

Ministry of Education and Science of the Russian Federation

APPROVED BY

Deputy Minister of Education and  
Science of the Russian Federation

\_\_\_\_\_A.B. Povalko

« \_\_\_ » \_\_\_\_\_ 2016

APPROVED BY

Rector of Kazan Federal University

\_\_\_\_\_ Ilshat R. Gafurov

« \_\_\_ » \_\_\_\_\_ 2016

Amendments to the Activity Plan for the Implementation of Program for Enhancing Competitive Ranking (“Roadmap”) of Federal State Autonomous Educational Institution of Higher Professional Learning “Kazan Federal University” for 2013-2020 (stage 2 – 2015-2016) agreed by Ministry of Education and Science of the Russian Federation on July 2015 and approved by Federal State Autonomous Educational Institution of Higher Professional Learning “Kazan Federal University” on March 30, 2015

Moscow 2016

Amendments to the Activity Plan for the Implementation of Program for Enhancing Competitive Ranking (“Roadmap”) of Federal State Autonomous Educational Institution of Higher Professional Learning “Kazan Federal University” for 2013-2020 (stage 2 – 2015-2016);

presented at the meeting of the Council for enhancing competitive ranking of the Russian leading universities among world leading research and academic centers on March 18, 2016;

amended as per recommendations of the Council for enhancing competitive ranking of the Russian leading universities among world leading research and academic centers, forwarded in the letter from the Ministry of Education and Science of the Russian Federation No АП-580/02 dated April 13, 2016.

The data in Forms 1 and 2 presents updated information on performance indicators and financing of the Activity Plan for the Implementation of Program for Enhancing Competitive Ranking (“Roadmap”) of Federal State Autonomous Educational Institution of Higher Professional Learning “Kazan Federal University” for 2013-2020 (2<sup>nd</sup> stage – 2015-2016) based on the data regarding the implementation of the mentioned plan in 2015.

The data in Form 3 is an addition to the chapter 2.2. of the Activity Plan for the Implementation of Program for Enhancing Competitive Ranking (“Roadmap”) of Federal State Autonomous Educational Institution of Higher Professional Learning “Kazan Federal University” for 2013-2020 (stage 2 – 2015-2016) regarding the introduction and development of strategic academic units by the University aimed at meeting the goals and objectives of the mentioned plan as well as improving the University’s positions in subject rankings.

**Amendments**  
**to the Activity Plan for the Implementation of Program for Enhancing**  
**Competitive Ranking (“Roadmap”) of Federal State Autonomous Educational**  
**Institution of Higher Professional Learning “Kazan Federal University”**  
**among world leading research and academic centers for 2013-2020 (stage 2 –**  
**2015-2016)**

Cross out the word *professional* in the name of the document “Activity Plan for the Implementation of Program for Enhancing Competitive Ranking (“Roadmap”) of Federal State Autonomous Educational Institution of Higher Professional Learning “Kazan Federal University” among world leading research and academic centers for 2013-2020 (stage 2 – 2015-2016).

Introduce the following amendments in the text.

**PART 1. TARGET PERFORMANCE INDICATORS AND MEANS FOR ACHIEVING THEM**

**1.1. KFU’s Objectives and Performance Indicators**

Paragraph 3 shall be reworded as follows:

“The improvement in the University’s positions in all key rankings and the achievement of established KPIs and performance indicators have demonstrated the appropriateness of the selected development strategy, model and techniques. Thus, during the second stage (2015 – first half of 2016) we consolidated the advantages gained and launched large-scale structural transformations in the selected priority areas of the University development using all the opportunities offered by a classical university located in a truly unique, dynamically developing and innovation-driven region, featuring tolerant centuries-old co-existence of diverse ethnic groups, religions and cultures. In the next stage (starting from the middle of 2016) we are planning to form new aggregative organisational development drivers – strategic academic units – based on the existing priorities by involving structural divisions and strengthening the educational component. The

objective of this plan is to introduce the field proven development models and instruments in the whole University.”

Delete the Table 1 “Target indicators of the Program for Enhancing KFU’s Competitive Ranking for the period up to 2020”.

## **1.2. Target University Model**

### *1.2.1 Миссия вуза*

Paragraph 1 shall be reworded as follows:

“– Contributing to Russia’s innovation-driven development and enhancing the competitiveness of its human capital through ensuring high-quality academic process, research and technological developments in priority development areas of the Russian Federation;”.

Delete Paragraph 3.

### *1.2.2. Global Higher Educational Institutions Selected as KFU’s Benchmarking Peer Group*

Sentence 3 in the Paragraph 1 shall be reworded as follows:

“Additionally, taking into account the expert suggestions provided for the first stage of the Road Map, we analysed the following universities with the profile similar to KFU’s profile and demonstrating the fastest growth in their respective rankings over the past five years, as well as universities with structural divisions and areas leading in global subject rankings in the areas selected by us as strategic academic units.”

Introduce the following paragraphs after Paragraph 12:

“In 2016, the following universities were included in the target group:

- University of Calgary;
- University of Texas at Austin;
- Imperial College London

Paragraph 13 shall be reworded as follows:

“These universities served as benchmarks for more precise determination of the growth dynamics of KFU’s planned target performance indicators and structural divisions involved in subject rankings in 2015-2020.”

Table 2 shall be deemed as Table 1.

Paragraph 15 shall be reworded as follows:

“Upon analysing the reviewed peer universities group, all the 2020 target model indicators that KFU had accepted for the Road Map (target model indicators) in 2013 were re-confirmed. Furthermore, KFU’s planned performance indicators for 2015-2018 and the fluctuation trends for these Program indicators for 2016-2020 were corrected, as well”.

Table 1 “Peer Universities: Substantiated Target Model Parameters” shall be reworded as follows:

University	Position in QS ranking in 2015\5-year growth	Articles in WoS database within 5 years per faculty member\% change within 5 years	Articles in Scopus database within 5 years per faculty member \% change within 5 years	Article citations in WoS database within 5 years per faculty member \% change within 5 years	Article citations in Scopus database within 5 years per faculty member \% change within 5 years	Total number of students / faculty members, thousand people
Seoul National University (SNU)	36	6,54	5,34	32,07	28,18	28\6
Peking University (Beida)	41	7,33	8,43	40,76	38,26	33\4
Lund University (Sweden)	70	4,14	3,61	32,91	27,51	33\5
The University of Helsinki (Finland)	96	4,82	4,60	40,65	41,28	35\4,5
Freie Universität Berlin (Germany)	119	5,08	2,14	37,10	14,89	29\4
Universidad de Chile (Chile)	209\+53	1,79\+35	2,52\+40	6,93\+59	10,38\+64	38\3
Zhejiang University (China)	110\+81	13,91\+48	10,53\+33	46,26\+156	45,28\+138	45\3
Hokkaido University (Japan)	139\+36	9,26\+1,5	8,75\+5,5	46,30\+18	42,06\+17	17\2
Universidade Estadual de Campinas (UNICAMP) (Brazil)	195\+40	7,39\+31	8,96\+34	26,3\+59	30,73\+64	18\2
University of Calgary (Canada)	204	8,7	8,72	53,2	59,87	28/2,6
University of Texas at Austin (USA)	77	9,35	10,1	76,48	84,86	48,8/3
Imperial College London (Great Britain)	8	12,2	9,6	104,7	91,77	15,3/4
<b>Reference values for KFU by 2020</b>	<b>99</b>	<b>4,3</b>	<b>5,7</b>	<b>25,8</b>	<b>30,21</b>	<b>17\2</b>

### *1.2.1 Marketing Strategy for the Research Market*

Paragraphs 1-6 shall be replaced with the following:

“Four strategic academic units (StrAUs) are being formed to meet the challenge of KFU’s accelerated transformation into a world-class research university. They will make a research and educational framework of the University by 2020:

- 7P Translational Medicine;
- Eco-oil – global energy and resources for future materials;
- Astrochallenge: cosmology, monitoring, navigation, applications;
- Transformation quadrature of teacher’s training education – 4T.

By 2020 KFU will achieve globally recognized research results within StrAUs owing to:

- Creating Centres of Excellence and world-class unique laboratories;
- Inviting world renowned scholars;
- Developing grant and scholarship support system;
- Collaborating with large companies and leading research and academic centres;
- Cooperating with institutes of the Russian Academy of Science.”

Relocate chapters *1.2.3.1 “Biomedicine and Pharmaceutics”*; *1.2.3.2. “Oil Production, Oil Refining and Petrochemistry”*; *1.2.3.3. “Advanced Materials”*; *1.2.3.4. “Info-communication and Space Technologies”*; *1.2.3.5. “New Interdisciplinary Centers of Excellence”* to Appendix 13 “Chapters excluded from Activity Plan for Implementation of Program for Enhancing Competitive Ranking (“Roadmap”) of Federal State Autonomous Institution of Higher Education “Kazan Federal University” among world leading research and academic centers for 2013-2020 (2<sup>nd</sup> stage – 2015-2016)”.

Extend with the new following chapters:

*“1.2.3.1. StrAU “7P Translational Medicine”*

Goal: to form new solutions in human health protection by developing personalized translational medicine based on innovation model of transdisciplinary medical education and interdisciplinary scientific solutions. Underlying the StrAU

is a concept of the medicine of future, in which the 4P-medicine principle (Personalized; Predictive; Preventive; Participative) is expanded with additional 3P (Providing; Preemptive; Point of care).

Research done within the StrAU will be focused on five interrelated research areas: 1) neurotechnology; 2) personalized medicine; 3) regenerative medicine; 4) living system chemistry; 5) biomedical physics. Both fundamental research of translational research, phase T0, and applied translational research, phase T1, will be conducted in each area.

The University Clinic, four Centres of Excellence, three shared use centres for research equipment, Research and Education Centre for Pharmaceuticals, as well as individual laboratories and departments from 10 KFU's institutes and faculties will also be included in the StrAU organised in the Institute of Fundamental Medicine and Biology. Transdisciplinary transformations of educational programs will be made for all the educational levels in biology, physics, chemistry and medicine. A uniform research and education domain will be formed in order to train healthcare staff, promote translational medicine, internationalize education and improve the University's competitiveness.

#### 1.2.3.2. "Eco-Oil – Global Energy and Resources for Future Materials"

Goal: to generate, concentrate and globally spread knowledge and technologies in the field of energy-efficient, clean and cost-effective technologies (EECCCE-technologies) for exploration, production, processing, petrochemistry and gas chemistry of nonconventional hydrocarbon reserves, which will meet challenges connected with the global energy security and resource provision against the background of global climate change conditions and ecological problems.

