



САМАРСКИЙ УНИВЕРСИТЕТ
SAMARA UNIVERSITY




National Centre for
Public Accreditation

SUMMARY REPORT

on Joint International Accreditation
of the cluster of study programmes
in the fields of study:

- “Chemistry” (04.03.01, 04.04.01),
- “Basic and Applied Chemistry” (04.05.01),
- programme of further education “Analytical Methods of Monitoring the Process Flow, Raw Materials Quality and Marketable Products”,

delivered by Samara National Research University



2017

While preparing this Summary Report we used information from the Self-Evaluation Report and the Report on the External Review of the cluster of study programmes in the fields of study: "Chemistry" (04.03.01, 04.04.01), "Basic and Applied Chemistry" (04.05.01), programme of further education "Analytical Methods of Monitoring the Process Flow, Raw Materials Quality and Marketable Products", delivered by Samara National Research University.

The presentation document for the use by the National Accreditation Board.

CONTENTS

General information on educational institution.....	4
Information on the study programmes undergoing accreditation	5
Achievements of the study programmes.....	7
Good practice.....	12
Recommendations	15
Distribution digram of the external review outcomes.....	16
Conclusion of the external review panel.....	17
Schedule of the site visit of the external review panel	18

GENERAL INFORMATION ON EDUCATIONAL INSTITUTION

Full name of the educational institution	<i>Federal State Autonomous Educational Institution of Higher Education "Samara National Research University"</i>	
Founders	<i>Ministry of Education and Science of the Russian Federation</i>	
Year of foundation	<i>1942 – Kuibyshev Aviation Institute 1966 – Kuibyshev Aviation Institute named after academician S.P. Korolev 1967 – Order of Red Banner of Labor Kuibyshev Aviation Institute 1991 – Samara order of Red Banner of Labor Kuibyshev Aviation Institute named after academician S.P. Korolev 1992 – Samara State Aerospace University named after academician S.P. Korolev 2010 – Samara State Aerospace University named after academician S.P. Korolev (National Research University) 2016 – Samara National Research University named after academician S.P. Korolev</i>	
Location	<i>443086, 34, Moskovskoye Shosse, Samara, Samara Region, Russian Federation</i>	
Rector	<i>Shakhmatov Evgeny, Doctor of Sciences, Professor</i>	
License	<i>Series 90Л01 № 9264 reg. № 2222 dated 28.06.2016 permanent</i>	
State Accreditation	<i>Certificate of State Accreditation Series 90A01 № 2372, reg. №2251 dated 20.09.2016 valid till 31.05.2019</i>	
Number of students	<i>14467 among them: Full-time 10545 On-site and off-site 615 Part-time 3307</i>	

