#### Ministry of Education and Science of Ukraine National Technical University Kharkiv Polytechnic Institute

# REGULATIONS ON EDUCATION ACTIVITY QUALITY ASSURANCE AND HIGHER EDUCATION QUALITY ASSURANCE IN THE NATIONAL TECHNICAL UNIVERSITY KHARKIV POLYTECHNIC INSTITUTE

Approved by the Academic Council of NTU "KhPI"

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#### 1. GENERAL PROVISIONS

- 1.1. Regulations on educational activity quality assurance and higher education quality assurance in the National Technical University "Kharkiv Polytechnic Institute" (hereinafter the University) was developed on the basis of the Law of Ukraine "On higher education" and on the principles defined in the Standards and Guidelines for Quality Assurance in the European Higher Education Environment of the European Association for Quality Assurance in Higher Education.
- 1.2. Basic terms and their definitions.
- 1.2.1. Autonomy of the higher educational institution self-government, independence and responsibility of the higher educational institution in making decisions on the development of academic freedom, educational process organization, scientific research, internal management, economic and other activities, independent staffing within the limits established by this law.
- 1.2.2. *Academic mobility* an opportunity for participants of the education process to study, teach, have practical training or conduct scientific activities in another higher education (research) institution in Ukraine or abroad.
- 1.2.3. *Academic freedom* independence of the participants of the education process in teaching, academic teaching, academic and/or innovation activities based on the principles of freedom of speech and creativity, propagation of knowledge and information, research and use of its results with restrictions established by the legislation.
- 1.2.4. *Higher education* is a collection of systematized knowledge, skills and practical aptitudes, manners of thought, professional, worldview and social qualities, moral and ethical values, other competences, acquired in a higher educational institution (research institution) in an appropriate field, in a certain qualification at higher education levels that are more complex than the full secondary education level.
- 1.2.5. European Credit Transfer and Accumulation System (ECTS) credit transfer and accumulation system used in the European Higher Education Environment with the aim of providing, recognition, confirmation of qualifications and educational components, and which facilitates academic mobility of higher education students. The system is based on determining the academic workload of a higher education student required to achieve specified learning outcomes, and is recorded in CTS credits.
- 1.2.6. *Higher education students* persons who study at a higher educational institution at a certain higher education level in order to receive an appropriate degree and qualification.
- 1.2.7. *Qualification* the official result of assessment and recognition, which is acquired when the authorized body established that an individual had acquired competencies (learning outcomes) in accordance with the higher education standards, and which is certified by the relevant higher education document.
- 1.2.8. Competence a dynamic combination of knowledge, skills and practical aptitudes, manners of thought, professional, worldview and social qualities, moral and ethical values, which determines an individual's ability to carry out professional duties and further learning activities successfully, and is the result of education at a certain higher education level.
- 1.2.9. *Educational activity* the activity of higher educational institutions which is carried out to provide higher, postgraduate education and to meet other educational needs of higher education students and others.
- 1.2.10. Educational (educational-professional or academic) programme system of educational components at the appropriate level of higher education within a specialty, which determines the requirements for the education level of individuals who can begin training in this programme, a list of academic subjects and a logical sequence of their study, the number of ECTS credits required to complete this programme, as well as the expected learning outcomes (competences), which a student of the corresponding higher education degree has to acquire.
- 1.2.11. Learning outcomes knowledge, abilities, skills, ways of thinking, views, values, other personal qualities that can be identified, planned, assessed and measured, and which an individual is able to demonstrate after the completion of the educational programme or its separate educational components.
- 1.2.12. *Specialization* speciality component defined by a higher education institution and which provides for a specialized educational programme for training of higher and postgraduate education students.

