2. The presentation of the information agency "CredInform". March 24, 2016
3. The presentation of the PAO "Gazprom Neft" company. October 19, 2016.
4. Day of PAO "NC" Rosneft " company .October 08th, 2016
5. Master-class "Complete analytics and automation in contextual advertising", leading by eLama.ru CEO Dovzhikov A.
6. Workshop of KPMG. November 18th, 2016.

Recommendations:

In order to improve the quality of education to develop and put into regular practice mechanisms to encourage employers to participate in the implementation of the main educational programme.

It is recommended to further develop opportunities for deeper interaction with employers / industry on the potential training programmes for employees, including part-time and flexible programmes.

Additional material:

The statement of self-assessment of educational institution provides information about the results of the survey of employers in terms of their satisfaction with the quality of training of graduates.

At the same time, answering the question "How long did it take a young specialist to get into the course of the matter?" all employers indicated a period from 3 to 6 months.

During the interviewing, employers expressed their desire to increase practice-oriented training of graduates, including teaching them skills in working with application programmes such as Statistics, Turbo-bookkeeper, 1C solutions, etc. In addition, it was proposed to introduce depth studying of databases, enterprise architecture in the main educational programme "Business Informatics".

The conducted survey of employers allows making conclusions about the employers' satisfaction with the quality of graduates' preparation and recommending to the Heads of the "Business Informatics" educational programme to take into account the wishes of employers.

10. Participation of students in defining the programme's content
Evaluation of criterion: excellent

Strengths of the programme:

Intra-university normative documents establish that students participate in the management of the educational programme through the following organisational structures and procedures: the Council of Young Scientists; Student Council; Monitoring of the quality of teaching; Treatment of students in the virtual reception hall.

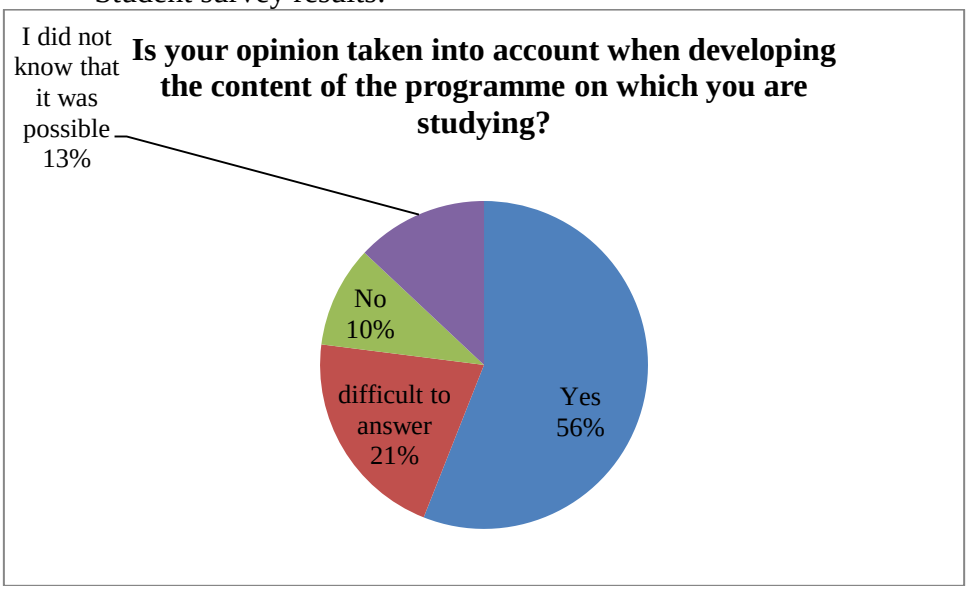
Recommendations:

To respond rapidly to students' opinions about the quality of individual disciplines' teaching.

Additional material:

During the on-site visit, the reviewers analysed the students' participation in the bodies of the student government. Based on the analysis of the data presented, the reviewer concludes that the majority of students believe that they can influence decision making through the Student Council.

Student survey results:



11. Services for students on a programme level
Evaluation of criterion: excellent

Strengths of the programme:

The SPSU Student Council operates in SPSU. The SPSU Student Council includes the chairmen of the student councils of all SPSU academic and research divisions. More than 300 students take part in the work of Student Councils.