Research and development done within the StrAU will be focused on five key complementary trends: 1) exploration and mining of hydrocarbon accumulations, deposit modelling, development of information technologies for exploitation monitoring and control; 2) development of EECCCE-technologies for "subsurface oil refining" of nonconventional hydrocarbon reserves; 3) development of catalysts for oil production, refining and petrochemistry; 4) evaluation and prevention of

environmental risks in oil production; 5) innovation solutions in gas hydrate study and gas chemistry.

The StrAU will integrate five Centres of Excellence, three shared use centres for research equipment, departments and research laboratories from 7 KFU's institutes, as well as a catalyst production plant. In addition to the aforesaid, structures ensuring international and interdisciplinary network communication will be created to develop the StrAU and enter international learning service, research and development markets.

*1.2.2.1. 1.2.3.3. StrAU "Astrochallenge: Cosmology, Monitoring, Navigation, Applications"*

Goal: to create a unique world-class education-and-research and research-and-technical facility, providing systematic education in astrophysics, cosmic geodesy, radio physics, starting from study at school to gaining competences in the university in space exploration and application of space activity results in national economy; to improve KFU's academic reputation through promotion in "Physics and Astronomy" subject ranking.

Research done within the StrAU will be focused on five key complementary trends: 1) cosmology; 2) space navigation; 3) near and deep space monitoring; 4) applications of space activity results; 5) research facility prototypes. We are planning to develop world-class research laboratories with state-of-the-art experimental equipment for advanced projects (elaboration of new cosmologic and astrophysical models, selenocentric navigation network, detection and study of nonstable optical objects of different nature), form interdisciplinary teams, which will elaborate technologies for space activity result application in ecology, nature management, territory management.

The following divisions will be among the StrAU units: Division of Astrophysics and Cosmic Geodesy and Division of Radio Physics and Infocommunications of the Institute of Physics; Education and Research Centre for Space Exploration and Technologies; Centre of Gravity, Astrophysics and Cosmology; applied research cluster; departments from 6 institutes and faculties of KFU.

#### *1.2.2.4.StrAU “Transformation Quadrature of Teacher’s Training Education – 4T”*

Goal: KFU evolvement as an educational centre for highly qualified teaching staff (“teachers of future”), world research centre for pedagogic studies and educational developments, as well as a world centre for multicultural and multilingual education. The StrAU is created as a solution to the global challenge: incompatibility of a conservative educational system to quickly changing life style and human activity; human flow migration and mobility; necessity to educate teachers of future ready for transformations.

We are planning to develop a professional pedagogical standard, which will permit KFU to become a unique classical higher education institution professionally retraining teachers through foreseeing competences and disciplines of future, forming flexibility to transform; conduct research and offer educational programs in contemporary physical, mathematical and engineering education within the newly created OpenLabs for engineering education, and centres of excellence in mathematical and physical education; conduct research and launch educational programs (including international programs, double-degree programs) in multicultural and bilingual education, aimed at educating bilingual teachers capable of working in a multicultural environment; develop and introduce innovation software products in educational process gamification, educational trajectory support, Big Data analysis of educational results, and conduct corresponding research in the aforesaid fields.

#### *1.2.4. Education Market Strategy*

Amend paragraph 7 to read as follows: “Besides, to pursue the concept of the research university and appropriate integration of research and academic components, we will revise the content of academic programmes and teaching methods and ensure the shift of emphasis to critical thinking and creativity development, and analysis method teaching. Strategic academic units created will act as a locomotive in this job.”

Amend paragraph 9 to read as follows: “The academic environment in general, and the curricula in particular, will be highly internationalised due to the introduction of joint academic graduate and doctoral programmes with Top-200 foreign universities (50 programmes in priority areas by 2020), as well as graduate programmes offered in English (at least 50% of programmes by 2020). The University is planning to elaborate unique on-line courses (MOOC – massive open on-line courses) based on international educational platforms.”

Amend sentences 4 and 5 in paragraph 12 to read as follows: “Within this Centre of Excellence, the further development is expected for the Educational and Laboratory Complex for General Physics established in 2011-2015 in close cooperation with LD Didactic (Germany), one of the world’s leading producers of university laboratory equipment. In 2016 this Complex will considerably extend the scope of its research opportunities by opening new university laboratories – in photonics, medical physics and chemistry of new materials.”

### 1.2.3. 1.2.5. Marketing Strategy for Prospective Students

*1.2.4. Amend sentence 2 in paragraph 10 to read as follows: “Therefore in working with international applicants, long-term relationships with key universities in Turkic-speaking countries, higher education institutions and research centres of Kazakhstan, Uzbekistan, established through national programs “Mevlana”, “Bolashak” etc., will be especially important.”*

*1.2.5. Table 3 shall be renumbered Table 2.*

*1.2.6.*

#### *1.2.6. Marketing Strategy for Employer Market*

Amend paragraph 7 to read as follows: “The majority of divisions and structures listed above will be organised within the formed StrAUs. The University will become a foundation in its priority areas for the leading international companies: IBM, Cisco, Unity 3D, ICL group of company, JSC Gazprom, JSC Rosneft, JSC Tatneft, JSC Taif, JSC Nizhenkamskneftehim, JSC Lukoil, JSC Zarubezhneft, JSC Kazan Synthetic Rubber Plant, Haldor Topsoe, Shell, Schlumberger, State Corporation *Rostec*, State Space Corporation *Roscosmos*, Toshiba Medical Systems Europe B.V., Pfizer, Inc., Janssen (pharmaceutical division of Johnson & Johnson).”

Amend paragraphs 8 – 19 to read as follows: “The largest and most promising projects, implemented by KFU in collaboration with employers and with their support, are:

– Projects by “Rostec-KFU” Centre of Competence for development of adaptive and near absolutely secure data transmission systems, and global satellite systems of high accuracy positioning;

– Projects by “Rostec” companies (JSC Roselectronics, JSC Shvabe, JSC KRET) for developing and creating a selection of civilian products;

– Projects for positioning support of lunar exploration, development of devices for the orbital lunar module and lunar robots;

– Development and implementation of preclinical and clinical drug trials with JSC “Tatchempharmpreparaty”;

- Project for designing high-viscosity oil-pool development models using thermal catalytic processes in collaboration with JSC “Tatneft”, JSC “Lukoil”, with support of “Schlumberger”;
- Development of a technology for thermal in-situ processing of high-viscosity oil for JSC RITEC, JSC Zarubezhneft, in collaboration with JSC Tatneft, with support of Xtel Inc. (USA);
- Creation of catalysts and processes to reduce oil viscosity for JSC Tatneft;
- Creation of catalysts and processes to reduce oil viscosity for JSC Nizhenkamskneftehim, JSC Kazanorgsintez, JSC Kazan Synthetic Rubber Plant;
- A series of projects of “KFU-Keysight-Technologies” Scientific Centre in biochemistry (creation of antenna arrays to detect tumors in the human body without X-ray or magnetic radiation), agriculture (analysis of plant and microorganism viability in various stages of cultivation), and biotechnologies (analytical control of biopreparation production using the super-high-frequency method);
- Project for Rohde&Schwarz Company in the field of phased antenna arrays creation;
- Projects in the field of Smart City and fractal antenna development in collaboration with Cisco Systems;
- Creation of KFU Centre for Evidence-Based Medicine “Cochrane – Russia”;
- Creation of KFU – RASA Translational Medicine Centre (RASA – Russian-speaking Academic Science Association);
- Organising of RIKEN – KFU research centre in Yokohama campus (Japan).”

#### *1.2.9. Promising Research and Academic Facilities*

Amend paragraph 5 to read as follows: “To ensure the progressive development of medical studies a University clinic was created in 2015 on the

basis of three major health-care institutions, the total area exceeds 47,000 sq.m., the Clinic is stuffed with state-of-the-art equipment.”

Cross out paragraph 6.

Add the following clauses after paragraph 9: “– Upgrading of KFU medical unit (University Clinic); – Creation of WetLab and university laboratories for translational medicine in military hospital buildings being currently reconstructed and assigned to KFU.”

Amend sentence 3 in paragraph 10 to read as follows: “3 new academic buildings along with KFU’s research and education grounds in Japan and France and KFU clinic for 840 beds were commissioned in 2015. Furthermore, 450 staff members got new apartments, and dwelling for 170 invited scholars was commissioned in 2015, as well. All the students are provided with comfortable accommodation.”

#### *1.2.10 Economic and Financial Model*

Table 4 “Financial Plan” shall be renumbered Table 3 and amended to read as follows:

<b>Indicators</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
<b>Revenues, mln RUB, including</b>	<b>7350</b>	<b>9660</b>	<b>10880</b>	<b>13490</b>	<b>16010</b>
Education	5100	5600	6100	7300	8300
Research and R&D	1200	1400	1600	2000	2500
Endowment and alternative funding sources	150	160	180	190	210
Programme for Enhancing KFU’s Competitive Ranking	900	2500	3000	4000	5000
<b>Expenses, mln RUB, including</b>	<b>7350</b>	<b>9660</b>	<b>10880</b>	<b>13490</b>	<b>16010</b>
Operating expenses	5900	7500	8050	8700	9550
Capital expenditures	1450	2160	2830	4790	6460

#### *1.2.11 Management and Structural Reorganisation*

Amend paragraph 4 to read as follows: “– Improvements in the organisational structure based on the merger of departments and reduction in the number of management levels. Strategic academic units will be formed in KFU in order to

improve its management efficiency, invite highly qualified specialists and develop well-balanced and globally competitive teams. Such units will be managed with due account of work activity management practices used by the world's leading research and education centres<sup>1</sup>. Optimization of structural subdivisions will be supported by a proven system of internal complex ranking of institutes, faculties and departments using the integral efficiency evaluation of division development program indicators formed on the basis of target indicator decomposition in the University Road Map. Specifically, the number of KFU institutes is supposed to be reduced from 19 in 2015 to 12 in 2020;”.

### **1.3 Strategic Initiatives**

#### *1.3.1 SI 1. Development of Programme Portfolio and Intellectual Products Ensuring the University's International Competitiveness*

Amend paragraphs 1, 2 to read as follows: “Starting from 2016, the development of new programmes will be initiated by the supervisors of the relevant priority research areas and submitted for approval to newly created profile expert groups of the International Academic Council of KFU.

The programmes will be developed with the involvement of scientific teams conducting successful research in promising interdisciplinary areas, including: medicine (translational medicine, regenerative medicine, personalized medicine, neuro technologies, biophysics, bioinformatics and medical cybernetics, nano-biotechnologies, medical chemistry, pharmacology), power engineering, oil production, material sciences, informatics, astronomy, geophysics, teacher's training education, cultural linguistics, applied economics, and urban studies.”

Replace the words “start” in sentence 1 of paragraph 3 with the words “have been launched”.

