Appendix to the order № 7-165 from 10.09.2020

## REGULATIONS

on the internal quality assurance system in higher education at the National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»

**KYIV 2020** 

#### REGULATIONS

# on the internal quality assurance system in higher education at the National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»

The development of the internal quality assurance system in higher education at the National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute» has begun with the introduction of the integrated training quality monitoring system and the study on the needs expressed by employers acting as main stakeholders.

Scientific and methodological principles of integrated training quality monitoring at Igor Sikorsky Kyiv Polytechnic Institute, the first round of which was held in the autumn of 2005, were established on the basis of the appropriate system investigations that have been implemented at the university since 1992.

Since 2005, the university has been conducting research to study the views of the employers (stakeholders) on the training quality of KPI students of all specialties and the compliance of their academic level with the requirements of the labor market, which is an important element in ensuring the quality of higher education.

#### **1. GENERAL TERMS**

1.1. Regulations on the internal quality assurance system in higher education at the National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute» (hereinafter referred to as the Regulations) regulate the functioning of the internal quality assurance system (hereinafter referred to as Quality System) in higher education at Igor Sikorsky Kyiv Polytechnic Institute (hereinafter referred to as the University).

1.2. The quality assurance system in higher education is aimed at improving all areas of the University and ensuring the high quality of all components of the educational process, the compliance with the international standards, the formation of a culture of quality education at the University as a basis for its competitiveness.

1.3. The Regulations are developed in accordance with the Law of Ukraine «On Higher Education», «On Education», «Standards and Guidelines for Quality Assurance in the European Higher Education Area» of the European Association for Quality Assurance in Higher Education, the state standard of Ukraine «Quality Management Systems» DSTU ISO 9001:2015 and professional standards.

1.4. The quality assurance system in higher education is a subsystem of the general management system of the University.

1.5. The quality assurance system in higher education at the University covers:

 policies and procedures for ensuring the quality of education and allocation of responsibilities for quality assurance among all participants in the educational process;

 system and mechanisms for ensuring academic integrity, in particular, through the use of an effective system to detect and prevent academic plagiarism in scientific, educational and methodological works of the University employees and students;

 necessary resource, material and technical base for the organization of the educational process, in particular for the independent work of students of each academic program;

- information system to support management decisions;

annual evaluation of the academic results of students, the performance of scientific and teaching staff and departments of the University, the publication of these evaluations in the information space of the University;

 career development system for teaching, scientific and scientificpedagogical staff of the University;

providing and conducting the marketing and monitoring,
sociological and psychosocial research of stakeholders;

- a set of other necessary procedures and measures to improve the quality of education defined by special documents of the University.

1.6. The quality assurance of academic activities and higher education at the University is based on such principles as:

autonomy of the University and academic freedom of the university community;

responsibility of the University and its employees for the results of its activities;

- systemacity in the quality assurance of academic activities and higher education;

- compliance with the European and state standards for quality assurance in higher education, as well as with professional standards;

– fundamental nature of training;

academic integrity;

– mobility of the educational community;

- transparency, accessibility and openness of information;

innovativeness of the academic activities;

monitoring and permanence of improving the quality of education
based on the management of all components of the educational process.

1.7. The model of the quality management system of education at the University is based on a process-oriented approach, which takes into account and balances the numerous interrelated processes that affect each other (Appendix 1).

#### 2. MAIN GOALS AND TASKS

2.1. The quality assurance system in higher education at the University provides:

definition and specification of the content of procedures for quality control of education;

development and implementation of normative documents in the educational process to ensure the quality of education;

monitoring of the resources for ensuring the educational process of the University;

monitoring of the publicity of information on educational programs, degrees of higher education and qualification;

development and continuous improvement of information systems of the University;

distribution of responsibilities in the functioning of the internal quality assurance system of academic activities between structural units of the University;

introduction of the self-analysis mechanism as an integral component of sustainable development of the University.

2.2. The quality system in higher education of the University has the following tasks:

formation of infrastructure and institutional conditions for the development of cooperation in educational and scientific spheres;

inspection and current monitoring of educational programs;

organization and implementation of marketing and monitoring, sociological and psychosocial researches of target groups of entrants, students, teachers, graduates, employers;

development of recommendations for improving the quality of the educational process;

ensuring the correlation of the tasks of the internal quality assurance system in higher education at the University with procedures of the external quality assurance of higher education in Ukraine;

ensuring the publicity of information on educational programs, degrees of higher education and qualification;

monitoring and managing of the resource potential of the University,
the providing of career development for teaching, scientific and scientific pedagogical staff.

#### **3. QUALITY ASSURANCE POLICY**

3.1. The quality assurance policy of educational activities and higher education (hereinafter referred to as the Policy) is a component of its strategic management.

3.2. The policy is public and open to all participants in the educational process, as well as other concerned parties (stakeholders).

3.3. The policy takes into account the national traditions of higher education in Ukraine and the previous experience of the University in organizing the educational process and content.

3.4. The policy is implemented through internal quality assurance processes with the involvement of all structural units of the University and participants in the educational process.

3.5. The policy creates the principles:

 ensuring the internal organizational procedures and processes for quality assurance of educational activities and higher education;

 formation of criteria for the quality of higher education and the system of its evaluation on the basis of the international dimension;

 formation of a management system of processes and procedures for quality assurance of educational activities and higher education;

 participation of educational structural subdivisions, the University administration and community in the implementation of quality assurance measures;

practical implementation of innovative pedagogical and virtual technologies in the educational process;

 academic integrity and freedom, as well as counteraction to academic fraud and plagiarism;

prevention of intolerance or discrimination against students and employees;

- involvement of external stakeholders in quality assurance;

 integration of scientific and educational activities of the University and effective use of research results in the educational process;

- ensuring personal development and creative self-realization of scientific and pedagogical staff and students.