SPSU has a curatorship institution. The main tasks of the curators are:

- adaptation of students to the requirements associated with the organisation of the educational process;
- assistance in the formation of the training group team;
- assistance to the academic office in organising events with students of the group.

More than 15 creative clubs and studios operate in SPSU, including:

Career Club, English Club, SPSU Theatre Studio, SPSU Student Choir, Jazz Vocal Studio, Pop Vocal Studio, Dance Sport Club, Fine Art Studio, etc.

In 2012, the Psychological Aid Service was established in SPSU to provide assistance and support in solving various psychological problems and overcoming difficult life situations.

The SPSU has a Department of Practices, Internships and Employment, which interacts with leading Russian and foreign companies offering interesting positions for internships and permanent or temporary jobs.

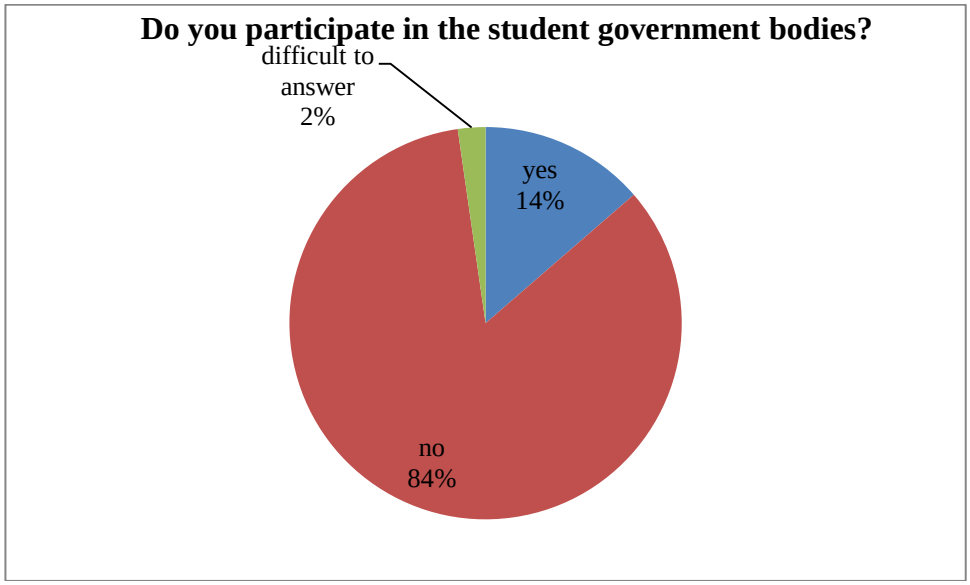
***Recommendations**:*

To inform students more actively about the work of student services and involve students in the work of student government bodies.

***Additional material**:*

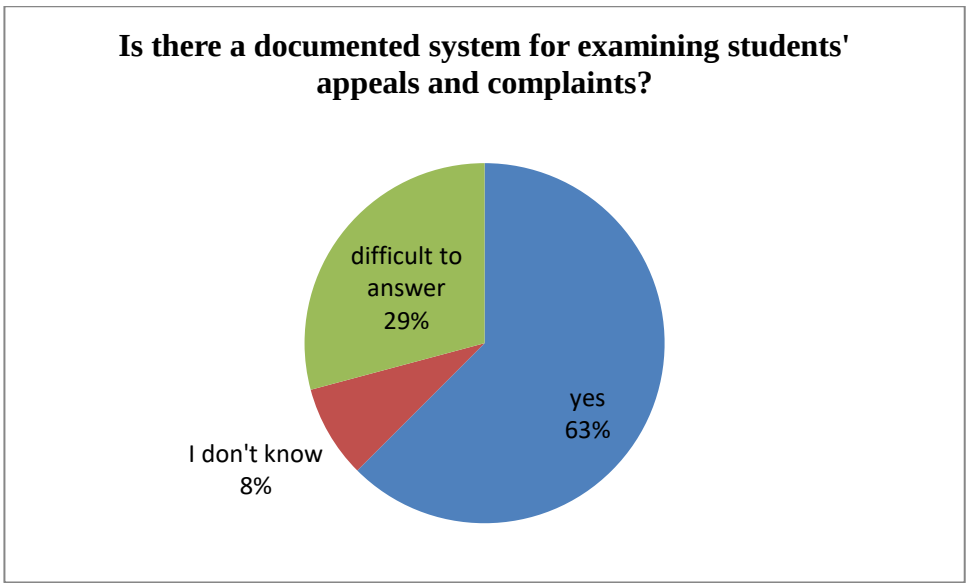
During the on-site visit, the reviewer analysed students' awareness of the work of student self-government bodies.