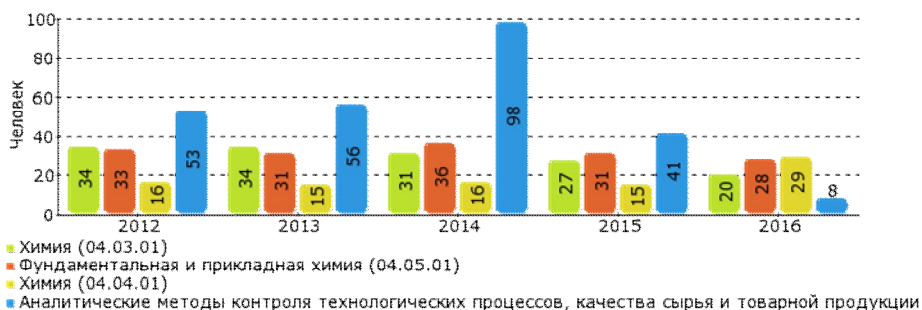
INFORMATION ON THE STUDY PROGRAMMES UNDERGOING ACCREDITATION

Study programmes	<p><i>"Chemistry" (04.03.01), "Chemistry" (04.04.01), "Basic and Applied Chemistry" (04.05.01), programme of further education "Analytical methods of monitoring the process flow, raw materials quality and marketable products"</i></p>
Level of training / Standard period of training	<p><i>academic bachelor's degree programme / 4 years Chemist, Chemistry Teacher/ 5 years master's degree programme / 2 years further education / 216 hours</i></p>
Structural subdivisions (Head)	<p><i>Institute of Natural Sciences (Director – Aleksandr Krutov, Doctor of Sciences (Physics and Mathematics), Professor)</i></p> <p><i>Faculty of Chemistry (Svetlana Kurbatova, Doctor of Sciences (Chemistry), Professor)</i></p>
Major department (head of major departments)	<p><i>Department of General Chemistry and Chromatography (Head of Department – Ludmila Onuchak, Doctor of Sciences (Chemistry), Professor)</i></p> <p><i>Department of Organic, Bioorganic and Medical Chemistry (Head of Department – Petr Purigin, Doctor of Sciences (Chemistry), Professor)</i></p> <p><i>Department of Inorganic Chemistry (Head of Department – Viktor Serezhkin, Doctor of Sciences (Chemistry), Professor)</i></p> <p><i>Department of Analytic and Expert Chemistry (Head of Department – Anatoly Lobachev, Doctor of Sciences (Chemistry), Professor)</i></p>
Date of the site visit	<i>October 25-27, 2016</i>
People responsible for accreditation of the study programme	<i>Vitaly Garkin, Ph.D. in Chemical Sciences, Associate Professor , Deputy Director of the Institute of Natural Sciences</i>

SAMPLING RESULTS OF THE PROJECT "THE BEST STUDY PROGRAMMES OF INNOVATIVE RUSSIA"

Indicators	2016
Cluster of the study programmes in the fields of study: "Chemistry" (04.03.01, 04.04.01), "Basic and applied Chemistry" (04.05.01)	
Number of the given programmes in the RF	193
Number of higher educational institutions to offer the given programmes	158
Number of programmes – winners of the project (% from total number of these programmes offered in the RF)	60 (31,09%)
Samara Region	
Number of the given programmes offered in the region	11
Number of programmes – winners of the project (% from total number of these programmes offered in the region)	4 (36,36%)
Number of higher educational institutions and branches in the region	41
Total number of programmes offered in the region	591
Total number of programmes – winners of the project (% from total number of these programmes offered in the region)	111 (18,78%)

REFERENCE DATA ON STUDENT ENROLLMENT FOR PROGRAMME



ACHIEVEMENTS OF THE STUDY PROGRAMMES

Quality of implementing the study programme

Efficient student enrollment, successful completion of assessment procedures, victories of the University students in numerous competitions, publishing research findings with the students participation in the prestigious periodicals, favourable reports of employers prove high quality of the study programmes' delivery of the Faculty of Chemistry.

Provision of up-to-date education

Research findings are implemented in the training process on a regular basis: the Faculty teachers develop new special and elective courses taking into account recent research activity. The present lecture courses and practical classes are being updated, syllabi are reviewed.

Teaching staff

The total number of teachers involved in the implementation of the Faculty programmes is 36 people. The percentage of the teachers with academic degrees and titles is 94.4% (34 Teachers); Doctors of Sciences, Professors – 25% (9 Teachers), Ph.D.'s, Associate Professor – 69.4% (25 Teachers).

Independent assessment of student learning outcomes

The assessment of student learning outcomes is carried out on a regular basis; since 2011 such technologies as "Diagnostic assessment of the 1st year students" and the "Federal Internet Exam in Professional Education" have been implemented in the assessment procedure.

The students of the Faculty of Chemistry take an active part in competitions, carried out by off-site educational institutions, and receive high marks of the learning outcomes, which are confirmed by Certificates and letters of appreciation.

Material and technical resources

The classes of the study programmes of the cluster "Chemistry" are delivered in the buildings of the Faculties of Chemistry and Biology, classrooms and laboratories are equipped with multi-media facilities in accordance with the FSES HE requirements. The computer classrooms are equipped with modern computers with broadband Internet access. License software programmes are used in carrying out special modules.

The students have an opportunity to get access to the equipment of the public centers on the basis of the Russian Academy of Sciences – the Center for collective use of Physical methods of investigation and the Center for collective use of Physical methods of investigation of the matter structure.

The set of the computer programmes TOPOS, developed by the staff members and implemented in the educational process, is actively used by the Russian scientists, working in the institutions of the Russian

Academy of Sciences as well as by foreign colleagues from Germany, France, the USA, Japan, China, India.

An access to full-text electronic resources of the publishing houses Elsevier is provided and subscription for the most in-demand Russian and foreign journals in Chemistry is available.

Research activity

The University took the 6th place in the total rating in the subject area *Chemistry* and the 2nd place according to the criterion "Efficiency of research activity" among 28 Russian universities in the rating of "ATS-Expert", based on the criterion of relevance, scale and stability of research activity of a University.