# 4. STRUCTURE AND ORGANIZATION OF THE INTERNAL QUALITY ASSURANCE SYSTEM OF EDUCATION

4.1. The quality system of higher education is a set of structural units that ensure the quality of educational activities and the quality of higher education at the University through the implementation of their functions.

4.2. The quality system of higher education at the University has five levels (Appendix 2):

- The first level is the University students and their initiative groups (regardless of educational programs);

- The second level is the level of direct implementation of educational programs, current monitoring: departments, guarantors of the educational process support group, executives who are responsible for educational components (head of the department, scientific and teaching staff) and initiative groups of students under the program, employers;

 The third level is the level of implementation and administration of educational programs, annual monitoring of programs and needs of the sectoral labor market: structural subdivisions that carry out educational activities (administrations of faculties, institutes), student self-government bodies, sectoral employers councils;

- The fourth level is the vice-rectors in the field of activity, level of development, inspection, approbation, monitoring of academic policy, university decisions, documents, procedures, projects: general university structural subdivisions, advisory and consultative bodies, student self-government bodies, joint (regional) employers councils;

- The fifth level is the level of system-making decisions: the Supervisory Board, the Academic Council (the composition and functions of which are determined by the Law of Ukraine «On Higher Education» and the Statute) and the Rector (responsible for the University and the quality system of higher education in general).

4.3. Proper functioning and organization of the Higher Education Quality System at the University provides the distribution of decision-making powers between officials, management of educational programs (departments and faculties/institutes) and universitywide structural subdivisions with the involvement of students, their selfgovernment bodies, employers and alumni associations.

# 5. COMPOSITION AND FUNCTIONS OF THE PARTICIPANTS OF THE QUALITY ASSURANCE SYSTEM IN HIGHER EDUCATION AT THE UNIVERSITY

#### **University level**

5.1. The general management of the Quality System in Higher Education is carried out by the **Rector** of the University.

5.2. **The First Vice-Rector** deals with general organization planning issues, coordination and control of issues about quality of educational activities. He has the following functions:

reporting to the Rector, the university administration, the Academic
Council of the University on the functioning of the quality assurance system in

higher education, on all unresolved issues in the field of education quality, as well as providing proposals and recommendations for their improvement;

- ensuring the implementation of the University policy in the field of quality in higher education;

 coordination and endorsement of documents on the functioning of the Quality System in Higher Education in general and in certain areas of activity;

ensuring interaction with external parties on issues related to the
Quality System in Higher Education at the University;

organization of measures to verify the effectiveness of the Quality
System in Higher Education at the University;

 ensuring the implementation of appropriate corrective actions aimed at improving the efficiency of the Quality System in Higher Education at the University;

identification of trends in the functioning of the Quality System in
Higher Education at the University;

 initiating the monitoring of the satisfaction of participants in the educational process with the work of the University and analysis of its results;

 annual reporting to the Academic Council of the University on the effectiveness of the processes and mechanisms of annual and periodic program viewing and presenting recommendations for upgrading them if such a need arises.

5.3. The Methodical Council of the University is a permanent working body of Igor Sikorsky Kyiv Polytechnic Institute that provides an analysis of the educational activities of the University and the preparation of recommendations for improving the quality of organizational and methodological support of the educational process. The decisions of the Methodical Council are of a recommendatory nature and are the basis for the development of administrative documents of the University. The First Vicerector is at the head of the Methodical Council. The powers of the Methodical Council include:

- the annual analysis of the policy and procedure implementation at the University related to ensuring the quality of educational activities, and presenting recommendations to the Academic Council of the University in order to make changes to them if such a need arises;

 the analysis and inspection of the program evaluation processes, the annual and periodic program viewing, the identification of problems and making recommendations for improving academic programmes and curricula for deans/directors;

 receiving and responding to recommendations from all external and internal stakeholders to improve monitoring processes and program viewing;

- the analysis and inspection of the annual reports on the program viewing, the identification of problems by its results and making recommendations to the Academic Council of the University to conduct an unscheduled viewing if such a need arises;

 providing the Academic Council of the University with the report on the evaluation results and recommendations for approval of each academic program or proposed changes to it;

 viewing of the policies and procedures related to the approval and amendment of programs;

 reporting to the Academic Council of the University on the effectiveness of processes and mechanisms for developing and improving programs and making recommendations for necessary improvements if such a need arises;

 receiving feedback and recommendations from stakeholders to improve processes and mechanisms for developing and improving programs.

5.4. The Department of Educational Quality Assurance provides:

- the methodological and consulting support of licensing procedures for all types of educational services of the University, accreditation of educational programs, which provide training and retraining of specialists and the University in general;

- the collection, accumulation and analysis of information on educational activity indicators of the University;

- the analysis of ensuring the quality of scientific and teaching staff;

- the monitoring and evaluation of the fulfillment of qualification requirements, scientific and professional activity by scientific and teaching staff;

 the analysis of human resourcing and career development of teaching and scientific-pedagogical staff as a process of their continuous professional growth aimed at ensuring the teaching and research quality;

 carrying out activities aimed at ensuring the high quality of the educational process and the quality of education at the University together with other structural subdivisions of the University;

- conducting internal accreditation of educational programs.

### 5.5. The Institute for Educational Quality Monitoring provides:

- creation of scientific and methodological bases and technologies of monitoring the quality of higher education together with University departments;

 preparation and publication of a set of methodological support for diagnosing the quality of the educational process;

 organization and implementation of the systematic independent monitoring of the education quality at the University and forming of recommendations for improvement of all educational process components on this basis;

organization and systematic conduction of residual knowledge assessment (rector's testing);

implementation of the introductory and correction courses for higher education students;

 implementation of organizational, educational, scientific, methodological and career guidance activities in the field of pre-university entrant tutorial.