Answers to the question "Do you participate in the student government bodies?" are presented in the diagram:



As seen from the diagram, most students (84%) are not involved in the work of the student government bodies.

The students' answers to the question "Is there a documented system for examining students' appeals and complaints?" are presented in the diagram:



Thus, 37% of the students surveyed do not know about the opportunities available at the university for examining their complaints and appeals.

Based on the analysis of the data presented, the reviewer concludes that the information level of students in the "Business Informatics" field of study is low and recommends that the programme management take appropriate measures. For example, it may be regular information meetings with students (at least 2-3 meetings per semester), public meetings of the Student Council; or organising the work of scientific circles, for example, on topics related to business analytics, as well as related to the research conducted within the programme.

12. Career guidance. Quality assessment of applicants' knowledge
Evaluation of criterion: excellent

Strengths of the programme:

Career-oriented work is implemented in various forms:

1. interaction with the St. Petersburg schools with in-depth study of relevant disciplines of Physics and Mathematics profile (Presidential Physics and Mathematics Lyceum No239, Physics and Mathematics Lyceum No30, Physics and Mathematics Lyceum No366, Academic Gymnasium named after Faddeev D.K. of SPSU). As part of cooperation with them, the institution holds annual summer practice in the direction of the business informatics for the students of these schools (at least 30 participants).
2. preliminary courses work to prepare for exams in of USE format on subjects included in the list of entrance tests (mathematics, Russian language, social studies)
3. School of Business Informatics, which aims to broaden understanding of information technology in the modern world for students in grades 9-11
4. guest lectures of professors at the unversity's venue and schools of St. Petersburg site within days of science
5. Research and Educational Project "SPSU students for school" includes a variety of different size and category extra-curricular activities in the schools of the city, which conduct training by students of bachelor degree, specialty, master degree and postgraduate programmes of SPSU

Recommendations:

To involve students in career-oriented work more actively, which, as practice shows, is very effective.

***Additional material**:*

Based on the data on the large competition on the main educational programme "Business Informatics" and high admission score (it is more than 90 points on average), the reviewer concludes that the organisation of career-oriented work in SPSU is good.

The management of the programme has close interaction with university-wide services in the field of career guidance for entrants.

CVs of reviewers

Reviewer's name: **Lyudmila S. Onokoy**

Place of work, position	Financial University under the Government of the Russian Federation
Academic degree, academic title	Doctor of Sociology, Academic
Deserved titles, degrees	Honorary Worker of Higher Education
Education	Higher education
Professional achievements	
Research interests	IC design methodology
Practical experience in the direction of the programme subject to assessment	7 years

Reviewer's name: **William Bennett**

Place of work, position	Technological Institute Letterkenny, Vice-Rector for Education Quality
Academic degree, academic title	Master of Arts, Master of Philosophy
Deserved titles, degrees	
Education	Higher education
Professional achievements	Member of the project team for the development of a higher education strategy for Northern Ireland
Research interests	Assessment of quality and quality assurance of education
Practical experience in the direction of the programme subject to assessment	10 years

Reviewer's name: **Andrey V. Yesenkov**

Place of work, position	ZAO "Krok Incorporated", reviewer
Academic degree, academic title	
Deserved titles, degrees	
Education	Higher education
Professional achievements	
Research interests	IT
Practical experience in the direction of the programme subject to assessment	More than 10 years

Reviewer's name: **Azamat Kudaev**

Place of work, position	SPSU, a student of the Master's programme
Academic degree, academic title	
Deserved titles, degrees	
Education	Higher education
Professional achievements	
Research interests	IT
Practical experience in the direction of the programme subject to assessment	