The teachers are actively involved in research activities: they supervise postgraduates' research, publish research outcomes in journals with high impact-factor, in the periodicals of the indexing systems Web of Science, RSCI (Russian Science Citation Index), Scopus and take an active part in prestigious conferences. Teachers are also members of Dissertation Councils.

Academic mobility of students

The system of public information on the joint University projects with foreign partners, scholarship programmes and grants of the support of academic mobility have been formed.

The Provision on internship of students and postgraduates and the Provision on grant support of students and postgraduates were adopted in accordance with the Programme for Increasing Competitive Ability of the University.

International conferences, carried out on the basis of research centre for theoretical material science (Director of the centre – V. A. Blatov) are an integral part of the development system of the students' academic mobility. During the conferences the prominent foreign scientists (2015 – Nobel Laureate R. Khoffman) give courses of lectures which provide an opportunity for the best master's degree students to receive an invitation to study abroad.

Employability of graduates

Information on employability of the University graduates of the study programmes under review, published at the web-site the Portal of monitoring graduate employment (graduate.edu.ru), demonstrates a high-level of the students' employability.

Currently, up to 75% of the graduates of the Faculty of Chemistry work in the following fields: petrochemistry and oil production, pharmaceutical industries, chemical industry, food industry, sanitary and epidemiological control, market of the laboratory equipment and chemical reagents, education and science (research institutions, HEIs and schools), forensic centers.

International projects

The teachers of the Faculty of Chemistry take part in foreign internships, implement joint research projects with foreign companies.

V. V. Klepov and S. A. Novikov, Assistant Professors of the Department of Inorganic Chemistry undertook internships in the universities of Germany, A. V. Savchenkov, Assistant Professor undertook internship in the University of Washington (Washington, the USA).

Professor Blatov V. A. signed a contract with Northwestern Polytechnical University (Xian, China).

Summer Schools are organized at the Faculty of Chemistry in the framework of International cooperation. (For example, International research School "Topological Methods for Expert Systems in Materials Science", carried out in Samara on August 12-16, 2014). The participant of the School included students and postgraduates as well as 20 young scientists from other Russian cities, Brazil, India, China, Poland and Saudi Arabia. The School delivered lecture courses and practical exercisers tasks by the TOPOS programme under the supervision of Professors D. M. Prozerpio and V. A. Blatov.

EXTERNAL REVIEW PANEL



Ivan Leban (Slovenia)

Review Chair, international expert

Director of the Slovenian Quality Assurance Agency SQAA, Professor of Inorganic Chemistry, Crystallography Specialist

nominated by the Slovenian Quality Assurance Agency SQAA



Nikolay Prokopov (Russia)

Deputy Review Chair, Russian expert

Doctor of Sciences (Chemistry), Professor, First Vice-Rector, Professor of the Department of Chemistry and technology of high-molecular compounds, Moscow Technological University, member of the Guild of Experts in Higher Education

nominated by the Guild of Experts in Higher Education

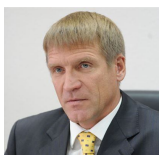


Rimantas Raudonis (Lithuania)

Panel member, international expert

Professor, Head of Department of Applied Chemistry, Faculty of Chemistry, Vilnius University

nominated by Higher Education Quality Evaluation Centre HEQEC



Oleg Volkov (Russia)

Panel member, representative of professional community, Russian Expert

Deputy Minister of Industry and Technology of Samara Region

nominated by the Ministry of Industry and Technology of Samara Region



Aleksandra Ovchinnikova (Russia)

Panel member, representative of student society, Russian Expert

6th year student in "General Medicine", Faculty of Medicine, Samara State Medical University of the Ministry of Healthcare of the Russian Federation

nominated by the Samara State Medical University of the Ministry of Healthcare of the Russian Federation

INFORMATION ON THE LEADING TEACHERS OF THE STUDY PROGRAMME

Vladislav Blatov

Doctor of Sciences (Chemistry), Professor, Professor of Department of General Chemistry and Chromatography, member of the Structure Commission, International Zeolite Association (IZA), Consultant of the Commission for Mathematical and Theoretical Crystallography, International Union of Crystallography (IUCr)

Andzhela Bulanova

Doctor of Sciences (Chemistry), Professor at the Department of General Chemistry and Chromatography, Honoured Worker of Higher Professional Education of the RF

Svetlana Kurbatova

Doctor of Sciences (Chemistry), Professor, Dean of the Faculty of Chemistry, member of the international scientific society "International QSAR and Modeling Society".