5.6. The **Department of educational process organization** provides:

organization of joint (including international) events to increase scientific and practical training of students and scientific and teaching staff;

- implementation of international and bilateral educational projects aimed at the modernization of higher education (creation of new and modernization of existing educational programs and courses, introduction of new approaches to learning), integration of the University into the international educational space;

- compliance control of educational and methodical materials of disciplines, programs of practices; methodical recommendations for the individual task and qualification projects (works) performance; qualification examination programs in accordance with the competencies defined by the standards of higher education; research orientation;

monitoring and evaluation of the organization level of the educational process on the educational component (discipline, module, etc.) by the scientific and teaching staff;

development of methodical recommendations concerning the organization and methodological support of educational process;

 analysis of the information and methodological support of the educational process at the departments of the University, development of proposals for its improvement;  improvement of the quality assurance system of training of specialists on the basis of the scientific and teaching staff rating and the index of scientific and pedagogical potential of the departments;

 development of proposals to increase the motivation of scientific and teaching staff, strengthening the interest of higher education students in the quality of education;

 analysis and generalization of the experience of organizing independent work of students, its information and methodological support, development of proposals and recommendations for its improvement;

 development of proposals for the organization of learning results monitoring, implementation of a rating system for evaluating educational activities;

 organization and conduction of the pedagogical experiments on introduction and performance evaluation of the new learning technologies, new forms and methods of the educational process organization;

organization and implementation of the Methodical Council and the
Expert Council on Educational Publications work at the University.

5.7. The Department of Educational Work organizes and supports the term control of students; analyzes the results of term control in order to assess ways to improve the quality of the educational process; is responsible for the organization of extracurricular activities of students, creating opportunities for self-realization and personal growth; organizes a system of measures to identify early career guidance among young students and promote the prestige of technical education; conducts organizational and advisory work on professional adaptation and self-determination of students, promotion of their employment.

5.8. The Scientific research centre of applied sociology "Socioplus" organizes and conducts the marketing monitoring, sociological and socio-psychological research of target groups (entrants, students, teachers, graduates, employers) on satisfaction with the educational environment of the University, career path of graduates, the needs of the sectoral labor market and assessment of the graduate training working quality at the request of the University.

5.9. Design Bureau of Information Systems (DB IS) performs:

information service, software and technical support of the educational process of University;

- software, information support of the administrative and management activity of University and its improvement;

– development and implementation of the information technology into both education process and services of University for the creation of exclusive information environment of University, which encompasses information resources, telecommunication networks, automated management system.

**5.10. Education and Methodological Establishment «Institute of Continuing Education»** (ICE) performs the realization of the broad range of postgraduate education training modules for the practical implementation of the life-long learning principle.

#### **Institutes/Faculties level**

5.11 **Dean of Faculty/Director of Institute** is responsible for the implementation and realization of the quality assurance system and other mechanisms which allow to provide and improve the quality of education activity at the Faculty/Institute.

5.12 Academic Board and Methodical Commission of Faculty/Institute are the collegiate operating entities which realize Faculty/Institute policy in the field of assurance of education activity quality and higher education quality and perform the following functions:

 the analysis of the proposals of project work groups on the development and accompaniment of the educational programs, their structure and content;

 the expert studies of educational programs and curricula, periodic review of educational programs and curricula; the accompaniment of the procedure of periodic education program reviews;

- the information management for the internal accreditation and expert studies of education programs;

organization and participation in conducting the incoming diagnostics of the students;

the selective monitoring of the quality of current learning outcomes of the students;

 the analysis of the assessment results of the level of residual knowledge, skills and other competencies of students in training components which are lectured;

 the formulation of recommendations on the quality enhancement of learning outcomes of students on the basis of carried out analysis.

5.13 **Employers Councils** are created at each Faculty/Institute with the aim of providing the innovative contribution to the education programs from the standpoint of the industry professionals and external stakeholders.

#### **Education program level**

5.14 **Assurance Units and/or project groups** on the education programs are the members of internal assurance system of the education activity quality and the quality of higher education. They are formed separately in each education program and are engaged in all procedures which require development, approval, monitoring and review of education programs as well as the procedures of external evaluation (accreditation, licensing) and self-assessment. The functions of the working groups on education programs cover the following:

 rationale behind the necessity of education program implementation according to the results of labour market research, employers' and prospective applicants' surveys, the analysis of current trends in the economic, science advancement etc; education program development and its promulgation on the website of the Faculty/Institute;

- the assurance of agreement upon the main elements of the education program with key stakeholders, namely competencies, learning outcomes, curriculum structure, alternative components, evaluation criteria of the performance level of learning outcomes.

5.15. **Responsible for the education component** takes part in providing the education program's quality in the capacity of academic and pedagogical employee, who lectures on the educational component, and/or is the member of the pedagogical expert studies. Academic and pedagogical employees are responsible for the educational component content and the compliance of the learning outcomes in this educational component with the learning outcomes in the education program. They provide the program quality by coordinating and evaluating different curriculum components within a program with other academic and pedagogical employees and students. Academic and pedagogical employees and students and pedagogical employees make the adjustments in the educational component on the basis of assessment, in particular the discipline evaluation by students and external examiners.

#### 5.16. Graduation departments perform:

- monitoring of the assurance of the information publicity about education program, degree of higher education and qualification;

- periodic review of the education programs with the aim of establishing the correlation of their structure and contents with the requirements of legislative and regulatory framework which regulates the quality of education and labour market according to the specialists' quality, level of general and professional competences, educational needs of students;

 development of curricula and other regulatory documents which organizationally accompany the training process of students in relevant education program;  determination of forms and methods of teaching and learning which foster the achievement of the anticipated program aims and which comply with student-centered learning requirements;

 introspection of human resourcing of education program, in particular due to the presence of qualification verification, professional and scientific level of academic and pedagogical employees;

involvement of external stakeholders (employers among which the graduates may be present) in the examination boards;

– provision analysis of the education program with necessary information (collections of educational and other literature, including multiple electronic resources) and logistic resources (lecture halls, laboratories, computer base, equipment, teaching aids etc).

