INDEPENDENT KAZAKH AGENCY FOR QUALITY ASSURANCE AGENCY IN EDUCATION (IQAA)

**Summary report on the external review of
JSC "International Information Technologies University"**
written by the IQAA expert group after the study of the self-evaluation report and the external review visit within the framework of institutional accreditation

Date of the site visit: 8-10 December, 2014

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The level of compliance of the self-evaluation report with the actual state of affairs at JSC "International Information Technologies University" by each standard

Standards	Level of compliance of the self-evaluation report with the actual state of affairs in the university by each standard			
	Complies fully	Complies with minor remarks	Complies with significant remarks	Doesn't comply
Standard 1 Mission and Strategic Planning	+			
Standard 2 Administration and Management	+			
Standard 3 Students	+			
Standard 4 Study programmes (disciplines) and their effectiveness	+			
Standard 5 Teaching staff and Teaching Effectiveness	+			
Standard 6 Scientific Research Work and/or Creative Activity	+			
Standard 7 Financial, Material and Technical, and Informational Resources	+			
Standard 8 Information Management	+			

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CHAPTER I
BACKGROUND AND AIMS OF THE SITE VISIT

Introduction

The external review of the IQAA expert group in the framework of institutional accreditation of JSC "International Information Technologies University" (hereinafter referred to as the University or **IITU**) was held on 8-10 December 2014.

IITU was established in April 2009 in accordance with the Resolution of the Government of the Republic of Kazakhstan No. 881 from 24 September 2008 in the framework of realization of the state policy in the field of stimulation of national IT market development through the establishment of specialized IT education and formation of the class of competent IT specialists.

The shareholders of the University are JSC "National Information and Communication Holding "Zerde", the public fund "Nursultan Nazarbayev Educational Foundation" and University of International Business LLP.

The Mission statement of the University is connected with national priorities of development of the system of higher education. According to the target indicators it is agreed with the State Programme on Education Development of the Republic of Kazakhstan for 2011-2020 (approved by the Decree of the President of RK No. 118 from 7 December 2010).

The University offers eight Bachelor's study programmes, four Master's study programmes and two PhD study programmes.

Studies in six study programmes is conducted in English (5B050700 – Management, 5B050900 – Finance, 5B060200 – Computer Science; 5B070300 – Information Systems, 5B070400 – Computer Systems and Software Engineering, 5B070500 – Mathematical and Computer Modelling).

The University has one Faculty and five Academic Departments. According to the staffing table of the University teaching in IITU is delivered by 186 teachers, of whom 160 FTE (86%), 26 part-time (14%), including one academician and one correspondent member of the National Academy of Science of RK, 25 Doctors of Sciences, 11 PhDs, and 64 Candidates of Sciences. Twenty young teachers are graduates of foreign universities by the international scholarship of the President of RK "Bolashak". Two teachers of IITU are the awardees of state grants of the Ministry of Education and Science of RK "Best University Lecturer" in 2011 and 2013 respectively.

On 10 December 2014 the University's student body is 2047 undergraduate students (1987 studying full-time and 60 studying part-time), 159 Master's students and 12 PhDs.

Students of IITU achieve high results. Thus, the University entered top-20 in the final of World Championship in Sports Programming ACM ICPC 2014.

CHAPTER II

According to the results of the external review the expert group notices a range of positive moments, where the University has achieved significant improvements.

For the development of its mission and strategy statements the University used the results of PEST-analysis (account of political, economic, social and technological factors) and SWOT-analysis (account of strong and weak points, opportunities and threats). The results of assessment of the mission implementation, achievement of aims, solving the tasks, and their adjustment were considered and discussed at meetings of the Scientific Council and Council of Directors.

Developed corporate culture is confirmed by the domination of collective motivation, social stability of the staff, compliance with the business ethics, presence of the effective system of staff's motivation.

IITU has a strategic partner, world leader in IT education, Carnegie Mellon University, with which IITU actively implements cooperation in educational and scientific innovative areas.

Efficiency of the University's activity and the degree of achieving strategic aims is assessed through the key performance indicators (KPI) and audits by QMS.

The expert group noticed quite a high level of corporate spirit and culture of the University, high satisfaction of employees and students with the system of the University management and the current changes.

The system of feedback and informing of students, employees and stakeholders is presented in effective forms: various forms of questionnaires, educational portal and informational website, systematic meetings of rector with students and staff, and Student Self-governance.

Assessment of the University's activity is done through KPI twice a year with a preliminary discussion in the Rectorate, then in the Board and delivering of a final assessment to the Board of Directors.

Introduction of balanced scorecards, which are developed on the basis of the strategy of the University development and are intended for an assessment of activity of IITU executives.

The University involves corporate partners to the organization of professional practice. At present there are 332 units of professional practice bases. During the interview with students and employers it was confirmed that the companies regularly select students and offer various forms of cooperation.