- 1.2.13. Speciality a component of the area of knowledge in which professional training is carried out.
- 1.2.14. *Higher education quality* conformity of learning outcomes with the requirements established by the legislation, by an appropriate higher education standard and/or by contract on provision of educational services.
- 1.2.15. *Educational activity quality* level of educational process organization in a higher educational institution that meets higher education standards, provides high-quality higher education for individuals and contributes to the creation of new knowledge measures.
- 1.3. The Law of Ukraine "On Higher Education" provides for the implementation of such procedures and activities:
- 1) definition of principles and procedures for higher education quality assurance;
- 2) monitoring and periodic revision of educational programmes;
- 3) annual assessment of higher education students, academic, academic teaching and teaching staff and regular publication of the assessment results on the higher educational institution official website, on information stands and by any other means.
- 4) providing advanced training for teaching, academic and academic teaching staff;
- 5) ensuring availability of the resources necessary for the educational process organization, including students independent work in each education programme;
- 6) providing availability of information systems for education process efficient management;
- 7) providing publicity of information about educational programmes, higher education degrees and qualifications;
- 8) providing an efficient system for prevention and detection of academic plagiarism in scientific works of the staff and higher education students;
- 9) other procedures and activities.
- 1.4. The University system for internal quality assurance takes into account the trends of main indicators of generally recognized international and national ratings, as well as the requirements of the national system for external quality assurance of education activity and quality assurance of higher education in Ukraine. The quality assurance system is also aimed at meeting demands and realizing rights of the participants of the educational process. Corresponding to modern European practices, the University system for internal quality assurance is based on the principles of publicity (transparency), academic rectitude, competitiveness, flexibility and adaptability, integrativity.
- 1.5. The University system for higher education quality is based on the following principles:
- awareness by all employees of the responsibility for the quality of the higher education provided;
- recognition of the necessity for development of strategies, policies and procedures of quality assurance for educational programmes;
- making scientifically sound decisions based on the analysis of complete and objective information;
- rejection of the authoritarian management style and transition to leadership;
- deep and full delegation of authorities at all levels of the University management, which also provides for the responsibility of the managers for the system functioning;
- continuous staff training;
- maximum consideration of all stakeholders' requirements for the higher education quality.
- 1.6. The University works in collaboration with all stakeholders, which include:
- bodies administering higher education (Ministry of Education and Science of Ukraine), National Agency for Higher Education Quality Assurance, Scientific and Methodological Council of the MES of Ukraine, etc.);
- suppliers of applicants (SES, VTES, colleges, technical schools, other educational institutions);
- stakeholders;
- the University staff (academic, academic teaching, and teaching staff, etc.);
- higher education students and their parents;
- civil self-government bodies in the sphere of higher education and science, etc.
- 1.7. The University quality management system also corresponds to the principles of SSU ISO 9001 standard and ensures the implementation of the main tasks, namely: planning, quality assurance and quality confirmation.

The main objective is to form a society and employers sustained trust that the University is a supplier of highly educated and highly professional specialists for industry and society who meet the best international requirements and have a high quality level of the knowledge acquired.

According to SSU ISO 9001 standards the quality management system is based on eight principles which the University administrators use to optimize the activities of the higher educational institution (HEI).

Principle 1. Consumer orientation.

The results and stable activity of the HEI depend primarily on consumers of educational services. Therefore, the administrators of the University analyze current and future demands of consumers of educational services and meet these demands fully, exceeding the expectations. For this purpose the University systematically conducts marketing research of the labour market, and also monitors and forecasts future quality requirements for educational services.

Principle 2. Leadership.

The University administrators take the main leading position in all areas of activity: set goals and ensure the team unity in its achievements at all levels, provide support and management, and also take on responsibility for the optimization and systemic improvement of the University management and supporting processes.

Principle 3. Staff interest.

The University staff forms the basis of the higher educational institution. The heads of the University and of its structural divisions contribute to the creation and maintenance of the optimal socio-economic environment and psychological climate in the team, directing it to perform the main tasks.

Principle 4. Process approach.

Any activity at the University, that has its *inputs* and *outputs* (SSU ISO 9001) and uses certain resources, is considered as a process. This approach allows to achieve the desired results of the activity most effectively.