#### **Students**

5.17. Students at the education program level are the members of working groups and stay as a part of groups on monitoring and reviewing education programs; at the level of Faculties/Institutes they take part in representing students' interests in the provision of higher education quality, and at the level of University they take part in ensuring the representation of students at the Academic Boards and Methodical Commissions of University.

# 6. UNIVERSITY KEY RULES, PROCEDURES AND MEASURES ON INTERNAL ASSURANCE OF EDUCATION QUALITY

6.1. General procedures and measures set of the realization of assurance system of educational activity quality (Appendix 3).

6.2. Competitive selection of applicants for higher education is performed according to the official University Admissions Criteria. The analysis of the admissions

process results (investigation of admissions quality) is annually reported at the meeting of University Academic Board.

6.3. Complex quality monitoring of professional preparation in specialties (rectorial control) is conducted according to the determined order (Appendix 4).

6.4. Monitoring of the state of fundamental training of University first-year students (entrance control) is conducted annually with the aim of determining the necessity of giving individual assistance to students, educational process adjustment etc (Appendix 5).

6.5. Determination of the integrated ranking of University's units is performed in accordance with Regulation on units' ranking system based on the performance indicators (specializations) and it has the structure stated in (Appendix 6).

6.6. Education programs evaluation (principles of project developments, monitoring, alterations and programs' establishment) is performed according to University regulations which define these procedures (Appendix 7).

6.7. Expert examination of educational resources is conducted at regular intervals in accordance with Procedure for granting the stamp of approval to University educational resources and according to corresponding procedure (Appendix 8).

6.8. Work assessment and determination of academic and pedagogical employees' rankings is carried out annually in compliance with Regulation on academic and pedagogical employees of Igor Sikorsky Kyiv Polytechnic Institute.

6.9. Realization evaluation of expected learning outcomes, examination methods of their achievement as well as benefit from learning outcomes on the labour market is conducted through giving opinion polls of University units to students, academic and pedagogical employees, graduates, employers by using corresponding questionnaires.

6.10. Resolution of conflicts which rise in the educational activity process is carried out according to Regulation on resolution of conflicts in Igor Sikorsky Kyiv Polytechnic Institute.

6.11. Statistical analysis of the results of all types of control is conducted annually with its results being reported at the meetings of Academic Boards and Methodical Commissions at all levels to make respective decision on education quality improvement.

6.12. Measures on quality improvement of students' support system encompass annual anonymous opinion poll on the assessment of educational resources, laboratory facilities, library resources, social conditions, administrative services, information system etc.

6.13. Provision of the high-quality necessary resources (staff, physical, information resources) for the educational process organization and students' support is performed in compliance with Licensing requirements (see Chapters 7, 8 of this Regulation).

6.14. Monitoring measures on internal system improvement of education quality assurance are carried out according to the annual rector's order «About organizing and planning the educational process for the next academic year». Those measures comprise the following:

 monitoring of degree course schemes that is education and working curricula for improvement or preparation of new curricula taking into account the experience of previous years;

 monitoring of completeness and quality of educational and methodological, and information assurance of academic subject area;

monitoring of human resourcing;

– monitoring of inventory and logistics assurance;

 monitoring of evaluation criteria and ranking systems assessment in academic subject areas and diagnostic tools of gained competencies.

# 7. SYSTEM FOR STUDENTS' KNOWLEDGE ASSESSMENT AND EVALUATION

7.1. Forms of control of the quality of educational components' acquisition by the students are determined by the educational program and curriculum.

7.2. Form of conducting students' evaluation is determined by the corresponding higher education standard, education program and curriculum.

7.3. Evaluation of students' learning outcomes is carried out on the basis of ranking system, which reveals in details the evaluation criteria of acquired competences level according to the program of academic subject area. Description of ranking evaluation system is a component of the discipline (educational component) working program and it is brought into applicants' notice beforehand.

7.4. Evaluation of learning outcomes is performed on a 100-point scale with further assessment interpretation according to the university scale (Appendix 9).

7.5. Evaluation criteria of qualifying papers on a 100-point scale (developed and approved by the chair for each level of higher education in compliance with the requirements of the standard of higher education and educational program) are brought into notice of students before entry into practical training.

# 8. HUMAN RESOURCING, UPGRADE TRAINING OF ACADEMIC AND PEDAGOGICAL EMPLOYEES

8.1. High-quality staff of academic and pedagogical employees is one of the key factors of University educational activity.

8.2. The selection of academic and pedagogical employees is carried out according to the Procedure for the conduct of competitive selection or selection on the competitive basis by shifting vacant posts of academic and pedagogical employees and conclusion of employment agreements (contracts).

8.3. Proficiency enhancement (professional growth) of academic and pedagogical employees and staff is a task-oriented continuous improvement of professional competences and pedagogical excellence which are needed for knowledge acquisition and which foster the quality improvement of management, educational, methodical, scientific, innovative, creative and disciplinary activity of Igor Sikorsky Kyiv Polytechnic Institute. 8.4. Proficiency enhancement of academic and pedagogical workers is channeled towards acquisition of innovative teaching techniques and establishment of discipline working programs in accordance with European standards.

8.5. Academic and pedagogical employees raise their qualification in compliance with Regulation on proficiency enhancement of academic and pedagogical employees of Igor Sikorsky Kyiv Polytechnic Institute and legislation of Ukraine.

8.6. Qualimetry of professional and pedagogical excellence is carried out by directory of structural subdivision by organizing and conducting public lectures with performance evaluation (Appendix 10).

# 9. LEARNING RESOURCES AND ADVISORY SUPPORT FOR STUDENTS

9.1. The main task of university-wide services, which are responsible for advisory support for students, is giving them consulting assistance in both academic and extracurricular fields at all stages of education. University-wide services, responsible for the consulting assistance to students, include the following:

- subdivisions of pre-university training;

– admission board;

offices and services of provision of extra-curricular and sporting activity for students;

offices which are responsible for practical training and job placement
of students;

– offices which are responsible for academic mobility support;

– scientific and technical library;

– IT-support services;

centers of student services (nutrition, treatment, inquiries, complaints, counseling);

- support centers for foreign students and students with special needs.