Amend sentence 2 in paragraph 4 to read as follows: “KFU plans to launch at least 30 double-diploma programmes by 2020. The key partners will be universities with renowned expertise in the relevant areas: the University of Nancy, France; the Federal Polytechnic School of Lausanne, Switzerland; the University of Birmingham, Great Britain; and French Institute of Petroleum, France.”

Cross out sentence 2 in paragraph 6.

Amend sentence 2 in paragraph 8 to read as follows: “The second stage implies full transition of some basic academic programmes into distance-learning format within individual educational trajectories, which provides considerable openness of education.”

#### *1.3.2 SI 2. Invitation of External Experts and Development of Key University Staff, Improving the Qualifications of Research and Teaching Staff*

Replace the words “In 2015” in paragraph 2 with the words “In 2016”.

Replace the words “In 2015-2016” in sentence 3 of paragraph 12 with the words “In 2016-2017”.

#### *1.3.3 SI 3. Attracting Talented Students, Doctoral Candidates and Young Researchers*

Replace the words “In 2015” in sentence 2 of paragraph 4 with the words “In 2016”.

#### *1.3.4. SI 4. Development of Key Emerging Areas Coupled with Phasing Out of Inefficient Activities*

Amend paragraphs 1, 2 to read as follows: “ In promoting its breakthrough research and development areas, KFU will continue creating units, which generate world-class research results and their applications, and rely on solutions that have proven their effectiveness, including: Personalized Research Centres, headed by prominent foreign and Russian scientists (by providing “maximum favourable”

conditions for them); the OpenLab system; large-scale projects and collaboration with the world's leading research centres, as well as joint departments opened in collaboration with RAS institutions and leading companies with a focus on StrAUs' priority areas.

In StrAU development we will move forward from tailoring the facilities and platforms of the Centres of Excellence to further evolution and consolidation of KFU's advantages in their specific niches. Research management efficiency will be improved due to implementation of a single research, educational and development policy. Not less than three new Centres of Excellence will be opened based on KFU's competencies in humanities and experience in efficient management of interdisciplinary studies.”

#### *1.3.5 SI 5. Enhancement of the University's Management and Financial System*

Replace the words “In 2015 – 2016” in sentence 2 of paragraph 3 with the words “In 2016–2017”.

Replace the words “In the year 2015” in sentence 2 of paragraph 6 with the words “In the year 2017”.

Amend sentence 3 in paragraph 7 to read as follows: “Starting from 2016 strategic academic units will serve as pilot projects for management system changes at subdivision level”.

Amend sentence 4 in paragraph 9 to read as follows: “A 180% increase in the percentage of revenues earned from non-budgetary sources is scheduled for the period from 2016 to 2020”.

Replace the words “starting from the fiscal year 2015” in sentence 2 of paragraph 11 with the words “starting from the fiscal year 2016”.

#### *1.3.7 SI 7. Strategic Positioning of KFU in Global Academic Community to Improve KFU's Academic Reputation*

Replace the words “in the top-quartile” in sentence 2 of paragraph 2 with the words “in the top-quartiles Q1 and Q2”.

Add the following sentence after sentence 4 in paragraph 3: “ At the same time KFU will elaborate an information and material incentive system for its staff, preventing possible engagement in editions with checkered or doubtful reputation.”

*1.3.8 SI 8. Developing and Implementing the Marketing Strategy and University Promotion in the Global Information Space*

Replace the words “in 2015” in sentence 1 of paragraph 2 with the words “in 2017”.

*1.3.9 SI 9. KFU Portal-Based Implementation of “Supersite” Concept*

Cross out sentence 2 in paragraph 2.

Cross out paragraphs 3–5.

Cross out clauses 1.1–1.2; 2.1–2.4; 3.1–3.4.

Cross out the sentence “The portal promotion will involve a number of activities:” in clause 4.

Cross out clauses 4.1–4.2.

Form 1. Corrected performance indicators of the Activity plan on the implementation of the Program for Enhancing Competitive Ranking of Kazan Federal University (“the Roadmap”) for 2013-2020 (2<sup>nd</sup> stage - 2015-2016)

No	Indicator	Measurement unit	Indicator value					
			Real value	Planned value				
			2015	2016	2017	2018	2019	2020
Compulsory performance indicators								
1.	Position (accurate within 50) in global leading rankings (overall and by subject areas)							
1.1.	Position in THE ranking, overall	position	301-350	301-350	301-350	251-300	226-250	175
1.2.	Position in QS ranking, overall	position	551-600	440	390	310	180	99
1.3.	Position in QS ranking, by subject areas - Physics & Astronomy	position	-	151-200	151-200	101-150	101-150	51-100
1.4.	Position in QS ranking, by subject area - Chemistry	position	-	151-200	151-200	101-150	101-150	51-100
1.5.	Position in QS ranking, by subject area - Medicine	position	-	-	-	151-200	101-150	51-100
1.6.	Position in QS ranking, by subject area - Biological Science	position	-	-	-	151-200	101-150	51-100
1.7.	Position in QS ranking, by subject areas - Earth & Marine Sciences	position	-	-	-	-	151-200	101-150
1.8.	Position in QS ranking, by subject area - Mathematics	position	-	301-400	201-300	151-200	101-150	51-100
1.9.	Position in QS ranking, by subject areas - Computer Science & Information Systems	position	-	-	-	-	-	151-200
1.10.	Position in QS ranking, by subject area - Linguistics	position	-	151-200	151-200	101-150	101-150	51-100

1.11.	Position in QS ranking, by subject areas - Engineering-Mineral & Mining	position	-	-	-	-	-	51-100
1.12.	Position in QS ranking, by subject area - Education	position	-	-	-	201-300	151-200	101-150
1.13.	Position in ARWU ranking, overall	position	-	-	-	-	-	-
1.14.	Position in ARWU ranking, by subject areas	position	-	-	-	-	-	-
2.	Number of articles in Web of Science and Scopus databases per faculty without duplication							
2.1.	Number of publications in Web of Science per faculty member (within past 5 years)	number	1,18	1,53	1,98	2,56	3,32	4,30
2.2.	Number of publications in Scopus per faculty member (within past 5 years)	number	2,12	2,41	2,99	3,71	4,60	5,70
3.	Average citation indicator per faculty member calculated based on aggregate of articles indexed in Web of Science and Scopus databases, without duplication							
3.1.	Average citation indicator per faculty member calculated based on aggregate of articles indexed in Web of Science database (within past 5 years)	number	3,16	4,79	7,30	11,12	16,94	25,80
3.2.	Average citation indicator per faculty member calculated based on aggregate of articles indexed in Scopus database (within past 5 years)	number	4,09	5,61	8,55	13,02	19,84	30,21
4.	Percentage of international professors, faculty members and researchers in the number of teaching and research staff, including Russian citizens with PhD degree conferred by international universities	%	3,30	4,3	5,7	7,5	9,8	12,0
5.	Percentage of international students enrolled in major academic programs (including students from CIS countries)	%	8,20	8,4	9,0	9,8	12,0	15,0
6.	Average Unified State Examination (hereinafter - USE) scores of students admitted for full-time Bachelor's and Specialist degree programmes (funded by the Russian federal government)	point	76,40	76,4	76,4	76,6	76,8	77,0
7.	Revenues from non-budgetary sources, as percentage of total revenues	%	42,70	43,0	45,0	48,0	51,0	53,0
8.	Percentage of students enrolled in master's degree programs, postgraduate programs having bachelor's diploma, specialist's diploma or master's diploma	%	23,1	24,0	25,0	26,0	27,0	28,0

	from other organizations in the total number of students of master's degree and postgraduate programs							
9.	Scope of R&D work per one faculty member	tsd rubles	471,2	600	800	1 000	1 200	1 400
Additional performance indicators set by the University								
10.	Graduate and postgraduate and students of all study forms, as percentage of total student number	%	14,07	15,0	20,0	25,0	29,0	35,0
11.	Doctors of Sciences and PhD, as percentage of total academic staff	%	19,2	22,0	25,0	28,0	31,0	35,0
12.	Faculty members with work experience and long-term internships in world leading research and educational centres, as percentage of total academic staff	%	20,0	25,0	30,0	35,0	40,0	50,0
13.	Revenues from research work and R&D as percentage in total University revenues	%	18,0	18,2	18,4	18,6	18,8	19,0
14.	Position in Webometrics ranking	position	1 487	500	300	200	150	100
According to Individual University's Methodology								
1.	Position (accurate within 50) in the world's leading rankings (overall and by subject areas)							
1.1.	QS ranking, overall	position	551-600	440	390	310	180	99
1.2.	QS ranking, by subject areas - Mathematics	position	-	301-400	201-300	151-200	101-150	51-100
1.3.	QS ranking, by subject areas - Physics & Astronomy	position	-	151-200	151-200	101-150	101-150	51-100
1.4.	QS ranking, by subject areas - Chemistry	position	-	151-200	151-200	101-150	101-150	51-100
1.5.	QS ranking, by subject areas - Linguistics	position	-	151-200	151-200	101-150	101-150	51-100
1.6.	QS ranking, by subject areas - Earth & Marine Sciences	position	-	-	-	-	151-200	101-150

2.	Number of articles in Web of Science and Scopus databases, per faculty member without duplication	number	1,88	1,9	2,2	2,6	3,3	4,3
3.	Average citation index per faculty member, calculated based on aggregate of articles indexed in Web of Science and Scopus databases, without duplication	number	11,9	16,9	24,3	34,9	40,1	50
4.	International professors, teachers and researchers in total faculty, including Russian citizens with PhD of international university, as percentage of total academic staff	%	3,80	5,0	6,6	8,7	11,4	14,0
5.	International students taking basic educational programs in the university (including students from the CIS), as percentage of total student number	%	8,20	8,4	9,0	9,8	12,0	15,0
6.	Average Unified State Examination (hereinafter - USE) scores of students admitted for full-time Bachelor's and Specialist degree programmes (funded by the Russian federal government)	point	76,40	76,4	76,4	76,6	76,8	77,0
7.	Revenues from non-budgetary sources, as percentage of total revenues	%	42,70	43,0	45,0	48,0	51,0	53,0

**Form 2. Funding of the Activity plan on the implementation of the Program for Enhancing Competitive Ranking (“the Roadmap”) of Kazan Federal University for 2013-2020 (2<sup>nd</sup> stage 2015-2016) from subsidies allocated for the state support of leading universities of the Russian Federation and aimed at increasing their competitive ranking among world-class research and educational centers**

rub.