Anatoly Lobachev

Doctor of Sciences (Chemistry), Professor, Head of the Department of Analytical and Expert Chemistry, Honorary Worker of Higher Professional Education of the RF.

Ludmila Onuchak

Doctor of Sciences (Chemistry), Professor, Head of the Department of Physical Chemistry and Chromatography, Honorary Worker of Higher Professional Education of the RF, member of the scientific council of the RAS.

Petr Purigin

Doctor of Sciences (Chemistry), Professor, Head of the Department of Organic, Bioorganic and Medical Chemistry, Honorary Worker of Science and Technology of the RF, Corresponding Member of RANS.

Viktor Serezhkin

Doctor of Sciences (Chemistry), Professor, Head of the Department of Inorganic Chemistry, Honorary Worker of Higher Professional Education of the RF, Professor Emeritus of Samara University, member of the scientific council of the RAS in Inorganic Chemistry

GOOD PRACTICE

Standard 1. Policy (goals, development strategy) and quality assurance procedures of a study programme

The quality assurance policy is documented and available to the public.

The inner system of quality assurance is regularly reviewed and it guarantees the continuous improvement of the educational process quality.

The quality of the educational process and research is constantly improved.

The mission of each study programme is clearly defined. It corresponds to the University's mission and takes into account the tendency of the regional development.

Standard 2. Design and approval of programmes

The study programmes in Chemistry were designed in accordance with the procedures of Samara University.

The study programmes are revised at a fixed date (before the beginning of the academic year).

Consideration of the requirements of professional activity, revealed during different independent external reviews.

Standard 3. Student-centred learning, teaching and assessment

A Centre for inclusive education was established at the University.

Students are provided with the opportunity of creating individual learning paths which imply the use of diverse teaching techniques, clearly defined criteria and objective assessment procedures of students' competences.

Criteria for assessment of students' performance and achievements are clearly defined and transparent. Point-rating system for current assessment of students' performance is used.

Independent, objective professional assessment of learning outcomes is guaranteed by means of combining internal and external evaluation procedures.

Standard 4. Student admission, support of academic achievements and graduation

Systematic and diverse work with applicants is carried out.

Informing the educational institutions and public on the events is held.

Availability of information on admission rules to Samara University, requirements to entrance tests, admission (transfer) of students from

other educational institutions, recognition of qualifications, periods of study and prior learning.

Individual achievements of students are taken into account during admission to the study programme.

Student portfolios are considered when students are granted enhanced scholarships. Requirements to portfolio are specified in Regulations on scholarships.

The procedures of collecting information on academic achievements of the Chemistry Faculty students, systematic analysis of this information, decision making on the basis of this information have been implemented.

Standard 5. Teaching staff

Qualification of all teachers meets the requirements of the Federal State Educational Standards.

The teachers carry out a lot of teaching and methodological activities, develop teaching materials with the use of information technologies, publish papers in journals with high impact factor, have high citation index in Web of Science, Scopus and Russian Science Citation Index, participate in prestigious conferences. The teachers are members of dissertation councils.

The teachers and other staff members of the faculty of Chemistry and Inter-university research centre on Theoretical Material Science took a second place in research among the Russian Universities.

The documented incentive system for achievements in research and teaching, built in accordance with the priorities of the University development has been introduced.

Standard 6. Learning resources and student support

Laboratories of the Faculty are complete with the equipment in the amount required by the Federal State Education Standards. It is used for general and special practical work.

There is an effective system that provides students with the opportunity of research activity with regard to their research interests and preferences.

The library provides students with an opportunity to work with licensed information resources.

Availability of the learning and scientific literature in chemical sciences of the early period in the library's electronic catalogue.

Regular placing of information on the opportunities of student academic mobility at the HEI website.

Standard 7. Collection, analysis and use of information for managing the study programme

Availability of the University electronic management system, which is regularly updated. The system takes into account concerns of all the

participants of the educational process and contains generally accessible resources and personal accounts.

The information is rapidly delivered through different information tools, including the system of teachers' and students' personal accounts.

Standard 8. Public information

Availability of the website version for visually impaired.

Availability of the account of Chemistry with coherent information and regular updating in social networks.