The University organizes target preparation. The number of grants from the partner-enterprises in the current year is: "Huawei Almaty" LLP – 11, JSC "National Information Technologies" – 6, "Center of Electronic Commerce" LLP – 4, and JSC "Kazakhtelecom" – 11.

The University conducts a policy of high level of students' input knowledge. This year among the applicants of IITU there have been 4.4% Altyn Belgi awardees, 3% graduates of Nazarbayev Intellectual schools, and 7% winners of Olympiads and scientific competitions. The average test score among the applicants is 75 points.

Annually IITU holds computer test for identification of English language proficiency. The average test score for admission is 78,04 points.

The University has a strong student self-governance body – Student Government, which includes 9 ministries by profiles of work and more than 120 students (7.5% from the total student population of IITU). In the course of the external review the expert group was shown plans of the student self-governance body, covering all directions of educational work in the higher school. In the interview with students a high organization level of the body was confirmed.

IITU students are absolute champions of Kazakhstan in all competitions and Olympiads in the field of Information and Communication Technologies. They also take prize places in international competitions and Olympiads in ICT field. 928 students received certificates of SSD iCarnegie, Carnegie Mellon University (USA), 24 students have SAP sertificates, more than 500 students passed training of Cisco Systems Company, and 150 students received Microsoft certificates.

The developed Catalogues of elective disciplines, used in formation of individual student curriculum, are aimed at considering personal student capacities, their growth perspectives, and the needs of industry and society. For example, organizational composition of the study programme 5B074000 - Computer Systems and Software Engineering includes several learning paths by the programmes: iCarnegie, Cisco, Microsoft (MS Programming), Oracle (Oracle Database и Java), and programming on the basis of Apple (MacOS).

Large scope of credits in working curricula is devoted to studying English. There is a developed methodology of language disciplines. The majority of disciplines of Bachelor's study programmes is delivered in English. Every student receives a SEFR certificate with the indication of the level. Preparation to IELTS test gives a competitive advantage to graduates.

From 2009 to 2014 the University teaching staff published 25 units of study guides, including 16 study guides in English, and also a textbook approved by the Ministry of Education and Science of RK.

Fifty-eight teachers of IITU passed training in iCarnegie and received certificates, giving them the right to teach one or several of ten SSD courses.

The University successfully realizes double diploma education. At present seven Bachelor's students in three specialties (5B074000 - Computer Systems and Software Engineering, 5B070300-Information Systems, 5B050700-Management) completed their education in UNITEN (Malaysia).

The University ensures quite a high level of teaching staff's qualification. Thus, the proportion of teaching staff with scientific degrees and titles is 63%, their average age is 43 years. Teahcers without a scientific degree have a Master's academic degree. Among them more than 70% are the graduates of foreign universities by "Bolashak" scholarship, e.g. Carnegie Mellon University, Herriot-Watt University, Jawaharlal Nehru University, University of East Anglia, The University of Oklahoma, Beijing University, Institute of Administration and Planning of Education under UNESCO (France), N.Bauman Moscow State Technical University).

Assessment of teaching activity is conducted in a form of a student questionnaire in the system of WEB-questionnaires in the portal dl.iitu.kz. Materials of the questionnaire are analyzed and used by the Commission. The questionnaire covers not less than 80-90% of teaching staff. The average score is quite high – more than 4.65.

The University annually attracts leading foreign teaching staff to work in IITU on a contract basis for an academic period. In 2010-2014 there were invited 36 foreign professors. At present IITU has 18 foreign teachers (about 12% of the total teaching staff nimber).

In 2009-2014 the number of contracted scientific research works, conducted by IITU, was 20 items, with the total funding of 31, 7 mln tenge.

The innovative activity of the University is confirmed by a large number of innovative patents and certifications, which is in total 63 units. In 2011 IITU presented twelve innovative projects, in 2012 – 4, in 2013 – 2, in 2014 – 45.

In 2014 IITU had 10 publications in journals with high impact-factor. The citation index of teaching staff is 42.

IITU has a modern innovative laboratory, where students construct robots. They already have experience of participation in robot construction competition ABU ROBOCON in China, Vietnam and India. Teaching staff of the University developed a 3D printer, FDM and FLA printing technology. Students developed the "AdamSky" keyboard, which uses Cyrillic alphabet of two official languages used in Kazakhstan. At the moment 3000 units of such keyboards were bought by secondary schools of Kazakhstan.

Every year students of IITU participate in the competition Microsoft - Imagine Cup (Master's students Nurzhan Aitbayev and Yerassyl Shalabayev won first place in developments for Windows Phone). In 2014 students took three first places of the Championship of Kazakhstan in Programming.

In 2013 two student innovation projects ("Electronic Turn" and "Barakat") under the Programme of Acceleration of the ICT Fund were awarded with the total amount of 15.13 mln tenge.