	2013 (real value)		2014 (real value)		2015 (real value)		2016 (planned value)			
							Total amount		Including 1 <sup>st</sup> semester	
	From subsidies	From extra-budgetary funds	From subsidies	From extra-budgetary funds	From subsidies	From extra-budgetary funds	From subsidies	From extra-budgetary funds	From subsidies	From extra-budgetary funds

1.	Costs from subsidies and extra-budgetary sources relating to the implementation of "the Roadmap" allocated for the activities under the Decree of the Government of the Russian Federation No 211 dated March 16, 2013 including	707 399,99	70 487 000,00	632 208 107,47	139 560 400,00	849 955 748,32	6 416 378,00	900 000 000,00	180 000 000,00	42 200 000,00	8 440 000,00
	a) implementation of measures on forming personnel pool with senior management of universities and recruitment of specialists with job experience in world and Russian leading universities and research organizations	249 513,85	290 000,00	1 074 733,92	77 000,00	14 223 800,00	0,00	20 088 000,00	4 017 600,00	0,00	0,00
	б) implementation of measures on recruitment of young research and teaching staff with job experience in R&D and education in leading foreign and Russian universities and research organizations	0,00	0,00	42 886 932,88	10 730 000,00	68 467 914,24	799 328,00	88 500 000,00	17 700 000,00	18 700 000,00	3 740 000,00
	в) implementation of international and Russian academic mobility programs in forms of internships, advanced training and professional retraining and other forms for research and teaching staff	364 897,23	1 975 000,00	39 791 121,32	3 933 000,00	45 907 593,50	1 253 478,00	86 000 000,00	17 200 000,00	5 000 000,00	1 000 000,00
	г) implementation of measures for upgrading postgraduate and doctoral programs	0,00	0,00	654 251,40	46 000,00	0,00	1 197 771,00	13 300 000,00	2 660 000,00	0,00	0,00
	д) implementation of measures on support of undergraduate and postgraduate students, as well as trainees and young research and teaching personnel	0,00	0,00	90 448 914,58	6 209 000,00	57 037 754,66	2 076 490,00	44 100 000,00	8 820 000,00	10 500 000,00	2 100 000,00

	e) introduction of new academic programs jointly with leading international and Russian universities and research organizations	0,00	360 000,00	12 685 580,99	11 236 000,00	27 672 930,19	0,00	29 520 000,00	5 904 000,00	0,00	0,00
	ж) implementation of recruitment measures aimed at students from world leading universities to study in the Russian universities achieved through partnership academic programs with international universities and associations of universities	73 014,92	0,00	6 593 099,96	1 539 000,00	4 425 400,04	351 417,00	78 471 800,00	15 694 360,00	0,00	0,00
	з) implementation in the framework of R&D plans in compliance with the program of long term fundamental research in the Russian Federation as well as international priority areas of fundamental and applied research:	19 973,99	67 862 000,00	438 073 472,42	105 790 400,00	632 220 355,69	737 894,00	540 020 200,00	108 004 040,00	8 000 000,00	1 600 000,00
	<i>1. Research projects involving world and Russian leading scientists for supervision and (or) with prospective research organization for possible collaboration including launch of university subdivisions</i>	19 973,99	67 862 000,00	438 073 472,42	105 790 400,00	632 220 355,69	737 894,00	519 520 200,00	103 904 040,00	8 000 000,00	1 600 000,00
	<i>2. R&amp;D projects jointly with Russian and international hi-tech organizations including possible launch of structural university subdivisions</i>	0,00	0,00	0,00	0,00	0,00	0,00	20 500 000,00	4 100 000,00	0,00	0,00
2.	Costs from extra-budgetary sources relating to the implementation of “the Roadmap” excluding the costs on the activities of the Decree of Government No 211 dated March 16, 2013	99 763,00					183 650 000,00				
3.	Costs from other sources relating to the implementation of “the Roadmap”						303 650 000,00				

	excluding costs from subsidies and extra-budgetary sources					
4.	Allocated amount of subsidies	592 400 000,00	600 000 000,00	378 000 000,00	900 000 000,00	
5.	Remaining balance of subsidies by the end of year	591 692 600,01	559 484 492,54	87 528 744,22	-	

Planned amount of subsidies for general system activities in 2016 is 150, 000, 000 roubles.

Form 3. Planned schedule for formation and development of KFU Strategic Academic Units (StrAU)

No	Name of activity	Implementation form (quarterly)						Results	Responsible authorities	«Road map» activities
		April – September 2016	October – December 2016	2017	2018	2019	2020			
	<b>1. University-wide events for formation and development of StrAU</b>									
1.1.	Appointment of a person (curator) from the top managers of the educational institution, responsible for development of StrAUs and implementation of activities of StrAUs calendar plan	II qtr.						Orders	Director of the Center for Prospective Development, I. Kuzmishin	5.1.2
1.2.	Determination and formation of university structural divisions, forming each particular university StrAU, determination of internal structure of each university StrAU (allocation and formation, if necessary, of laboratories and structural divisions of StrAU)	II–III qtr.						Orders, instructions	Heads of StrAUs , Director of the Center for Prospective Development, I. Kuzmishin	5.2.1 4.2.2 5.3.4
1.3.	Appointment of research head and executive head of StrAU out of number of candidates, recommended by Supervisory and Academic Boards of the university	II qtr.						Orders, minutes of meetings of Supervisory and Academic Boards	Heads of StrAUs , Director of the Center for Prospective Development, I. Kuzmishin	5.1.2

1.4.	Development and approval of a management system of StrAU system of university	II–III qtr.	IV qtr.					Orders, instructions	Heads of StrAUs	5.2.1 5.3.4
1.5.	Determination and approval of major functions of StrAU system of university and each particular StrAU, of rules and regulations governing the cooperation between StrAU system of university , each particular StrAU and other structural divisions of university	II–III qtr.	IV qtr.					Orders, instructions, regulations, provisions	Heads of StrAUs , Director of the Center for Prospective Development, I. Kuzmishin	5.2.1
1.6.	Consideration by Supervisory Board, International Advisory Board and Scientific Council of the University (subject to approval) prepared by university 3-year development plans of educational activities and research activities of each StrAU, including, information on the development and implementation of new academic programs (including cooperation with leading Russian and international R&D centers and other partners), trends and research projects designed to obtain unique results within the framework of solving global challenges of research and technological development and long-term scientific and technological challenges, including the needs of the		IV qtr.	IV qtr.	IV qtr.	IV qtr.	IV qtr.	R&D reports on STRAU for the reported period, activities plan and budget for the planned period, minutes of meetings of Supervisory, Academic and International Boards	Vice-Rector for Research D. Nurgaliev, Heads of StrAUs, Director of the Center for Prospective Development, I. Kuzmishin	5.2.1 5.3.1

	Russian Economics (in cooperation with leading Russian and international scientific and educational centers and other partners)									
1.7.	Determination of principles of staff formation of each particular StrAU to implement functions assigned to them and the planned performance indicators of planned values, the formation of staffing of each specific university StrAU	II qtr.		I qtr.	I qtr.	I qtr.	I qtr.	Orders, staffing register, job instructions, efficient contracts	Heads of StrAUs	5.1.2 5.1.3 5.3.2
1.8.	Identification of main sources of financing and formation of planned revenue targets of every StrAU , to ensure its development, taking into account formed plans for educational and research activities, definition of financial models and parameters of financial support of StrAU university system and of separate StrAU	II qtr.		I qtr.	I qtr.	I qtr.	I qtr.	Approved plan of financial and economic activities, calendar plan	Heads of StrAUs, Project office, Vice-Rector for Finance Mullakaeva R.R.	5.2.1 5.5.1
1.9.	Determination of main indicators of StrAU effectiveness and planned values for the purposes of internal control by institution of its development and performance and management decisions, including terms of resource support for its activities	II qtr.		I qtr.	I qtr.	I qtr.	I qtr.	StrAU approved performance indicators	Heads of StrAUs	5.2.1 5.3.2

1.10.	Conclusion of agreements on cooperation between university and its major international and Russian partners for the implementation of the relevant sub-schedule and ensure the effective development of each particular university StrAU	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Agreements, cooperation agreements, memorandums, etc	Heads of StrAUs, Vice-Rector for International Affairs, Latypov L.N.	1.1.1 1.1.8 2.2.3 4.1.3 4.2.3
1.11.	Implementation of subsections measures on the development of educational activities and sub-sections for research work sections schedule for each specific StrAU university as a part of approved three-year plans for the development of educational activities and research and development activities (development of educational programs, organization of conferences, consultations etc.)	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Reports on academic and R&D according to StrAU planned schedule	Heads of StrAUs	SI1 – SI4 activities
1.12.	Operation of each particular university StrAU for allocation of necessary resources and work organization	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Maintenance and coordination of StrAU projects	Heads of StrAUs, Project office	5.2.1 5.5.1
1.13.	Conducting information activities of StrAU system of university and of each specific StrAU	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Information support for StrAU project implementation	Heads of StrAUs, Director of Media Relations Department, Mukhtarova L.M., Director of UNIVER Media Center, Karimov	5.2.4 9.3.1 9.3.3 8.3.1

									I.A.	
1.14.	Consideration of StrAU calendar plan results at the end of the year at the meeting of supervisory board of university within the framework of general report on “road map” implementation results		IV qtr.	IV qtr.	IV qtr.	IV qtr.	IV qtr.	Supervisory Board protocols of meetings	Heads of StrAUs, Director of the Center for Prospective Development, Kuzmishin I.A.	5.2.1 5.3.1
	<b>2. Formation and development of StrAU «Translational 7P medicine»</b>	<p><i>StrAU Mission :</i> New solutions in the area of human health by developing personal translational medicine on the basis of innovative model of transdisciplinary medical education and interdisciplinary scientific solutions. In the basis of StrAU is lied the concept of the medicine of future in which the principle of 4 “P” (Personalized; Predictive; Preventive; Participative) is extended by an additional three “P” (Providing; Preemptive; Point of care).</p> <p><i>StrAU goals:</i></p> <ul style="list-style-type: none"> <li>– construction of infrastructure and implementation of scientific and educational programs transfer and application of innovative developments in the area of translational 7P medicine;</li> <li>– transdisciplinary transformations of academic programs at all levels in biology, physics, chemistry and medicine and creation of common scientific and educational space for the industry training, "Health", the development of translational medicine, internationalization of education and improving competitiveness of the university;</li> <li>– conducting breakthrough research in the area of translational 7P medicine in close cooperation with the world's leading research centers and universities and creation of co-financed R &amp; D units (KFU-RIKEN "Functional genomics", Center for Translational Medicine KFU-RASA Center "Cochrane-Russia").</li> </ul> <p><i>Positions in the subject ratings on the basis of formation and development STRAU:</i> Position in QS ranking, by subject area - Medicine – 151–200 to 2020</p>								
2.1.	Organizational-economic and regulatory support	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Normative documentation elaborating	Head of the priority area “Biomedicine and Pharmaceutics” Kiyasov A.P.,	5.2.1