Principle 5. System approach to management.

Considering any activity as a process and taking into account that *output* of one process is the *input* to another or more other processes, the management of interrelated processes at the University is carried out as a system management. This approach contributes to successful and efficient achievement of goals in the sphere of education activity quality.

Principle 6. Continuous improvement.

Continuous improvement of the University is the main goal of each University employee, it is based on preventive and corrective actions (improvement and assessment of the effectiveness).

Principle 7. Fact-based decision making.

At the University all decisions are made on the basis of the analysis of functioning of the system of higher education quality management, which allows to improve effectiveness of the decisions taken.

*Principle 8. Mutually beneficial relationship with suppliers.* 

Taking into account the fact that the University and suppliers are interdependent, the University administers pursue a policy of mutually beneficial relations with suppliers, which increases the ability of both parties to create material and spiritual values of the society.

- 1.8. The University system of internal higher education quality assurance is an integral part of the system of higher education quality assurance in Ukraine and contains two subsystems:
- for the University higher education quality assurance and monitoring;
- for the University educational activity quality assurance and monitoring.

The subsystem for higher education quality assurance and monitoring is directed to assess the learning outcomes of higher education students by gradual transition to transparent assessment methods and by using multi-point complex rating scales, differentiated approaches to assessment of learning outcomes of higher education students.

The subsystem for the University educational activity quality assurance and monitoring includes the following measures:

- internal audits of activity quality of structural subdivisions, which ensure the educational process functioning;
- providing a feedback with participants of the educational process (interrogation survey of higher education students, academic teaching staff, employees);

- support of the system of quality rating assessment of the academic teaching staff and students' activities;
- promotion and monitoring of the staff advanced training;
- assistance in improving teaching skills of the University academic teaching staff, other staff, by organizing a variety of seminars (psychological and teaching aspect for young teachers, study of foreign languages, etc.), academic readings, conferences, round tables meetings and forums;
- ensuring the availability of the information on the University activity results on the website;
- continuous optimization of information system operation for the support of modern information and educational environment;
- taking measures to detect and prevent academic plagiarism.

#### 2. QUALITY ASSURANCE PRINCIPLES AND PROCEDURES

2.1. The University develops the Concept (Strategy) of its development for 5 years, which reflects the objectives for all kinds of activity (educational, scientific, organizational, financial and economic, etc.). On its basis strategy, direction of activity, objectives, principles and quality assurance procedures that are available to general public are determined.

This process involves all the parties concerned (stakeholders), namely, higher education students, academic teaching staff; administration, other University staff and employers.

The procedure for ensuring educational activity quality has two components:

- 1) requirements and norms for introduction and organization of educational activity, that are specified in certain state documents (normative-legal documents, internal documents, etc.);
- 2) supervision of the execution of requirements and norms, monitoring and analysis of the indicators of the educational services quality, taking actions based on analysis in order to improve the functioning of the University system of higher education quality assurance.
- 2.2. Reporting procedure, supervision and monitoring of the quality assurance indicators should be carried out:
- at the department level by monitoring of the academic teaching staff activity, its consideration, discussion and decision-making at departments meetings of a certain faculty (institute). Monitoring of the implementation of decisions taken is carried out by the appropriate unit by order of the vice-rector for science and education:
- at the faculty level by monitoring of the departments activities, consideration, discussion of issues and by decision-making at academic council meetings of the faculty (institute).

Monitoring of the implementation of decisions taken is carried out by the appropriate unit by order of the vice-rector for science and education;

- at the University level - by monitoring of the activities of faculties (institutions), separate structural units, other units, consideration of issues, discussion and decision-making at the University Academic Council meeting, implementation of its decisions.

Monitoring of the decisions implementation is executed by the Academic Council secretary together with the Department of Educational Activities Quality Assurance.