#### **10. INFORMATION MANAGEMENT**

10.1. University informatization is performed through the use of IT for educational processes optimization, automatization of main functions: planning, organization, control of educational process and management activity.

10.2. The University has the web portal (where key information about activities of the University is located) and the internal electronic resource (it contains educational and learning materials, samples and other internal regulations).

10.3. General structural scheme of the University corporate portal (Appendix 11).

10.4. Planning and information support of educational process are carried out through the use of automated information systems and complexes.

10.5. Information and telecommunication system «Electronic campus» provides:

 information support of educational process of the University departments by giving access to virtual cabinets through user profiles: students, lecturer and researcher, advisor, department guidance counselor;

 information distribution about future events and activities in the framework of educational process and automatization of the communication process between its members;

 use of local closed repositories of educational process methodological support with the possibility of providing access to designated education and learning materials for all who are interested in it.

10.6. Automated information system «Electronic catalogue of education and learning material» (<u>http://directory.kpi.ua</u>) provides:

 expanding access to University information resources and increasing the quotation level of University scientific-methodical literature by expanding access to information resources of «Electronic campus» system;

improving University ranking at the international level
Webomertics.

10.7. Automated information system «Academic and pedagogical employees web-pages» (intellect.kpi.ua) provides:

- the expansion of presence of University subdivisions in the world academic zone;

- the expansion of information capabilities of department web-sites;

– the diffusion of knowledge at the state and world levels about the achievements of University academic and pedagogical employees in scientific and educational work, experience exchange and communication assistance.

10.8. Software and hardware complex «Personnel records» provides:

- automatization of HR record management and support of the personnel management process;

maintaining of complex HR accounting, in particular University academic and pedagogical employees accounting.

10.9. Automated information system «Graduate employability accounting» provides:

automated building of organization databases, job vacancies, student
job placement, reports on graduates' employment;

 processing on information on conclusion of contracts with enterprises concerning the employment according to the acquired specialty.

10.10. «Electronic campus» system module «Ranking of university academic and pedagogical employees» provides:

 automatization of rating analysis of every University academic and pedagogical employee (APE) according to the results of their activity in the following directions: educational and methodical, scientific and innovative and organizational and pastoral work;

 performance accounting of APE in accordance with the activity types, which is sufficient for the reporting of required statistical data concerning the ranking of APEs, departments and Institutes/Faculties; the determination of statistically valid assessment grades of APE's work according to certain activity areas based on the results of supply analysis from academic and pedagogical employees, identified tendencies and relevant targets.

10.11. Automated planning system of educational process «APS EP» provides:

 automated process of forming curricula and working curricula, correlating documents for further load analysis on APEs, end-of-term curriculum, departments' load;

integration with program modules of system «Electronic campus»,
AMS (Automated management system) «HEE (Higher Educational Establishment)».

10.12. Automated system of time-schedule formation (rozklad.kpi.ua) provides the automated process of forming timetable of classes, examination periods, consultations, lecturer schedule.

10.13. Scientific and technical library uses specialized software solutions which computerize library activity (individualized services, distant user maintenance, resource materials placement), provide the formation of in-house electronic resources with the differential access, ensure data integration into University internal systems and external information systems.

10.14. Electronic archive of University scientific and educational materials ELAKPI (ela.kpi.ua) stores, saves, distributes and ensures long-term, permanent and reliable access to the scientific and educational materials of higher-education teaching personnel, employees, students, postgraduates and PhD candidates of University via Internet.

10.15. Information assurance of educational activity in the field of higher education corresponds to the process requirements to License terms regarding this type of activity.

#### **11. PUBLIC INFORMATION**

11.1. Public information provision is performed by University in response to the information request according to the Law of Ukraine «About access to public information».

11.2. Information which is published on the official web sites of University according to the requirements of the Law of Ukraine «About higher education» and Law of Ukraine «About education» includes the following:

– University Statute;

- regulation on University Academic Board;
- regulation on University Supervisory Board;

 regulations on University subdivisions are located on the sites of these subdivisions and on the site of Information service in University internal network;

– licenses for educational activity conduct;

educational programs accreditation certificates, University institutional accreditation certificate;

- University documents which are connected with educational process organization;

 methodological materials on the organization of academic and pedagogical employees' activity and educational process learning and teaching support materials;

information on University academic and information assurance is located on the sites of subdivisions;

conclusions of examination board of Ministry of Education and
Science of Ukraine based on the results of accreditation examination;

- admission regulations to University;

– University anti-corruption program;

conclusions of examination board of Ministry of Education and
Science of Ukraine based on the results of accreditation examination;

- other information on procedures and results of decision-making while carrying out the activity in the field of higher education.