									Vice-Rector for Economic and Strategic Development Safiullin M.R.	
2.1.1	Appointment of Research head and Executive head of StrAU out of candidates, recommended by Supervisory and Academic Boards of university (subject to approval).	II qtr.						Appointed Research head and Executive head	Head of the priority area “Biomedicine and Pharmaceutics” Kiyasov A.P., Vice-Rector for Economic and Strategic Development Safiullin M.R.	5.1.2 5.2.1
2.1.2	Determination of StrAU internal structure	II qtr.						Determined internal structure of StrAU	Head of the priority area “Biomedicine and Pharmaceutics” Kiyasov A.P.	4.2.2 5.2.1 5.3.4
2.1.3	Formation of StrAU staffing register	II qtr.						Formed StrAU staffing register	Head of the priority area “Biomedicine and Pharmaceutics” Kiyasov A.P.	5.2.1 5.3.4
2.1.4	Defining parameters of financial model and financial support of StrAU	II qtr.						Formed financial model	Head of the priority area “Biomedicine and Pharmaceutics” Kiyasov A.P., Vice-Rector for Economic and	5.2.1 5.5.1

									Strategic Development Safiullin M.R.	
2.1.5	Conclusion of agreements of cooperation between university and its leading international and Russian partners for implementation of relevant sub-schedules and ensure effective development of StrAU	I–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Signing of agreement with minimum 26 universities and 12 companies	Head of the priority area “Biomedicine and Pharmaceutics” Kiyasov A.P.	1.1.1 1.1.8 2.2.3 4.1.3 4.2.3
2.1.6	Formation of quality management system, assessment and monitoring of key performance indicators of StrAU	III qtr.						Formed quality management system	Head of the priority area “Biomedicine and Pharmaceutics” Kiyasov A.P., Deputy Director of the Institute of Fundamental Medicine and Biology for Research Fajzullin R.I.	5.2.1 5.3.2
2.2.	<b>Development of educational activities</b>								Deputy Director of the Institute of Fundamental Medicine and Biology for Medical Education Gumerova A.A., Deputy Director of the Institute of	

									Fundamental Medicine and Biology for Biological Education Sabirov R.M.	
2.2.1	Admission plan on the 1st year of education  (number of people): – bachelor programs – specialist programs – master programs	III qtr.  145 260 73		III qtr.  140 260 80	III qtr.  130 260 90	III qtr.  120 260 100	III qtr.  110 260 110	1-year students enrolment	Deputy Director of the Institute of Fundamental Medicine and Biology for Medical Education Gumerova A.A., Deputy Director of the Institute of Fundamental Medicine and Biology for Biological Education Sabirov R.M., Head of the Department of Botany and Plant Physiology Timofeeva O.A., Associate Professor Baltina T.V.	3.1.1 3.2.2

2.2.2	Development of master networking programs (number of programs)	III qtr. 1		III qtr. 1	III qtr. 2	III qtr. 2	III qtr. 3	minimum 9	Deputy Director of the Institute of Fundamental Medicine and Biology for Medical Education Gumerova A.A., Deputy Director of the Institute of Fundamental Medicine and Biology for Biological Education Sabirov R.M., Head of the Department of Botany and Plant Physiology Timofeeva O.A., Associate Professor Baltina T.V.	1.1.1 1.1.5 1.2.4
2.2.3	Increasing amount of academic programs taught in English language, the amount of international students, the amount of PhD double degree programs with partner universities and amount of basic academic programs having international professional and social accreditation:  – basic education program in English		IV qtr.	IV qtr.	IV qtr.	IV qtr.	IV qtr.	Minimum number of general academic programs in English is 41, Minimum number of PhD double degree programs is 12, Minimum number	Deputy Director of the Institute of Fundamental Medicine and Biology for Medical Education Gumerova A.A., Deputy Director of the Institute of	1.1.1 1.1.2 1.1.3 1.1.5 1.2.3 1.2.4

	<ul style="list-style-type: none"> <li>– amount of international students</li> <li>– double-degree doctoral programs</li> <li>- programs with international accreditation</li> </ul>		<p style="text-align: center;">5 11,5 % 1 1</p>	<p style="text-align: center;">6 12 % 2 2</p>	<p style="text-align: center;">8 14 % 2 2</p>	<p style="text-align: center;">10 15 % 3 3</p>	<p style="text-align: center;">12 16 % 4 4</p>	<p>of general academic programs with international accreditation is 12</p>	<p>Fundamental Medicine and Biology for Biological Education  Sabirov R.M., Deputy Director of the Institute of Fundamental Medicine and Biology for Research  Fajzullin R.I. , Head of the Department of Human and Animal Physiology  Sitdikova G.F. Head of the Department of Microbiology  Ilinskaya O.N., Head of the Department of Genetics  Chernov V.M., Head of the Department of</p>	
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									Biochemistry and Biotechnology Kiyamova R.G.	
2.2.4	Training of highly qualified personnel in the internship, graduate school (the number of new programs)			III qtr. 16	III qtr. 4	III qtr. 6	III qtr. 10	Minimum number of new programs is 36	Deputy Director of the Institute of Fundamental Medicine and Biology for Medical Education Gumerova A.A., Deputy Director of the Institute of Fundamental Medicine and Biology for Research R. Faizullin.	1.2.2 1.2.3 1.2.4
2.2.5	Advanced training /internships and programs of academic mobility for StrAU R&D employees in the area of organization and teaching methods of medical-biological, chemical, physical and humanity subjects in leading international partner university (the amount of employees completed training programs/internships and academic mobility programs)	III qtr. 6		III qtr. 6	III qtr. 10	III qtr. 10	III qtr. 10	Minimum 42 employees having taken advanced training programs/ internships and academic mobility programs	Deputy Director of the Institute of Fundamental Medicine and Biology for Medical Education Gumerova A.A., Director of Alexander Butlerov Institute of Chemistry Galkin V.I., Director of the Institute of Physics Nikitin	2.2.1 2.2.2 5.1.1 5.2.2

									S.I., Director of the Institute of Social Sciences, Philosophy and Mass Communications, Shchelkunov M.D., Director of the Institute of International Relations, History and Oriental Studies Khairutdinov R.R.	
<b>2.3.</b>	<b>R&amp;D for the ensuing year and planned period</b>	I-III qtr.	IV qtr.	I-IV qtr.	I-IV qtr.	I-IV qtr.	I-IV qtr.		Chief researcher of the Institute of Fundamental Medicine and Biology Rizvanov A.A.	
2.3.1	Research and development in the areas: (1) Neurotechnologies, (2) Personalized medicine, (3) Regenerative medicine, (4) Chemistry of living systems, (5) Biomedical physics	I-III qtr.	IV qtr.	I-IV qtr.	I-IV qtr.	I-IV qtr.	I-IV qtr.	Increased total number of publications and citation index per one faculty member per year	Chief researcher of the Institute of Fundamental Medicine and Biology Rizvanov A.A. ,  Vice-Rector for Education Tayurskiy D.A.,	4.2.1 4.2.2 4.2.3

									Director of Alexander Butlerov Institute of Chemistry Galkin V.I., Chief researcher Khazipov R.N., leading researcher Gusev O.A.	
2.3.2	Establishing of Centers of Excellence (amount of centers)	II qtr. 5		II qtr. 1	II qtr. 1	II qtr. 2	II qtr. 2	minimum 11 centers	Chief Researcher of the Institute of Fundamental Medicine and Biology Rizvanov A.A. , Vice-Rector for Education Tayurskyi D.A., Director of Alexander Butlerov Institute of Chemistry Galkin V.I., Chief researcher Khazipov R.N., leading researcher Gusev O.A.	4.1.5 4.2.1 4.2.2 4.2.3
2.3.3	Establishing of Center “Cochrane Russia”	II qtr.						Establishing of the Center	Head of the Department of Fundamental and	4.1.5 4.2.1 4.2.3

									Clinical pharmacology Ziganshina L.E.	
2.3.4	Establishing of Center for Translational Medicine KFU RASA	II qtr.						Establishing of the Center	Chief researcher Litvinov R.I., Head of the Department of Biochemistry and Biotechnology Kiyamova R.G.	4.1.5 4.2.1 4.2.3
2.3.5	Establishing of Center “KFU-RIKEN functional and applied genomics”	II qtr.						Establishing of the Center	Leading researcher Gusev O.A..	4.1.5 4.2.1 4.2.3
2.3.6	Clinical studies of new methods of diagnostics, prevention, rehabilitation and disease treatment (amount of studies)	III qtr. 10		III qtr. 20	III qtr. 40	III qtr. 50	III qtr. 60	minimum 180	Senior researcher Abdulkhakov S.R.	4.2.2 4.2.3
<b>2.4.</b>	<b>Miscellaneous</b>									
2.4.1	Diversification of the University's revenue model, increase of non-budget financing from StrAU education, research and clinical activities (% in relation to 2015)	I–III qtr.	IV qtr. 136 %	I–IV qtr. 168 %	I–IV qtr. 194 %	I–IV qtr. 262,5%	I–IV qtr. 411 %	Increase of non-budget financing from StrAU education, research and clinical activities	Head of the priority area “Biomedicine and Pharmaceutics” Kiyasov A.P	5.5.1
	<b>3. Formation and development of StrAU “Ecooil – global energy and</b>	<i>Mission of StrAU :</i> Leadership in generation, concentration and global expansion of knowledge and technology in the area of energy								

	<b>resource for materials of the future”</b>	<p>saving, environmentally friendly and efficient fuel technologies (EEE-technologies) of exploration, production, refining, oil and gas chemistry of unconventional hydrocarbon reserves in response to the challenges of global energy security and resourcing in terms of climate change and environmental problems on the planet.</p> <p><i>StrAU goals:</i></p> <ul style="list-style-type: none"> <li>– creation of process-oriented management system and organizational structure of StrAU;</li> <li>– creation of global network educational system in the “Ecooil” area (information and competence “at first hand” – from laboratories and test-industries);</li> <li>– formation of new generations of professionals, researchers and engineers, who work in oil and gas industry and related areas and who are willing to continuously develop skills and creative thinking within the concept of lifelong learning;</li> <li>– creation of experimental and technological basis in the area of exploration competencies, production and deep processing of hydrocarbons;</li> <li>– development of transfer technologies in oil and gas industry by creating new services and start-ups, high-tech jobs for university graduates (motivation of talents, innovations);</li> <li>– StrAU budget diversification by attracting additional extra-budgetary funding from oil and oil service companies.</li> </ul> <p><i>Positions in the subject ratings on the basis of formation and development of StrAU:</i></p> <p>Position in QS ranking, by subject area - Chemistry – 51–100 by 2020;</p> <p>Position in QS ranking, by subject areas - Earth &amp; Marine Sciences – 101–150 by 2020;</p> <p>Position in QS ranking, by subject areas - Engineering-Mineral &amp; Mining – 51–100 by 2020</p> <p>Position in QS ranking, by subject areas - Mathematics – 51–100 by 2020</p>							
3.1.	Organizational, economic and regulatory support							Vice-Rector for Research Nurgaliev D.K., Vice-Rector for Economic and Strategic Development	