# 3. MONITORING AND PERIODIC REVISION OF EDUCATIONAL PROGRAMMES

- 3.1. The main purpose of monitoring and revision of educational programmes is to confirm their relevance taking into account global development trends in the corresponding area of knowledge and labour market demands, to improve the efficiency of educational process organization and to meet higher education students' demands.
- 3.2. The monitoring and revision system provides for:
- 3.2.1. Expert assessment made by labour market representatives of the relevance of the educational programmes content and of graduates readiness for professional activity.

Implementation procedure: introduction of a feedback system between enterprises, institutions and organizations (employers) and the University to obtain expert information on educational programmes content and on the quality assessment of the professional training of graduates; analysis of demands and offers in labour market; monitoring of the necessity for introducing new specialties (specializations).

- 3.2.2. Assessment of the state of educational process organization made by higher education students, monitoring of the success and learning outcomes of higher education students. Implementation procedure: questionnaire survey of higher education students on their assessment of the level of educational process organization in studies of selected academic subjects; monitoring of students' success and achievements, analysis of the attestation results that are provided by the educational programme.
- 3.2.3. Assessment of the relevance of educational programmes content and organization of the educational process by faculties (institutes), departments and by academic teaching staff. Implementation procedure: consideration of the proposals of faculties (institutes), departments and individual instructors on the relevance and content of educational programmes.
- 3.2.4. Generalization and prompt response to current information regarding the content of the educational programme, problem situations and violations in its realization. Implementation procedure: informing the appropriate officials (heads of departments, directors of institutes (deans of faculties), vice-rectors, the Rector) on the quality of the educational process according to programmes; assessment of the relevance of educational programmes.

Monitoring: continually. Units in charge: departments

## 4. ASSESSMENT OF LEARNING OUTCOMES OF HIGHER EDUCATION STUDENTS

- 4.1. Assessment procedures for the University higher education students ensure programmes realization in order to encourage students to take an active part in development of the educational process, and the students assessment reflects this approach. The assessment is based on the national scale, the University multi-point (differentiated) scale and on the ECTS international scale, it also provides for current control procedures, semester attestation, final attestation.
- 4.2. The University ensures the compliance of the procedures for higher education students assessment with the following principles:
- the use of modern achievements in the sphere of testing and examination procedures;
- demonstration of the effectiveness of the educational process organization as a result of assessment;
- compliance with the learning outcomes planned and with program objectives;
- compliance with the purpose (diagnostic, current or final);
- taking into account reasons for absence of students in classes (due to illness or for other valid reasons);
- informing higher education students about the assessment procedure and its criteria;
- possibility for higher education students to appeal against the assessment results;
- participation of at least two examiners in assessment;
- administrative verification of the accuracy of the assessment procedure;
- formation of clear generally accepted criteria;
- assessment by specialists who are aware of the impact of their assessment on the further learning process and success of higher education students in acquiring knowledge, skills and aptitudes required for the assignment of an appropriate qualification.
- transparency and objectivity of the assessment process according to the established procedures. Monitoring: upon completion of semester training according to the curriculum. Units in charge: training units.

#### 5. ENSURING COMPETENCE OF ACADEMIC TEACHING (TEACHING) STAFF

- 5.1. Ensuring competence of academic teaching (teaching) staff must comply with the procedures and criteria by which the University:
- establishes clear, transparent and fair procedures for staffing and employment conditions;
- encourages scientific activities to strengthen the links between education and research;
- monitors the schedule and quality of scientific research done by academic and academic teaching staff;
- encourages innovations in teaching methods and use of new technologies;
- provides advanced training of teaching, academic and academic teaching staff, improves the system of formation of teaching competencies of young instructors, assistants and scientists;

- annually assesses the academic teaching staff activity: their teaching activities; scientific, methodological and organizational work; quality of classwork and control measures; their international activity using the analysis of the internal audit indicators, department reports, individual plans realization, etc., sociological interrogation of students and graduates.

The quality of the academic teaching and teaching staff is one of the main factors of the University education activity quality.

Advanced training is seen as a continuous process of instructor's professional development in order to ensure the quality of educational services and research, and to stimulate integration of world-class scientific achievements and innovative learning methods into the University academic and educational activity.

