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**THE MAIN ASPECTS OF PREPARATION THE  
COMPETENT SPECIALISTS IN THE CONTEXT OF  
SUSTAINABLE DEVELOPMENT****T. HAVRYLENKO<sup>1</sup>, N. SHABATYN<sup>1</sup>**<sup>1</sup>Kyiv National University of Technologies and Design**Keywords:**

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**ABSTRACT**

The article deals with the process of formation of masters' research competence in universities. Researched the current state of national institute of master's training means of achieving high quality training of competitive experts, ways of integrating Ukrainian higher education into the European educational space. The article defines the issue of the effective use of innovative and communication technologies while training masters in the modern university. Based on the analysis of legal documents relating to the functioning of the higher education of Ukraine were analyzed courses of forming national institute of Master Degree.

Ukraine once again confirmed its European development vector by signing an agreement on European integration. This applies not only to support of democratic values, ethical and social norms, but also to the aspirations of our country to create and develop a model of European society. Reform must be carried out in the economic, political and other social spheres, as well as in the education system, which takes a leading role in the professional and educational preparation of modern specialists.

The processes of European integration continue to spread onto more and more spheres of our life, of which education is of no least importance. The problem of quality of education in Ukraine in the conditions of implementation of European standards of higher education occupies central place in the world's educational discourse. The world's education development trends are necessitated by practical implementation of innovative trends taking place in almost all spheres of economy, while augmentation of accumulated knowledge represents the main factor behind the growth of social wealth. Consequently, people interact among each other in the sphere of education for the purposes of augmenting and developing fundamentally different knowledge and determining the ways of its optimal use. As a result, education may be characterized as the main sphere of preparing competitive specialists to achieve higher results in national economic development.

The educational system of any country, despite its uniqueness, is made up of the same elements. In its composition the following main components are pointed out: generation of knowledge (scientific work and education); practical application of knowledge (production sector of goods and services); management component (organization of training and educational environment).

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The connection between the elements is provided by a special environment, formed by moral, social and cultural environment of society, government policy and regulatory framework. Ukrainian higher education systems are based on the above components, but their implementation and content are somewhat different.

Formation of knowledge of future specialists in a particular subject area is the first and the main component of the whole educational process. But due to the high velocity of propagation, change of information and new information technologies there is a need in the formation of the basis of knowledge that enables the specialist to have the professional competence. In addition, they must be prepared to develop and learn throughout their lives, thereby improving their professional and personal qualities.

Integration of the system of higher education into European and world organizations with simultaneous preservation and development of national achievements and traditions of higher school is one of the principles of development of Ukraine's educational policy. Ukraine as a member of the Bologna Process faces a number of key priority tasks envisaging implementation of standards, recommendations and main instruments of the European Higher Education Area: implementation of three-level education system (Bachelor, Master, Philosophy Doctor); innovative European Credit Transfer and Accumulation System; Annex to the European-standard diploma; National Qualifications Framework. It became possible thanks to creation of a legislative framework in higher education sphere, revision of existing and passage of new laws and regulatory documents, and implementation of measures aimed at determining the status of higher education institutions of all levels of accreditation and changing the areas and forms of teaching.

Contemporary Ukrainian Education is in the process of formation and development, due to a difficult task: to preserve all the positive position and experience of Ukrainian education, enrich its innovative achievements and harmoniously reconcile them. This situation requires a comprehensive, systematic and coordinated action in higher education, namely:

- Creating conditions to achieve a new level of mobility and practical vocational training;
- Creating conditions for the development of highly cultured personality and creative self-realization of every citizen of Ukraine;
- Renewal of educational content and organization of educational process in accordance with European and international standards;
- Ensuring cohesion between the education system and labor market needs.

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Participation of Ukrainian universities system in the Bologna process requires it to take part in the modernization of scientific, academic and educational work. For these purposes, two-tier system of education, universal graduation diplomas, degrees and qualifications, which is recognized throughout Europe were implemented [1, 2, 3, 5]. A universal system of evaluation ECTS (European Community Course Credit Transfer System) was adopted. This will enable the Ukrainian educational system to be close to the European system and will enable future graduates to be competitive on the European labor market.

But with the majority of positive factors of transformation of the national training system in Ukraine, there are significant differences, which are due to national and cultural features. The European system of education is based on the values of science, culture and education of the leading countries like France, Germany, Italy, which have always been centers of science and art. But at the same time, higher educational institutions in Europe are trying to preserve national characteristics and values of their countries.

Considering the foregoing, the Law of Ukraine *On Higher Education* (a legislative basis for higher education in Ukraine) was developed and passed in July 2014. In the conditions of implementation of the Law of Ukraine *On Higher Education* which sets out the main legal, organizational and financial principles of functioning of the higher education system, preparation of competitive specialists (in particular, holders of Master's degree) becomes an extremely important matter. It is worth noting that the problem of legal framework regulating Master's programs in Ukraine remains scarcely studied, whereas legal regulation of professional preparation of Masters and its scientific substantiation plays an important role in creation of the European Higher Education Area in Ukraine.