									Safiullin M.R.	
3.1.1	Appointment of Research head and Executive head of StrAU out of candidates, recommended by Supervisory and Academic Boards of university (subject to approval).	II qtr.						Appointed Research head and Executive head	Vice-Rector for Research Nurgaliev D.K., Vice-Rector for Economic and Strategic Development Safiullin M.R.	5.1.2 5.2.1
3.1.2	Determination of internal structure of StrAU	II qtr.						Determined internal structure of StrAU	Vice-Rector for Research Nurgaliev D.K.	4.2.1 4.2.2 4.2.3 5.2.1 5.3.4
3.1.3	Formation of StrAU staffing register	II qtr.						Formed staffing register	Vice-Rector for Research Nurgaliev D.K.	1.1.6 2.1.1 2.1.2 2.1.4 5.2.1 5.3.4
3.1.4	Defining parameters of financial model and financial support of StrAU	II qtr.						Determined financial model	Vice-Rector for Research Nurgaliev D.K., Vice-Rector for Economic and Strategic Development	5.2.1 5.5.1

									Safiullin M.R.	
3.1.5	Conclusion of agreements of cooperation between university and its leading international and Russian partners for implementation of relevant sub-schedules and ensure effective development of StrAU	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Signing agreements with minimum 26 universities and 12 companies	Vice-Rector for Research Nurgaliev D.K.	1.1.1 1.1.8 2.2.3 4.1.3 4.2.3
3.1.6	Formation of quality management system, assessment and monitoring of key performance indicators of StrAU		IV qtr.					Formed quality management system (certification)	Vice-Rector for Research Nurgaliev D.K., Director of the Center of Advanced Training, Quality Management and Marketing of the Institute of Geology and Petroleum Technologies Chukmarov I.A.	5.2.1 5.3.2
3.2.	<b>Development of education activities</b>								Director of the Center of Advanced Training, Quality Management and Marketing of the	

									<p>Institute of Geology and Petroleum Technologies  Chukmarov I.A. , Deputy Director for Education of the Institute of Geology and Petroleum Technologies  Fazlyeva F.A. Director of Alexander Butlerov Institute of Chemistry Galkin V.I., Director of the N.I. Lobachevsky Institute of Mathematics and Mechanicso  Khranchenkov M.G., Director of the Institute of Computing Mathematics and Information Technologies</p>	
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									Mosin S.G., Director of the Institute of Environmental Sciences Selivanovskaya S.Yu.	
3.2.1	Establishment of StrAU Center of academic programs	II qtr.						18 new unique academic programs	Deputy Director for Education of the Institute of Geology and Petroleum Technologies Fazlyeva F. A.	1.1.1 1.1.2 1.1.5
3.2.2	Development of academic programs in English (number of programs)	I–III qtr.	IV qtr. 1	I–IV qtr.	I–IV qtr. 1	I–IV qtr. 6	I–IV qtr. 4	12 new academic programs	Deputy Director for Education of the Institute of Geology and Petroleum Technologies Fazlyeva F. A., Deputy Director of the Center for Advanced Training, Quality Management and Marketing of the Institute of Geology and Petroleum	1.1.1 1.1.5 1.2.3

									Technologies Platov B. V.	
3.2.3	Development of double-degree academic programs with world-class research centers and universities (number of programs)	I–III qtr.	IV qtr. 1	I–IV qtr.	I–IV qtr. 1	I–IV qtr. 1	I–IV qtr. 3	6 new academic programs	Deputy Director for Education of the Institute of Geology and Petroleum Technologies Fazlyeva F. A.	1.1.5
3.2.4	International accreditation of academic programs (number of programs)	III qtr. 1				III qtr. 1	II–IV qtr. 3	5 new academic programs	Deputy Director for Education of the Institute of Geology and Petroleum Technologies Fazlyeva F. A.	1.1.3
3.2.5	Development of unique online MOOC courses (number of courses)	I–III qtr.	IV qtr.	I–IV qtr. 2	I–IV qtr. 1			3 new MOOCs courses	Director of the Center of Advanced Training, Quality Management and Marketing of the Institute of Geology and Petroleum Technologies Chukmarov I.A.	1.1.7

3.2.6	Development of unique training professional programs (number of programs)	I–III qtr.	IV qtr. 3	I–IV qtr. 3	I–IV qtr. 1	I–IV qtr. 1	I–IV qtr.. 1	9 new training professional programs	Director of the Center of Advanced Training, Quality Management and Marketing of the Institute of Geology and Petroleum Technologies Chukmarov I.A.	1.1.8
3.2.7	Development of the system of annual summer schools (number of schools)	II–III qtr. 1		II–III qtr. 3	II–III qtr. 2	II–III qtr. 4	II–III qtr. 2	12 new summer schools	Head of the Department of Paleontology and Stratigraphy of the Institute of Geology and Petroleum Technologies Silantiev V.V., Deputy Director for Innovation of the Institute of Geology and Petroleum Technologies Sudakov V.A.  Deputy Director for	2.1.3

									Research of the Institute of Geology and Petroleum Technologies Kolchugin A.N., Associate professor of Alexander Butlerov Institute of Chemistry Vafolomeev M.A.	
3.2.8	Development of the system of grant support for attracting talented students to the master's and doctoral programs	II qtr.		II qtr.	II qtr.	II qtr.	II qtr.	Enrolment of up to 60 students per year	Deputy Director for Education of the Institute of Geology and Petroleum Technologies Fazlyeva F. A.	3.1.1 3.1.4
3.2.9	Development of the system of grant support for short-term internships of talented students in the world-class research centers and universities	III qtr.		II qtr.	II qtr.	II qtr.	II qtr.	Internships of up to 80 undergraduate and postgraduate students	Deputy Director for Education of the Institute of Geology and Petroleum Technologies Fazlyeva F. A.	3.1.3 3.1.4
3.2.10	Creation of the international network university of additional education in the area of global energy and materials					III qtr.		Recruitment of min 500 international	Director of the Center of Advanced Training,	1.1.8

								students and course participants by 2020	Quality Management and Marketing of the Institute of Geology and Petroleum Technologies Chukmarov I.A.	
3.2.11	Organization of regional, national and international competitions for students and pupils	II–III qtr.		II–III qtr.	II–III qtr.	II–III qtr.	II–III qtr.	Participation of over 600 pupils and students in Olympiads by 2020, increase in the average USE score of university applicants up to 77,5	Deputy Director for internships and interaction with employers of the Institute of Geology and Petroleum Technologies Trekhin A.A	3.3.2
3.2.12	Establishment of dissertation councils for awarding PhD degrees in the area of oil production, oil refining and petrochemistry			III qtr.	III qtr.	III qtr.	III qtr.	Increase in the percentage of international doctoral students by min 50 %	Vice-Rector for Research Nurgaliev D. K.	1.2.1
3.2.13	Organization of educational and industrial training programs abroad	III qtr.	III qtr.	III qtr.	III qtr.	III qtr.	III qtr.	Increase in the number of gifted students, increase in the average USE score of university applicants to 77,5	Deputy Director for internships and interaction with employers of the Institute of Geology and	3.1.3 3.1.4

									Petroleum Studies Terekhin A.A., Director of the Center for Advanced Training, Quality Management and Marketing of the Institute of Geology and Petroleum Technologies Chukmarov I. A.	
3.3.	<b>R&amp;D for the ensuing year and planned period</b>	I-III qtr.	IV qtr.	I-IV qtr.	I-IV qtr.	I-IV qtr.	I-IV qtr.		Deputy Director for Research of the Institute of Geology and Petroleum Technologies Kolchugin A.N.,, Associate professor of Alexander Butlerov Institute of Chemistry Vafolomeev M.A., Director of Alexander Butlerov Institute of	

									Chemistry Galkin V.I., Director of Nikolai Lobachevsky Institute of Mathematics and Mechanics Khranchenkov M.G., Director of the Institute of Computing Mathematics and Information Technologies Mosin S.G., Director of the Institute of Environmental Sciences Selivanovskaya S.Yu.	
3.3.1	Conducting R&D	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Increase in the total number of publications to 870 articles per year and citation	Deputy Director for Innovation of the Institute of Geology and Petroleum Technologies	4.2.1 4.2.2 4.2.3

								index to 32,1 per one faculty member per year	<p>Sudakov V.A., Deputy Director for Research of the Institute of Geology and Petroleum Technologies</p> <p>Kolchugin A.N., Associate professor of Alexander Butlerov Institute of Chemistry</p> <p>Vafolomeev M.A., Chief engineering officer of the department of Innovative and Educational Technologies</p> <p>Vakhin A.V., Director of the Institute of Environmental Sciences</p> <p>Selivanovskaya S.Yu., associate professor of the Institute of Environmental Sciences</p> <p>Galitskaya</p>
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									P.Yu., Deputy Director for Industry Relations and Commercialization of Alexander Butlrov Institute of Chmistry Lamberov A.A.	
3.3.2	Organization of regional, national and international conferences, symposia and seminars on StrAU priority research areas	II–III qtr.	IV qtr.	II–IV qtr.	II–IV qtr.	II–IV qtr.	II–IV qtr.	Number of conferences/ participants	Deputy Director for Research of the Institute of Geology and Petroleum Technologies Kolchugin A.N.  Associate professor of Alexander Butlerov Institute of Chemistry Vafolomeev M.A.	7.2.1
3.3.3	Establishment of international consortiums in StrAU priority research areas			II qtr.	II–III qtr.			Number of consortiums	Deputy Director for Innovation of the Institute of Geology and Petroleum Technologies	4.1.2 4.2.2

									Sudakov V.A. Associate professor of Alexander Butlerov Institute of Chemistry Vafolomeev M.A.	
3.3.4	Implementation of grant support to attract young research and academic staff with experience in scientific research and educational areas in the leading Russian and international universities and research centers	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Increase in the percentage of staff with work experience in the leading Russian and international universities and companies to 42 % in 2020	Deputy Director for Education of the Institute of Geology and Petroleum Technologies Fazlyeva F. A.,  Associate professor of Alexander Butlerov Institute of Chemistry Vafolomeev M.A.,  Deputy Director for Research of the Institute of Geology and Petroleum Technologies Kolchugin A.N.	2.1.1 2.1.2
3.3.5	Implementation of the programs of international and domestic academic mobility of research and teaching staff	II–III qtr .	IV qtr .	I–IV qtr .	I–IV qtr .	I–IV qtr .	I–IV qtr.	Number of research and teaching staff	Director of the Center for Advanced Training,	2.2.1 2.2.2 5.1.1

	in the form of internships, advanced training and retraining							members participating in internship, advanced training and professional retraining programs	Quality Management and Marketing of the Institute of Geology and Petroleum Technologies Chukmarov I. A.,  Deputy Director for Research of the Institute of Geology and Petroleum Technologies Kolchugin A.N.	
3.3.6	Implementation of travel-grant program for participation in top international conferences on StrAU priority research areas	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Number of travel grants	Deputy Director for Research of the Institute of Geology and Petroleum Technologies Kolchugin A.N. Associate professor of Alexander Butlerov Institute of Chemistry Vafolomeev M.A.,	2.2.1 3.1.4
<b>3.4.</b>	<b>Miscellaneous</b>									