The purpose of the advanced training and practical training of the University academic teaching and teaching staff is to develop professional competencies and teaching skills that help improve the quality of managing, teaching, methodological, scientific, innovative, creative and educating activities.

Monitoring: annually. Units in charge: training units, administration and Human Resources Department.

# 6. PROVIDING AVAILABILITY OF THE RESOURCES NECESSARY FOR THE ORGANISATION OF THE EDUCATION PROCESS

- 6.1. Providing educational process with necessary resources and support of higher education students at the University has to correspond to the licensed and accreditational demands that determine the regulations of providing higher education students' of all stages preparation with material-technical and informational basis, that is:
- -providing the educational environment with rooms necessary for conducting classes and practices of all forms and kinds, equipping them according to modern standards. Conducting attestation of current and newly created laboratories once per five years with the aim of improving material-technical basis, improving scientific-methodological equipment;
- -aligning educational conditions with the existing demands of occupational health and fire security. Resource indexes are reflected in the department passport.
- -providing dining points, a gym, a stadium or sports grounds, a medical centre.
- -providing educational process and other kinds of University activity with modern solutions in the field of informational technologies, including informational educational systems, students` individual work fulfilment control system, the opportunities for electronic learning, communicational portals for students and instructors.
- -providing by the University library the access to modern sources of information and opportunities for students' individual work.
- -providing educational process with educational, methodological and scientific literature on paper and on electronic media.
- -improvement of forming and using financial resources, which will let them provide educational programmes;
- -complex estimation and monitoring of financial resources usage efficiency;
- -informing students about existing services and introducing new ones;
- -giving students opportunity to express their opinion about the services and educational resources given to them.

Monitoring: annually.

Units in charge: educational, administrative-household subdivisions, scientific-technical library, accountants, student council.

# 7. PROVIDING EXISTANCE OF THE INFORMATION SYSTEMS FOR EFFICIENT EDUCATION PROCESS MANAGEMENT

- 7.1. Electronic system of collecting and analysing information and electronic document flow system stimulate efficient management of educational activity quality at the University.
- 7.2. The components of the system of collecting and analysing information are data bases on the main spheres of University activity:
- -forming the contingent of higher education students and organising educational process;
- -staffing of educational and scientific activity;

- -scientific research;
- -resource providing of educational process and scientific research work;
- -forming informational segment for providing publishing activity (automation of publishing activity).
- 7.3. Electronic document flow system presupposes existing of University document flow standard, subsystem for electronic signature, electronic documents templates and a system of their editing, electronic document flow software.
- 7.4. Informational systems allow to provide monitoring of University activity quality and making efficient management decisions as for its improvement.

With the help of informational systems, to conduct monitoring of University activity quality and making efficient management decisions as for its improvement annually.

Units in charge: university authorities, IEC, educational subdivisions, scientific research centre.

# 8. PROVIDING PUBLICITY OF INFORMATION ABOUT THE UNIVERSITY, EDUCATIONAL PROGRAMMES, HIGHER EDUCATION DEGREES AND QUALIFICATIONS