The University updates information about vacancies on a regular basis, takes an active part in employability of the students.

Competitions, Olympiads and "Open Days" for young scientists are carried out on a regular basis.

Standard 9. On-going monitoring and periodic review of programmes

Adjustment of the study programme is based on the assessment results and the marks for the quality of the students' learning outcomes.

The procedure of making amendments in the study programmes under review is fully automated.

Standard 10. Cyclical external quality assurance of study programmes

The University pays great attention to the procedures of external review of the Russian and international ranking agencies.

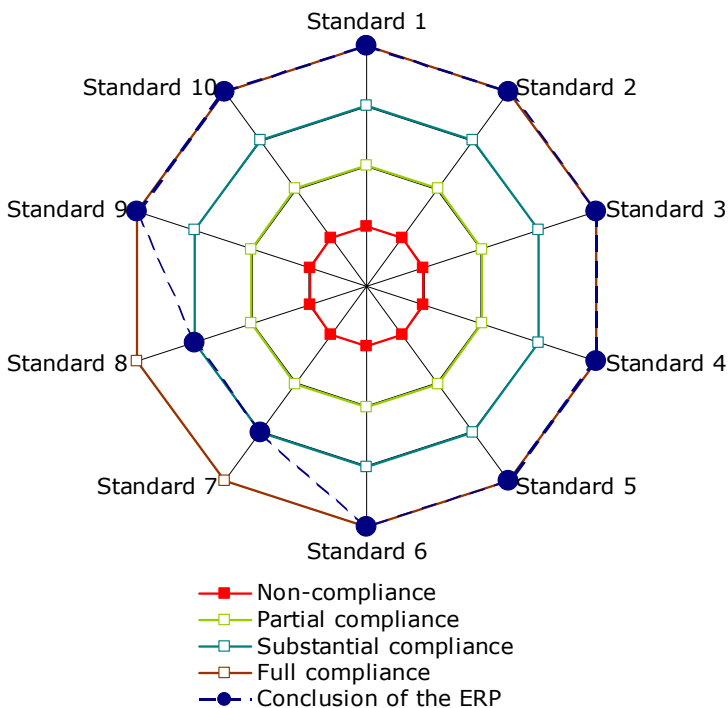
The University takes an active part in the interactive distance procedures of the external review of the quality of the study programmes.

Carrying out regular internal audits of the study programmes, including external evaluation of the Faculty, its subdivisions, study programmes on the basis of presented documents and to determine the correspondence of the subject of research to specific audit criteria, missions and objectives.

RECOMMENDATIONS

1. To enhance the updating of regulatory documents in the process of reorganization of the merged Universities.
2. To initiate a wide discussion on the policy and procedures of the quality assurance of the study programmes, outcomes of external and internal audit.
3. To involve students and employers in developing, monitoring and periodic review of the study programmes more extensively and to inform the public about the outcomes of periodic quality assurance procedures of study programmes.
4. To involve employers in the discussion of the long-term strategy of the University development.
5. To publish information on the achievements of the study programmes in Chemistry in comparison with similar programmes of the Russian educational institutions and foreign Universities.
6. To involve students in the process of getting grants from international exchange programmes.
7. To further develop the system of continuous enhancement of the teaching quality, continuous improvement in the work of teachers in accordance with the goals and objectives of the study programme.
8. To improve the staff enrollment system with the involvement of the most promising young scientists.
9. To continue improvement of material resources for research and training.
10. To conduct a systematic monitoring of students' opinions in terms of conditions and management of the educational process. The information from students' websites and accounts of social networking sites should be used.
11. To publish information on the topics of diploma projects and thesis at the University's official website for the benefit of potential employers.

DISTRIBUTION DIGRAM OF THE EXTERNAL REVIEW OUTCOMES



- Standard 1. Policy (goals, development strategy) and quality assurance procedures of the educational programmes
- Standard 2. Design and approval of programmes
- Standard 3. Student-centered learning, teaching and assessment
- Standard 4. Student admission, support of academic achievements and graduation
- Standard 5. Teaching staff
- Standard 6. Learning resources and student support
- Standard 7. Collection, analysis and use of information for managing the educational institution
- Standard 8. Public information
- Standard 9. On-going monitoring and periodic assessment of the educational programmes
- Standard 10. Cyclical external quality assurance of the educational programmes

CONCLUSION OF THE EXTERNAL REVIEW PANEL

Based on the self-evaluation report analysis, documents and data submitted, interviews with the representatives of the professional communities, students, post graduates, doctor-degree students, staff and administration of the educational institution the External Review Panel came to the conclusion that the cluster of educational programmes in the field of study: "Chemistry" (04.03.01, 04.04.01), "Basic and applied Chemistry" (04.05.01), programme of further education "Analytical methods of monitoring the process flow, raw materials quality and marketable products", **fully** complies with the standards and criteria of public accreditation of the National Centre for Public Accreditation.