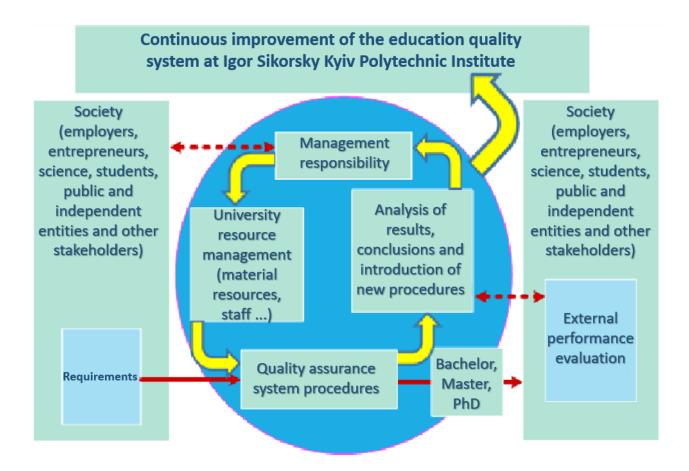
#### **12. ACADEMIC INTEGRITY POLICY**

12.1. Academic integrity policy is a component of System of higher education quality at University.

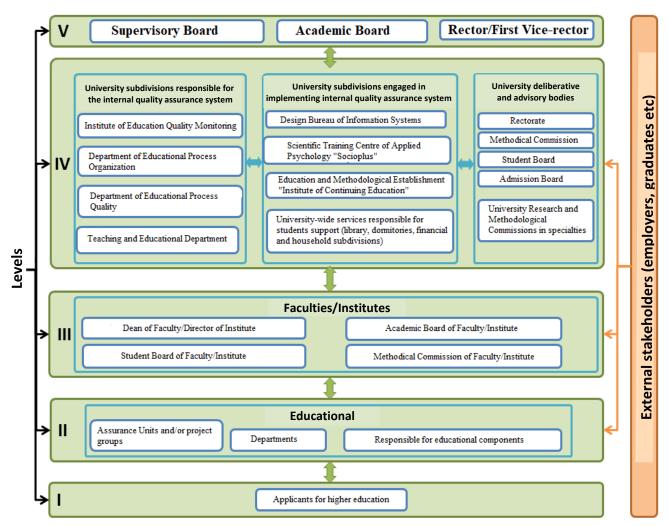
12.2. Academic integrity policy fosters the compliance with the requirements of pedagogical and research ethics and respect for intellectual achievement, activation of independency and individuality while creating a work of authorship and awareness of responsibility for violation of generally accepted citation rules.

12.3. Realization of assurance of academic integrity policy is performed according to the current University Code of Honour (approved by SC (staff conference) on 09.04.2014) and Regulation on system of academic plagiarism prevention.

## MODEL OF THE QUALITY MANAGEMENT SYSTEM IN HIGHER EDUCATION AT THE UNIVERSITY

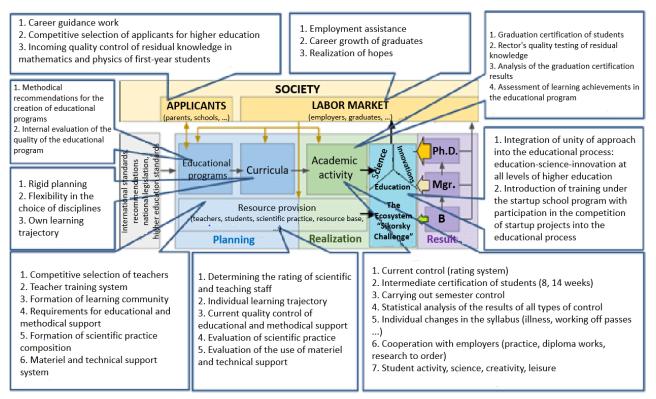


### STRUCTURE AND ORGANIZATION OF THE SYSTEM OF INTERNAL ASSURANCE OF EDUCATION QUALITY



#### **APPENDIX 3**

# THE QUALITY ASSURANCE OF ACADEMIC ACTIVITIES AT THE UNIVERSITY



## PROCEDURE FOR THE CONDUCT OF COMPLEX MONITORING OF EDUCATION QUALITY ACCORDING TO SPECIALTIES

- 1. The main task of complex monitoring as form of rectorial control is the systematic study of educational process nature at Faculties/Institutes of University aimed at identifying tendencies and developing on their basis research and methodological recommendations concerning the formation of agenda for actions on educational process quality management at University.
- 2. The development of research and methodological basis and conduct of complex monitoring of specialist preparation quality is laid upon Institute of Education Quality Monitoring.
- 3. Complex monitoring is carried out each term in groups of every specialty of University, thereby, in a year monitoring encompasses all academic groups of this specialty of correlating course.
- 4. On the basis of the results of each complex monitoring round in every specialty of University, specialist preparation quality index is defined. The components of this index are as follows:

a) the result of rectorial control of students' retained knowledge;

b) quality index of qualifying papers;

c) specialist preparation quality index according to the results of the surveys of labour market;

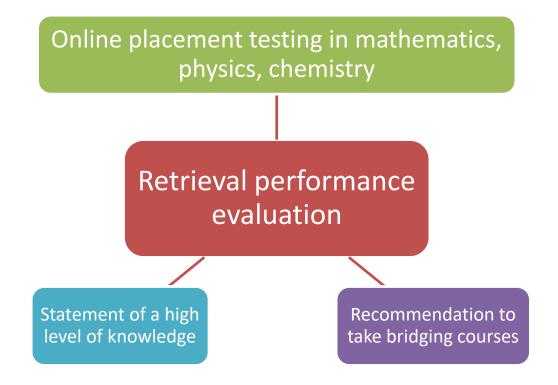
d) storage index of specialist preparation quality in accordance with the results of previous rounds.

- 5. Rectorial control of University students retained knowledge quality is conducted in compliance with the «Regulation on rectorial control of students retained knowledge quality». By the rectorial control the following clusters of disciplines are encompassed:
  - a) fundamental disciplines;
  - b) informatics;
  - c) foreign language;
  - d) job-related disciplines;
  - e) vocational disciplines.
- 6. After each round of integrated monitoring, the general and personalized results of rector's testing for each student are transferred by the Institute of Education Quality Monitoring to the relevant departments of the University for analysis and implementation of a set of activities.
- 7. Based on the results of integrated monitoring and rector's quality testing of residual knowledge, the department analyzes and forms a set of measures to improve the quality of specialist training every term.
- 8. The results of integrated monitoring and measures taken are regularly discussed at the Academic, Administrative and Methodological Councils of the University, at the faculties/institutes and departments. The final and analytical materials of the integrated monitoring are published in the mass media of the University and in the form of separate methodical brochures.