- 8.1. Publicity of information about university activity is provided according to Education and Science Ministery of Ukraine order "Some issues of promulgating information about higher educational institutions activity".
- 8.2. Information obligatory for promulgating according to the demands of the Law of Ukraine "About higher education" is set on the official site of the University:
- 8.2.1. Documents regulating University activity: NTU "KhPI" Principless, regulations on organising educational process in NTU "KhPI";
- 8.2.2. General analytical materials about University activity, the Rector's reports, annual reports on different fields of activity;
- 8.2.3. Information on staff issues: University administrative bodies members, the list of vacancies, which are appointed on competitive principles, staff list for the current year;
- 8.2.4. Information and documents connected with organizing educational process: list of specialities for which specialists are prepared, educational (professionally oriented educational, educational-scientific) programmes, information about postgraduate programme and doctoral course;
- 8.2.5. Information for applicants: the rules for entering the University for the current year and changes in them, the list of specialities for which admission has been announced, the fee for education and providing additional educational services;
- 8.2.6. Information for students: information about the activity of student self-governing, about organising students' leisure activities, examples of documents;
- 8.2.7. Information about scientific activity of the University: the spheres of scientific activity and scientific projects, conferences, seminars, competitions and exhibitions held in the University, scientific publications, specialised academic councils, students' scientific community activity;
- 8.2.8. Information about financial activity of the University: University financial computation for every year and all changes in it, annual financial report taking account of the information about funds incoming and expenditure, information about spending as to programmes, information about conducting tender procedures;
- 8.2.9. Information about University participation in national and international ratings of higher educational institutions.
- 8.3. On the sites of structural units the following information is placed:
- 8.3.1. Information about the structural unit (institute, faculty, department, section centre), fields of activity, administration, staff;
- 8.3.2. Scientific materials: electronic versions of publications, description of scientific achievements, materials of scientific conferences, students' scientific activity;
- 8.3.3. Educational materials: timetable for the current semester as well as sessions schedules;
- 8.3.4. Information for students' self-governing activity, students' participation in contests and olympiads, organizing leisure time.
- 8.4. Information obligatory for promulgation on the official site of the University is systematically upgraded.

8.5. Automated management system allows to provide monitoring of the quality of University activity and making efficient management decisions as for its improvement.

Monitoring: continually.

Units in charge:University authorities, IEC, educational units, Human resources department, scientific research unit.

# 9. PROVIDING AN EFFICIENT SYSTEM OF PREVENTION AND DETECTING OF ACADEMIC PLAGIARISM IN SCIENTIFIC WORKS OF THE STAFF AND HIGHER EDUCATION STUDENTS

To introduce new appropriate technologies as for preventing and detecting academic plagiarism. To create and constantly improve the system and mechanisms of implying academic rectitude, particularly through preventing cases of academic plagiarism and of breaking the norms of copyright.

The system of preventing and detecting academic plagiarism must be spread on scientific and educational works of academic teaching workers, research staff and other University employees, doctorants, postgraduates and students. Corresponding software to check scientific works and publications for plagiarism must be used.

To conduct purposeful complex work of all University links as for implementation and improvement of different means of educational activity, upgrading the content of educational courses, improvement of teaching methods, introducing new forms of scientific work with students with the aim of preventing plagiarism, forming students' social responsibility and the skill of working individually.

With the aim of encouraging academic rectitude, the administration must constantly inform resource users about the concept of academic rectitude, its components, the indications of plagiarism, organizing the system of preventing and fighting plagiarism, the principles of using electronic antiplagiarism systems. To popularise among students and scholars ethical norms of quoting the used sources, as well as to acquaint with the standards and international styles of bibliographic description of documents, to hold informational classes and trainings for librarians and users (students, instructors and scholars) as well as discussions, round tables on the issues of academic rectitude and preventing plagiarism with involvement of all participants of educational and scientific activity.

Monitoring: annually.

Units in charge: the heads of specialised academic councils, educational subdivisions, scientific technical library.

#### 10. INTEGRATION INTO EUROPEAN EDUCATION-SCIENTIFIC ENVIRONMENT

Development of international co-operation by means of activating educational process participants' taking part in international events, cultural exchange, social programmes and projects.

Developing co-operation in educational sphere, creating together with European universities international educational programmes and their accreditation.

Introducing higher education students' preparation according to "double diploma" programme together with European universities,

Holding international scientific conferences and symposiums,

Involving students, post-graduates and young scientists of the University into participation in international programmes,

Advanced training of academic teaching staff and other University employees by means of internship abroad at leading higher educational institutions and scientific institutions,

Providing and co-ordinating of units activity on creating and implying international and interregional agreements, contracts and programmes.

Monitoring: annually.

Units in charge: units responsible for international contacts, educational units, scientific research unit.