The External Review Panel recommends the National Accreditation Board to **accredit the cluster of educational programmes in the field of study: "Chemistry" (04.03.01, 04.04.01), "Basic and applied Chemistry" (04.05.01), programme of further education "Analytical methods of monitoring the process flow, raw materials quality and marketable products", delivered by Samara National Research University for the period of 6 years.**

SCHEDULE OF THE SITE VISIT OF THE EXTERNAL REVIEW PANEL

Time	Events	Participants	Venue
25 October, Tuesday			
08.30	Meeting the members of ERP in the airport		"Green Line Hotel"
08.45	Arriving at Samara State		1, Academic Pavlov Str.. Room Л-13
09.00 – 11.00	The first meeting of ERP and HEI's coordinators Briefing of experts.		1, Academic Pavlov Str.. Room Л-13
11.00 – 12.00	Meeting with the University administration and persons in charge of accreditation	ERP, Rector, Vice-Rectors, Chiefs of the Academic Process Management Directorate, Director of the Centre for Quality Assessment in Education, Director of the Institutes, deans, heads of departments	1, Academic Pavlov Str.. Assembly Hall
12.00 – 13.30	Lunch		49 Academic Platonov Str Café Favourite
13.30 – 15.00	Guided tour of the University	ERP	1, Academic Pavlov Str.. 49 Academic Platonov Str
15.00 – 16.00	Meeting with the Director of the Institute of Science, Dean of the Faculty of Chemistry	Director of the Institute of Science, Dean of the Faculty of Chemistry, ERP	1, Academic Pavlov Str.. Room Л-13
16.00 – 16.30	Break		1, Academic Pavlov Str.. Room Л-13a
16.30 – 17.30	Meeting the heads of Departments	Heads of Departments, ERP	1, Academic Pavlov Str.. Room Л-13a
17.30 – 18.00	Work with documents	ERP	1, Academic Pavlov Str.. Room Л-13a
18.00 – 19.00	Meeting representatives of the professional community	Employers, ERP	1, Academic Pavlov Str.. Room Л-13
19.00 – 19.30	Internal meeting of ERP	БЭК	1, Academic Pavlov Str.. Room Л-13a
26 October, Wednesday			

08.30	Transfer to the University		
08.45	Arrival at Samara University		1, Academic Pavlov Str.. Room Л-13
09.00 – 10.00	Meeting with students	Students, ERP	1, Academic Pavlov Str.. Room Л-13
10.00 – 11.30	Work with documents	ERP	1, Academic Pavlov Str.. Room Л-13a
11.30 – 12.30	Meeting with the Teachers	Teachers, ERP	1, Academic Pavlov Str.. Room Л-13
12.30 – 14.00	Lunch		49 Academic Platonov Str Café Favourite
14.00 – 14.30	Meeting with the students of the further education programme	Students, ERP	1, Academic Pavlov Str.. Room Л-13
14.30 – 16.30	Work with documents	ERP	1, Academic Pavlov Str.. Room Л-13a
16.30 – 17.30	Meeting with graduates	Graduates, ERP	1, Academic Pavlov Str.. Room Л-13
17.30 – 18.00	Internal meeting of ERP	ERP	1, Academic Pavlov Str.. Room Л-13a
27 October, Thursday			
08.45	Arrival at Samara University		1, Academic Pavlov Str.. Room Л-13
09.00 – 12.00	Closed meeting of the panel: making preliminary conclusions of the site visit, preparing the oral commission report on the results	ERP	1, Academic Pavlov Str.. Room Л-13
12.00 – 13.30	Lunch		49 Academic Platonov Str Café Favourite
13.30 – 15.00	Final meeting of External Review Panel with the representatives of the University's administration heads of departments, teachers, students	ERP, the representatives of the university administration, Heads of the degree-granting departments, teachers, students	1, Academic Pavlov Str.. Assembly Hall
	Departure of the External Review Panel		