IITU provides 20% discount in accordance with the Regulation on social discount for full-time students left without parental care (who had or have an orphan status before the age of 18 years). Thus, in 2009-2014 the number of students, who received social support in a form of discounts by different categories was 764 persons on the total amount of 39637010 thousand tenge. The University also annually provides support to children-orphans for their daily hot meal expenses in the amount of 618 tenge per day.

IITU has a high speed of Internet connection 320 MB/s with the downloading speed of 8 MB/s.

Besides of the University website the information is provided by two educational portals, dl.iitu.kz and platonus.iitu.kz, where there is available information on the study process of each student for the full period, performance by disciplines, GPA, orders and announcements. In addition the University has information channels in social media networks: Facebook, Twitter, and VKontakte.

In the beginning of each semester the textbooks, study and methodological literature by all the semester disciplines are handed according to the students' inquiries, free of charge.

One of the most effective feedback forms of the University with its stakeholders is a communication with Rector through the social media. Interview with students and teaching staff showed that it is a way of solving students' problems concerning their studies, accommodation or personal questions.

The Department of marketing and PR works effectively and creatively in the University. Its functions include collection, dissemination and public information on the University's activities.

CONCLUSION

On the basis of the conducted external review on compliance of the University with criteria of each standard, the expert group made the following recommendations:

1. The Development Strategy of the University is recommended to be reviewed considering the following aspects:

- to study deeper the current state of the external environment at the level of Central Asia region;

- to include the concrete activities for achieving the aims and set objectives, to expand the range of key performance indicators, which reflect uncovered types of IITU activities. For example, teaching staff qualification development, publication of study and methodological literature, diploma works incorporated to the industry, etc.

- to develop the strategic direction "Development of the University as a leader of innovations and science in the field of ICT in Central Asia region" in more detail, with the description of activities, aimed at achievement of the specified status.

- To review KPI values (key performance indicators) towards their growth (for example, average absolute progress of Bachelor's students from 2013 to 2020 is planned at the constant level of 80%).

2. The University is recommended to develop concrete measures for bringing the Development Strategy of the University to the awareness of students, teaching staff, administrative and managerial personnel, and all other stakeholders.

3. It is recommended to develop a methodology of planning the activity of structural divisions on the basis of achievement of Key Performance Indicators, defined in the Development Strategy of the University.

4. To assign conducting a monitoring of implementation of the IITU Development Strategy not less than once a year to the Vice-Rector on Academic Affairs.

5. To envisage changes in the university structure for the purpose of an activity specification, in particular opening of the Department on coordination of scientific research work, study and methodological activity, and also on quality improvement of HR planning.

6. To maintain compulsory parameters of Bologna Process the University is recommended to issue diploma supplement by European requirements, taking into account results of activity of the TEMPUS Structural Measures project by the European programme TEMPUS TuCAHEA, where IITU is a national coordinator.

7. In compliance with requirements to development of study programmes on the basis of modular and competence-based approach, it is recommended to revise catalogues of elective disciplines and curricula. The expert group recommends to review the internal normative document "Regulations on formation of the study and methodological complex of a discipline", to define requirements to study and methodological complex of a specialty, and to describe requirements to development of syllabuses.

8. To implement fully the principles of credit technology, in particular providing a transparent mechanism for choosing a learning path and a teacher.

9. During the interview with employers there was found a need of expansion of the content of study programmes by inclusion of non-economic disciplines in the working curricula. Those disciplines should be connected with obtaining of general professional competencies and promoting development of entrepreneurship skills, as well as increase in a number of hours by courses, and connected with development of mobile applications.

10. To further improve a complex criteria-based assessment of the activity and its distribution on the professional environment.

11. To expand types and forms of teaching staff qualification development through the establishment of the relevant division on rendering methodical support in the area of modern educational technologies and expansion of sector of production internships.

12. To introduce results of scientific research into the study process.

13. To expand cooperation with industrial enterprises and companies in organization of joint scientific research and design project works.

14. To conduct work on attraction of entrepreneurs, national companies and public authority organs for target preparation of Masters by state-commissioned student places.

15. To conduct regular monitoring of teaching staff and students' satisfaction with the quality of scientific research work for identification of strong and weak points.

16. To increase the income due to commercialization of scientific developments and innovative technologies.

17. To consider a possibility of increase in profitability due to creation of division in a form of university technological business incubator, on the principles of self-sufficiency and for cultivation of entrepreneurs in the field of IT.

18. The University is recommended to use its resources in expansion of the range of paid services as additional source of the income.

19. To accelerate construction or acquisition of a student hostel. It would raise social guarantees, stimulate interest of foreign students, and give the chance of attraction for work of domestic and foreign scientists.

20. To carry out the analysis of efficiency of use of material and technical resources for the purpose of improvement of problem activities.

21. To publish the full text of IITU Development Strategy on the University website. That will promote increase of transparency of the University's activity for all stakeholders.

22. The University is recommended to improve its forms of student self-government by their development and promotion in social networks.