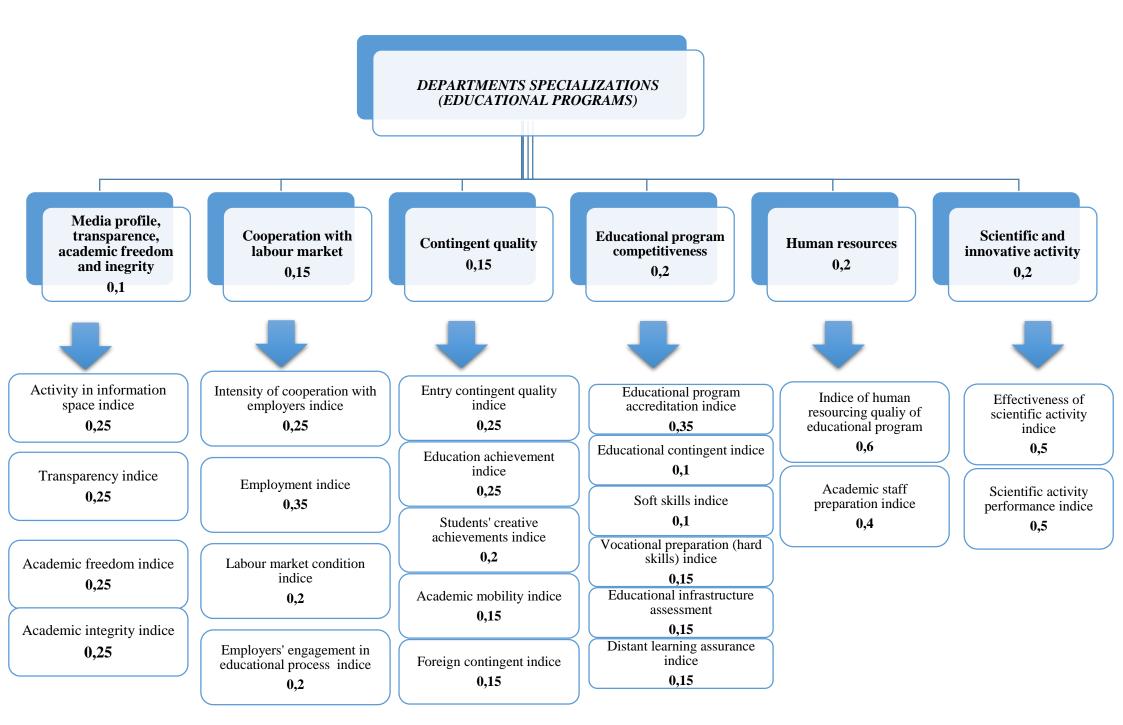
- 9. The Department of Educational Work and the Department of Economics and Finance in accordance with the approved methodology determine the amount of material incentives for departments, which according to the results of integrated monitoring took places from 1 to 30, and prepare appropriate orders.
- 10. The Department of Educational Work and the commissions of the Methodical Council of the University conduct at integrated inspection of departments, which according to the results of integrated monitoring took the last places, and hear their report at meetings of the Academic and Methodical Councils of the University.

#### **APPENDIX 5**

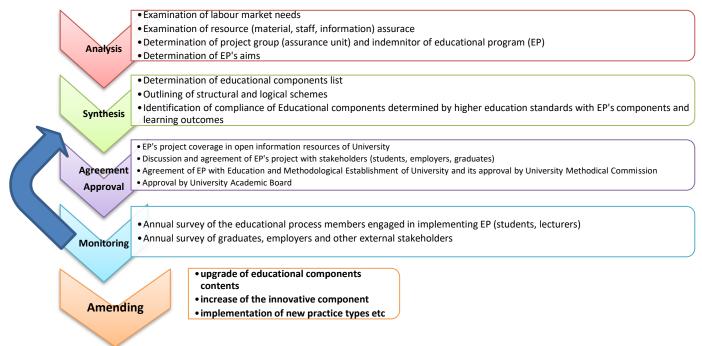
## PROCEDURE FOR PLACEMENT TESTING OF FIRST-YEAR STUDENTS' FUNDAMENTAL KNOWLEDGE AND SKILLS



#### STRUCTURE OF COMPLEX SUBDIVISIONS RANKING

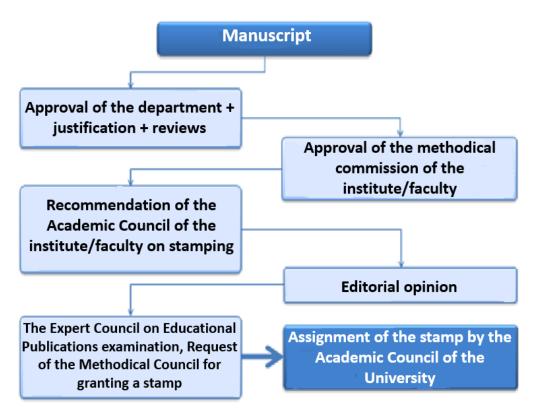


## PROCEDURE OF DESIGNING, MONITORING, AMENDING AND APPROVAL OF EDUCATIONAL PROGRAMS

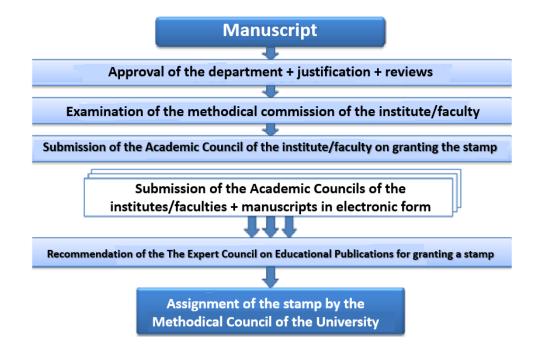


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# APPENDIX 9 COMPLIANCE OF RATING POINTS WITH UNIVERSITY RATING SCALE

| Students' rating points | University rating scale of acquired academic competencies |
|-------------------------|---|
| 95100                   | Excellent   |
| 8594                    | Very Good   |
| 7584                    | Good  |
| 6574                    | Satisfactory  |
| 6064                    | Sufficient  |
| Less than 60            | Fail  |