3.4.1	Issue of peer-reviewed international scientific journal						III qtr.	Increase in the total number of publications to 870 articles per year and citation index to 32,1 per one faculty member per year	Director of the Institute of Environmental Sciences Selivanovskaya S.Yu., Head of the Department of Paleontology and Stratigraphy of the Institute of Geology and Petroleum Technologies Silantiev V.V., Vice-Rector for Research Nurgaliev D. K.	7.1.1
3.4.2	Establishment of small innovative enterprises and scaling centers for developed technologies (number of SIE and centers)	I-III qtr. 1	IV qtr.	I-IV qtr. 1	I-IV qtr. 1	I-IV qtr. 3	I-IV qtr. 4	number of established SIE and centers	Deputy Director for Innovation of the Institute of Geology and Petroleum Technologies Sudakov V.A., Deputy Director for Industry Relations and	4.1.5 4.2.3

									Commercialization of Alexander Butlerov Institute of Chemistry Lamberov A.A., Chief engineering officer of the department of Innovative and Educational Technologies Vakhin A.V., Associate professor of Alexander Butlerov Institute of Chemistry Vafolomeev M.A..	
3.4.3	Establishment of Consulting center in the area of oil and gas technologies	III qtr.						Established Consulting center	Deputy Director for Innovation of the Institute of Geology and Petroleum Technologies Sudakov V.A., Head of the department of Innovative and Educational	4.1.5 4.2.2 4.2.3

									Technologies Khusnullin R.I.	
	<b>4. Formation and development of the StrAU “Quadrature of transformation of teacher education – 4T»</b>	<p><i>Mission of the StrAU:</i> To improve the quality of both pedagogical education in KFU and educational process in KFU as a whole. To form KFU as an educational center for training highly qualified teaching staff ("Teachers of the Future"), global pedagogical studies and educational solution center, as well as a global multicultural and multilingual education center.</p> <p><i>StrAU goals:</i> – develop a professional pedagogical standard permitting KFU to become a unique classical university offering professional retraining to teachers. The respective educational programs will be launched with the view to educate teachers of the future, including foresights of competences and disciplines of the future and forming of flexibility to transformation in teachers; – conduct research and implement educational programs in modern physical, mathematical and engineering education within the newly created OpenLabs for engineering education, centers of excellence in mathematical and physical education, as well as in multicultural and bilingual education, with the purpose of educating bilingual teachers able to work in multicultural environment; – conduct research and development work in the areas of gamification of educational process, tracking individual educational trajectories, Big Data analysis of educational results; to improve the quality of educational process in KFU.</p> <p><i>Positions in the subject ratings on the basis of formation and development StrAU:</i> Position in QS ranking, by subject area - Education – 101 – 150 by 2020</p>								
4.1.	<b>Organizational, economic and regulatory support</b>									
4.1.1	Appointment of research head and executive head of the StrAU from among candidatures offered by the supervisory board and academic council of the University (subject to approval)	II qtr.						Appointed research head and executive head	Head of the StrAU, Vice-Rector for Education Tayurskii D.A.	5.1.2 5.2.1
4.1.2	Consideration of the planned schedule item for educational activity	II qtr.						Approved item of the planned	Head of the StrAU, Vice-Rector for	5.2.1 5.3.1

	development in the StrAU by the supervisory board and academic council of the University. This item shall include, among others, development of educational cooperation between the University and the leading international and Russian partners							schedule for educational activity development	Education Tayurskii D.A.	
4.1.3	Consideration of the StrAU's planned schedule item for research during the ensuing year and planned period (3 years) by the supervisory board, international advisory board and academic council of the University, as well as its presentation to the founder. The item shall include, among others, development of scientific cooperation with the leading international and Russian partners	II qtr.						Approved item of the planned schedule for research activity development	Head of the StrAU, Vice-Rector for Education Tayurskii D.A.	5.2.1 5.3.1
4.1.4	Determination of the StrAU's internal structure	II qtr.						Newly organised structure	Head of the StrAU, Vice-Rector for Education Tayurskii D.A., Director of the Institute of Psychology and Education Kalimullin A. M., Director of the	4.2.1 4.2.2 4.2.3 5.2.1 5.3.4

									educational program of the Higher School of Information Technologies and Information Systems Abramskiy M. M.	
<b>4.2.</b>	<b>Development of educational activities</b>									
4.2.1	Development of educational standard on teachers training in a federal university including development and substantiation of varying trajectories for pedagogical education and implementation of a model of unique reflexive and research-oriented pedagogical education		IV qtr.					1 new standard, variative educational trajectories	Head of the Department of pedagogy and preschool education methods Gabdulkhakov V. F., Director of the Institute of Psychology and Education Kalimullin A. M.	1.1.1 1.1.2 1.2.4
4.2.2	Development and implementation of cross-university academic programs: Bachelor's programs for all school education disciplines	II–III qtr.	IV qtr.	I–IV qtr.				23 new academic programs	Head of the Department of pedagogy and preschool education methods Gabdulkhakov V. F., Director of the	1.1.1 1.1.5 1.2.4 3.4.1

									Institute of Psychology and Education Kalimullin A. M.	
4.2.3	Implementation of academic programs for additional education (advanced training) “Psycho-pedagogical support to children of Muslim migrants” and “Teaching the Russian language to children with different background. Migration processes in the system of education” with orientation towards international market (number of programs)			III–IV qtr. 1	I–II qtr. 2			3 new academic programs	Head of the Department of Preschool and Elementary Education Zakirova V.G., Associate Professor of the Institute of Psychology and Education Chirkina S. E., Associate Professor of the Institute of Psychology and Education Khusainova R. M.	1.1.8
4.2.4	Performance of works on implementation of individual educational trajectories in KFU institutes, as well as design and experimental works for individual educational trajectory support	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.			Introduced trajectory mechanism, developed support system	Head of the StrAU, Vice-Rector for Education Tayurskii D.A., Director of the Higher School of Information	1.1.1 3.4.3

									Technologies and Information Systems Khasianov A.F., Director of the educational program of the Higher School of Information Technologies and Information Systems Abramskiy M. M.	
<b>4.3</b>	<b>R&amp;D for the ensuing year and planned period</b>									
4.3.1	Setup of research groups supervised by leading international scientists (number of groups)	II–III qtr.	IV qtr. 1	I–IV qtr. 1	I–IV qtr. 2			4 research groups	Head of the Department of pedagogy and preschool education methods Gabdulkhakov V. F., Director of the Institute of Psychology and Education Kalimullin A. M.	4.2.1 4.2.2
4.3.2	Research in the field of multicultural teacher training. Conducting R&D on	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Improved quality of educational process	Head of the Department of	4.2.1 4.2.2

	gamification of the educational process. Research in Engineering, Mathematical and Physical Education							at KFU, increased publication activity of KFU in Education,  joining Top-100 QS Education in 2020	Preschool and Elementary Education Zakirova V.G., Director of the Higher School of Information Technologies and Information Systems Khasianov A.F., Head of the StrAU, Vice-Rector for Education Tayurskii D.A., Director of N. I. Lobachevsky Institute of Mathematics and Mechanics Khranchenkov M.G., Director of the educational program of the Higher School of Information Technologies and Information Systems Abramskiy M. M.	4.2.3
4.3.3	Advanced training/ internships and	II–III qtr.	IV qtr.	I–IV	I–IV	I–IV	I–IV	Advanced training	Deputy Director of	2.2.1

<p>academic mobility programs for managers and research and teaching staff of the StrAU in organization and methodology of teaching humanities, medico-biological, chemical and physical disciplines in the leading international partner universities (number of internships)</p>		6	qtr. 6	qtr. 10	qtr. 10	qtr. 10	of key personnel, 42 internships	<p>the Institute of Fundamental Medicine and Biology for Education in Medicine Gumerova A.A., Director of Alexander Butlerov Institute of Chemistry Galkin V.I., Director of the Institute of Physics Nikitin S.I., Director of the Institute of Social Sciences, Philosophy and Mass Communications, Schelkunov M.D., Director of the Institute of International Relations, History and Oriental Studies Khairutdinov R.R., Director of the Institute of Psychology and</p>	<p>2.2.2 5.1.1 5.2.2</p>
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									Education Kalimullin A. M.	
4.3.4	Publication of results of research activities in highly ranked journals included in Web of Science and Scopus data bases	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Increased publication activity of KFU in Education, joining Top-100 QS Education in 2020, percentage of articles per StrAU member: 3,2 (WoS), 7,0 (Scopus)	Head of the StrAU, Vice-Rector for Education Tayurskii D.A., Director of the Institute of Psychology and Education Kalimullin A. M.	7.1.2
<b>4.4.</b>	<b>Miscellaneous</b>									
4.4.1.	Setup of Centers of Excellence		IV qtr.					2 Centers of Excellence in Mathematical and Physical Education	Head of the StrAU, Vice-Rector for Education Tayurskii D.A., S.I., Director of the Institute of Mathematics and Mechanics Khranchenkov M.G.	4.1.5 4.2.1 4.2.2
4.4.2.	Organization of International Forum for Pedagogical Education (IFTE – 2017,	II qtr.		II qtr.	II qtr.	II qtr.	II qtr.	Improved KFU visibility in the	Head of the Department of	7.2.1