## QUALITY PERFORMANCE OF PROFESSIONAL AND PEDAGOGICAL EXCELLENCE OF DEPARTMENT ACADEMIC AND PEDAGOGICAL EMPLOYEES

| Professionally significant   | Secondary                         | Negative and professionally       |  |
|--|-----------------------------------|-----------------------------------|--|
| (dominant)   | (peripheral)                      | unacceptable                      |  |
| 1. Professional competence   |                                   |                                   |  |
| Knowledge of academic  | Knowledge of other                | Scientific incompetence           |  |
| subject area, its  | academic subject areas            | Serentine meanpetence             |  |
| fundamentals   | connected with the discipline     |                                   |  |
|  | that is lectured                  |                                   |  |
| High level of creative and   | Ability to implement the          |                                   |  |
| scientific-research initiative                                       | intellectual capacities           |                                   |  |
| Complete, consecutive, high-   | Expressive provision of           | Confusing provision of            |  |
| quality discipline teaching;   | thought with the use of           | thought, lack of precision of     |  |
| scientific accuracy of   | correct intonations               | wording                           |  |
| wording and phrases, well-   |                                   |                                   |  |
| bred, intelligible speech  |                                   |                                   |  |
| The lecture style is either  | The lecture style is              |                                   |  |
| emotionally methodological   | emotionally judgematic or         |                                   |  |
| or judgematically  | judgematically improvising        |                                   |  |
| methodological   |                                   |                                   |  |
| 2. Organizational and methodological aspects of delivering a lecture |                                   |                                   |  |
| Lecture planning according   | Control of classroom              | Recurrent delays to lectures, its |  |
| to time and strict plan  | attendance of students            | premature termination             |  |
| fulfillment  |                                   |                                   |  |
| The use of technical means   | Thorough depiction of             | Haphazard use of blackboard,      |  |
| of information delivery.   | graphs and figures which          | mistakes in conclusions and       |  |
| Rational use of blackboard,  | meets the standards               | graphical part, inconsistency of  |  |
| accurate and well-structured   |                                   | visual materials with the object  |  |
| formulae arrangement<br>Balance between theoretical                  | Sufficient amount of visual       | under study                       |  |
|  |                                   |                                   |  |
| and descriptive parts  | appliances, its task-oriented use |                                   |  |
| General interest of students   | Making notes of the lecture       | Absence of control over the       |  |
| in the lecture   | by students                       | learning process, noise in the    |  |
|  | by students                       | lecture hall                      |  |
| 3. Degree and methods of the use of didactic principles of learning  |                                   |                                   |  |
| Scientific rigour provision  | Idea development from             | Over-simplification of science,   |  |
| through strict argumentation   | phenomenon to its essence;        | primitiveness. Report on          |  |
| of key notions, use of   | elucidation of internal           | proved facts without giving       |  |
| modern scientific  | connections between               | commentaries, divorcement         |  |
| information  | phenomena; insight into           | from life                         |  |
|  | methods of scientific             |                                   |  |
|  | research activity; connection     |                                   |  |
|  | of theory with practice           |                                   |  |
| Systemacity and consistency  | Emphasizing the logical           | Inconsistency, illogicality;      |  |
| of the material; clear   | connection of the next            | dogmatism or formalism of         |  |
| formulation of the lecture   | material with the previous        | teaching                          |  |
| topic and its tasks  | one                               |                                   |  |

| Formation of a stable  | Checking the level of          | Memory overload with a          |  |
|--|--------------------------------|---------------------------------|--|
| structure of students'   | understanding and mastering    | significant number of           |  |
| knowledge  | of educational material by     | secondary facts                 |  |
|  | conducting rapid surveys,      | secondary racts                 |  |
|  | colloquia, tests               |                                 |  |
| The focus of the lecture on  | Formation of students'         | Lack of interest in the process |  |
| the development of students'                                       | ability to use the acquired    | and results of students'        |  |
| independence and activity in                                       | knowledge to explain new       | mastering of lecture material   |  |
| the learning process,  | facts; stimulating students to | mastering of rectare material   |  |
| understanding the essence of                                       | research activities            |                                 |  |
| the discipline   |                                |                                 |  |
| Emphasizing the connection   | The presence of the            |                                 |  |
| between the knowledge  | educational aspect of the      |                                 |  |
| acquisition, skills and the  | lecture; individual approach   |                                 |  |
| formation of personality;  | to students in the conditions  |                                 |  |
| focus on the use of  | of collective work with a      |                                 |  |
| educational material in  | group                          |                                 |  |
| professional activities  |                                |                                 |  |
| 4. Moral and psychological qualities of the lecturer's personality |                                |                                 |  |
| Strong, balanced type of   | Steady trend towards           | Weak, inert type of nervous     |  |
| nervous system   | leadership                     | system                          |  |
| Justice, pedagogical tact  | Magnetism (a fusion of         | Self-adoration, propensity for  |  |
|  | spirituality, loveliness and   | despotism                       |  |
|  | style)                         |                                 |  |
| The lecturer's behavior at the                                     | Elegant appearance,            | Untidy appearance, undue        |  |
| board is restrained and  | expressive facial expressions  | familiarity                     |  |
| tactful  | and gestures; artistry,        |                                 |  |
|  | external attractiveness, sense |                                 |  |
|  | of humor, friendliness         |                                 |  |
| Exactingness   | Reasoned self-confidence;      | Prejudice, vengeance,           |  |
|  | ability to make effective      | arrogance, unprincipledness,    |  |
|  | pedagogical decisions          | irresponsibility                |  |
|  | quickly and act in             |                                 |  |
|  | accordance with them           |                                 |  |

## **APPENDIX 11**