	2018, 2019, 2020)							global academic environment	general and social pedagogy Valeeva R. A.	
4.4.3	Setup of resource centers “Pedagogical education in federal university”, “Migration pedagogy and cross-cultural psychology” and “Support center for young teachers” (number of centers)			II qtr. 1	II qtr. 2			3 resource centers	Director of the Institute of Psychology and Education Kalimullin A. M.	4.1.5 4.2.1 4.2.2
4.4.4	OpenLab opening for engineering education	III qtr.						1 OpenLab	Head of the StrAU, Vice-Rector for Education Tayurskii D.A., Director of the educational program of the Higher school of Information Technologies and Information Systems Abramskiy M. M.	4.1.5 4.2.2
4.4.5	<i>Education and Self-development</i> journal joining Scopus database				IV qtr.			Journal inclusion in Scopus peer-review database	Head of the Department of general and social pedagogy Valeeva R. A , Head of the Department of pedagogy and	7.1.1

									preschool education methods Gabdulkhakov V. F.	
	<b>5. Formation and development of the StrAU “Astrochallenge: Cosmology, Monitoring, Navigation, Applications”</b>	<p><i>StrAU mission:</i> The objective includes introduction of unique academic-research as well as research-technological world class complex providing systematic education on Astrophysics, Space Geodesy, Radiophysics starting from school education up to obtaining University competence on space research and application of space activities results in national economy; increase of KFU’s academic reputation via its promotion in the subject ranking Physics and Astronomy.</p> <p><i>StrAU goals:</i></p> <ul style="list-style-type: none"> <li>– education of a new generation of young scientists actively engaged with global research infrastructure supervised by research community leaders creating new types of research groups and thanks to the concept of continuous education from a school students to a young scientists. Better engagement with the process is facilitated with the practice-oriented approach based on experience gained at KFU practical grounds and during internships at partner universities laboratories. A young researcher evolves during continuous work in creative groups participating in international research projects supervised by world leading scientists (e.g. KFU’s participation in Spectrum-X-Ray-Gamma project);</li> <li>– development of world class research laboratories with modern experimental equipment for executing advanced projects (new cosmological and astrophysical modelling, selenocentric navigation network, exposure and research of various non-stationary optical objects);</li> <li>– forming interdisciplinary groups for generating application technologies for space activities results in Ecology, Nature Resources Management and Territorial Management;</li> <li>– formation of interdisciplinary groups for generating the application technologies of space activities results in Ecology, Nature Resources Management and Territorial Development Management.</li> </ul> <p><i>Positions in subject rankings as per results of StrAU formation and development:</i> Position in QS ranking, by subject areas - Physics &amp; Astronomy – 51 – 100 by 2020</p>								
5.1.	Organizational, economic and regulatory support									
5.1.1	Determination of internal structure of	II qtr.						Approved StrAU	Head of the StrAU	4.2.1

	the StrAU							structure	Sherstyukov O. N.	4.2.2 4.2.3 5.2.1 5.3.4
5.1.2	Establishment new research and academic centers, laboratories and other subdivisions within the StrAU	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Minimum 2 new Research and Education Centers and 9 laboratories	Head of the StrAU Sherstyukov O. N.	4.2.1 4.2.2 4.2.3 5.2.1 5.3.4
5.1.3	Forming the StrAU staffing	II qtr.						Formed staff register	Head of the StrAU Sherstyukov O. N.	1.1.6 2.1.1 2.1.2 2.1.4 5.2.1 5.3.4
5.1.4	Defining financial model and financial support parameters of the StrAU	II qtr.		IV qtr.	IV qtr.	IV qtr.	IV qtr.	Financial plan	Head of the StrAU Sherstyukov O. N., Vice-Rector for Economic and Strategic Development Safiullin M.S.	5.2.1 5.5.1
5.1.5	Conclusion of agreements of cooperation between university and its leading international and Russian partners for implementation of relevant sub-schedules and ensure effective development of the StrAU	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Signing agreements with min 6 universities and 5 companies	Head of the StrAU Sherstyukov O. N.	1.1.1 1.1.8 2.2.3 4.1.3 4.2.3

5.1.6	Establishment of an international training center			IV qtr.				An international training center	Director of Engelhard Astronomical Observatory Nefedyev Y.A.	4.1.5 4.2.2
5.2.	<b>Development of educational activities</b>									
5.2.1	Upgrade of master's programs, specialties and profiles, launch of new profiles and master's programs (number of programs, specialties and profiles)	II–III qtr.	IV qtr. 2	I–IV qtr. 2	I–IV qtr. 2	I–IV qtr. 2	I–IV qtr. 2	6 Master's programs; 4 educational areas and majors	Head of the Department of Relativity Theory and Gravity Sushkov S.V.,  Head of the Department of Astronomy and Cosmic Geodesy Bikmaev I.F.	1.1.1 1.1.2 1.1.5 1.2.4
5.2.2	Implementation of new educational standards (number of standards)	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr. 1	I–IV qtr. 1		2 new educational standards	Senior lecturer of the Department of Radiophysics of the Institute of Physics Korchagin P.A.	1.1.1 1.1.2 1.2.4 3.4.1
5.2.3	Development of additional training programs (number of programs)	II–III qtr.	IV qtr. 1	I–IV qtr. 1	I–IV qtr. 1			3 new additional training programs	Senior lecturer of the Department of Radiophysics of the Institute of Physics Korchagin P.A.	1.1.8

5.2.4	Development unique on-line MOOC (massive open online courses) courses on international educational platforms (number of courses)	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr. 2	I–IV qtr. 1		3 new MOOCs	Senior lecturer of the Department of Radiophysics of the Institute of Physics Korchagin P.A.	1.1.7
5.2.5	International accreditation of academic programs (number of programs)		IV qtr. 1			IV qtr. 1		2 new academic programs	Head of the Department of Relativity Theory and Gravity of the Institute of Physics Sushkov S.V.	1.1.3
5.2.6	Organisation of a series of annual summer conference schools for young participants (number of summer schools)	III qtr.	IV qtr. 1	II–III qtr. 2	II–III qtr. 2	II–III qtr. 3	II–III qtr. 2	10 summer schools	Head of the Department of Relativity Theory and Gravity of the Institute of Physics Sushkov S.V.,  Director of Engelhard Astronomical Observatory Nefedyev Y.A.	2.1.3
5.2.7	Implementation of programs on space activities in subordinate schools (number of cooperation agreements)	II–III qtr.	IV qtr.	I–IV qtr. 1	I–IV qtr.	I–IV qtr. 1	I–IV qtr. 1	3 agreements of cooperation and collaboration with	Assistant lecturer of the Department of Radiophysics of the Institute of	3.3.1 3.3.3

								sponsored schools	Physics Gayazutdinov A.R.	
5.2.8	Implementation of a grant systems for admission of talented graduate and postgraduate students for studies in developed fields	II qtr.		II qtr.	II qtr.	II qtr.	II qtr.	Admission of up to 15 students per year	Deputy Director of the Institute of Physics for Research Savostina L. I.	3.1.1 3.2.2
5.2.9	Implementation of a grant systems for short term internships of talented undergraduate and postgraduate students as well as young scientists in world leading research centers and universities on developing specialties	III qtr.		II qtr.	II qtr.	II qtr.	II qtr.	Internship for up to 20 undergraduate and postgraduate students	Head of the Department of Relativity Theory and Gravity of the Institute of Physics of the Institute of Physics Sushkov S.V.,  Head of the Department of Astronomy and Cosmic Geodesy Bikmaev I.F.	3.1.3 3.1.4
5.2.10	Implementation of grant program and exchange program of teaching and research staff with world leading research centers and universities (number of employees having taken internships)	II–III qtr.	IV qtr. 2	I–IV qtr. 4	I–IV qtr. 4	I–IV qtr. 6	I–IV qtr. 10	Internship taken by 26 faculty members of StrAU	Director of Engelhard Astronomical Observatory Nefedyev Y.A., Head of the StrAU Sherstyukov O. N.	2.1.1 2.1.2 2.2.3
5.2.11	Implementation of young research and	II–III qtr.	IV qtr.	I–IV	I–IV	I–IV	I–IV	Recruitment of 74	Head of the	2.1.1

	teaching staff recruitment program for Russians and internationals on competitive basis (number of recruited employees)	5	5	qtr. 12	qtr. 15	qtr. 17	qtr. 20	young faculty members	Department of Astronomy and Cosmic Geodesy of the Institute of Physics Bikmaev I.F.,  Director of Engelhard Astronomical Observatory Nefedyev Y.A.	2.1.2 2.1.4 2.2.3
5.2.12	Development of student design engineering laboratory (number of participating students)	II–III qtr.	IV qtr. 10	I–IV qtr. 15	I–IV qtr. 20	I–IV qtr. 25	I–IV qtr. 30	Minimum 30 students per year by 2020	Assistant lecturer of the Department of Radiophysics of the Institute of Physics Smolyakov A.D.	3.1.2
<b>5.3.</b>	<b>R&amp;D for ensuing year and planned period</b>									
5.3.1	R&D and designing projects on the following areas: <ul style="list-style-type: none"> <li>• Study of astrophysical objects of high energy and evolutionary processes in the Universe.</li> <li>• Complex monitoring of space processes and Moon for ensuring life safety and secure functioning of equipment on Earth and in the space.</li> </ul>	II–III qtr.	IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	I–IV qtr.	Publishing at least 980 articles and total of 799 mln. rub. of attracted funds by 2020	Head of the StrAU, Sherstyukov O. N.	4.2.1 4.2.2 4.2.3

	<ul style="list-style-type: none"> <li>Development and generation of distributed monitoring systems for near and far space including elements of microsatellite locations platforms.</li> <li>Application of space activities results.</li> </ul>									
5.3.2	Invitation of world leading scientists with high h-index to participate in joint R&D of StrAU (number of invited scientists)	II–III qtr. 3	IV qtr. 2	I–IV qtr. 10	I–IV qtr. 14	I–IV qtr. 17	I–IV qtr. 23	Minimum 38 scientists with h>20 and minimum 32 scientists with h>30 invited	Head of the Department of Relativity Theory and Gravity Sushkov S.V.,  Director of Engelhard Astronomical Observatory Nefedyev Y.A.	2.1.4
5.3.3	Organisation of international symposia and conferences (number of events)	II–III qtr. 1	IV qtr.	I–IV qtr. 2	I–IV qtr. 3	I–IV qtr. 2	I–IV qtr. 3	11 международных симпозиумов и конференций	Head of the Department of Relativity Theory and Gravity Sushkov S.V.,  Director of Engelhard Astronomical Observatory Nefedyev Y.A.	7.2.1
5.3.4	Establishment of a joint research and educational center with National Observatory of Japan focused on			IV qtr.				Research and education center in collaboration with	Director of Engelhard Astronomical	4.2.2

	Russian-Japanese projects on space research							National Astronomical Observatory of Japan	Observatory Nefedyev Y.A.	
5.3.5	Enlargement of KFU interaction with the Russian Academy of Sciences: organization of specialized departments				IV qtr.	IV qtr.	IV qtr.	Collaboration expanding between KFU and RAS: new joint University departments	Associate Professor of the Department of Radiophysics of the Institute of Physics Latypov R.R.	4.2.3
<b>5.4.</b>	<b>Miscellaneous</b>									
5.4.1	Establishment of outsourcing center on development and creation of radiophysical systems			II qtr.				Outsourcing center: increased shares of non-budgetary funds	Associate professor of the Department of Radiophysics of the Institute of Physics Chikrin D.E.	4.2.2