When analyzing the process of professional preparation of Master degree holders in the conditions of European integration, one has to understand a certain set of requirements which society has to the system of education in the age of intellectual work and information technologies, of which the following are especially important: inventive and critical thinking ability; universal, systemic knowledge, high degree of adaptation and self-development; key competences in the relevant industry; ability to make decisions, social responsibility; ability to control dynamic processes and work with projects; ability to work in a team, high productivity.

Fulfillment of requirements to preparation of future specialists, in particular, Masters, is ensured by innovative type of education, because contemporary education must, on the one hand, remain the basic phase of the person's erudition and adaptation, and on the other hand, predictably meet today's requirements. That's exactly what the graduates of Kyiv National University of Technology and Design are.

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According to the Law of Ukraine *On Higher Education*, Master is an academic degree attained at the second level of higher education and awarded by a higher education institution upon successful completion of an academic program by a seeker of higher education. A Master's degree is awarded under a professional education or scientific education program which includes advanced fundamental, humanitarian, socioeconomic, psychological and pedagogical, special and practical components.

The essence of Master's education is determined by qualification characteristics and professional education program of preparation which provided the basis for academic curriculums. Master's programs at Kyiv National University of Technology and Design are classified as:

- **professional** programs envisaging development of professional and managerial competences in a certain sphere of professional activity;
- **scientific** programs envisaging in-depth study and research in a particular field of science.

To be eligible to enroll to **professional specialization programs** on the basis of admission tests, an applicant has to have education and be desirous of continuing education in the selected area of preparation to attain in-depth specialization in a selected field. These programs are required to provide manufacturing industries with highly-skilled specialists possessing innovative knowledge and able to implement it in advanced, highly-efficient technologies. The volume of professional education program for a Master's degree is 90-120 ECTS credits.

Kyiv National University of Technology and Design prepares **Masters in scientific fields of specialization** solely at departments licensed to prepare postgraduates and which have sufficient financing of research projects and achieved substantial progress in research and development sphere. Enrollees to these Master's programs are required to be fluent in at least one foreign language. Preparation of Masters in scientific disciplines envisages continuation of research work in a selected field of specialization at a postgraduate school or R&D institute and at knowledge-intensive enterprises. Scientific education programs for a Master's degree are available for full-time students only. The volume of scientific education program for a Master's degree is 120 ECTS credits. The number of persons studying under a scientific education program must be limited to three.

Studies under Master's scientific education programs offered by Kyiv National University of Technology and Design are based on individual schedules. Individual academic schedule of the attendee of a Master's scientific education program is prepared by his academic advisor, adopted at department's meeting and requires approval by the University Rector's order.

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The Master's degree paper represents the result of original comprehensive research of a problem in the field of degree seeker's specialization. The paper must be written individually during the period of study under a Master's program simultaneously with the study of disciplines required by an individual curriculum. Requirements to the Master's degree papers are set out in the Regulation on Preparation of Master's Degree Papers at Kyiv National University of Technology and Design.

Master's papers of all types must meet the following requirements which represent high status of and requirements to Master's degree holders:

- posting paper's subject on Kyiv National University of Technology and Design website;
- a research work must be published in a scientific magazine, collection and/or electronic publication;
- examination of paper for the signs of plagiarism;
- participation in a scientific conference with subsequent publication of an article dealing with the subject of Master's paper.

Master's degree papers under scientific education programs are recognized as a separate type of graduation qualification papers which are accorded the status of Master's thesis and subjected to the following additional requirements:

- introduction of the institute of opponent when defending a Master's degree paper (experienced academic and research fellows are designated as opponents for Master's papers);
- individual speech with a report on a subject of Master's thesis at minimum two scientific conferences, of which at least one must be held outside Kyiv National University of Technology and Design;
- publication of summaries of foreign-language reports at an international conference;
- preparation and publication of a research work in a specialized magazine.

An additional requirement to professional Master's programs includes availability of an opinion from a company, institution or organization where the results of research were used.

Graduates of a joint program offered by Kyiv National University of Technology and Design and another Ukrainian university with a specialization accredited at the Master's level may be issued a dual state-recognized diploma from the two universities. Licensed scope of these universities will be used at the 50/50 ratio in this case. In the case of a joint program with a foreign university, diplomas of either of or both these universities may be issued.

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Preparation of competitive specialists requires the following key knowledge and skills from the seekers of higher education: proficiency in native language; proficiency in foreign languages; ability to learn; interpersonal and intercultural skills; businesslike qualities; cultural expression. For that purpose, it is necessary to develop methodology of continuous professional education below and at the higher education level according to the needs and abilities of population.

In the conditions of sustained development, economic system will be able to function efficiently thanks to specialists capable of continuously gaining and employing scientific knowledge and mastering technologies of searching for new information. Under these conditions, the problematic parameter of efficiency of Ukraine's higher education system will be overcome: once receiving a job, a graduate will be able to use his knowledge and skills in practice right away. While in the rest of the world intellectual activity became a very important factor of economic development and social achievements, Ukrainian realities meant that a quite substantial intellect of the nation became alienated from economy and at the same time from the entire social system.

In the course of integration into the European Higher Education Area, Ukrainian system of education faces a number of problems:

1. Transition to the European Credit Transfer and Accumulation System of organization of academic process, which requires determination of academic workload on the seeker of higher education necessary to achieve required results
2. Contact between the higher school and labor market
3. Students' internship in realities of market economy
4. Separation of academic and professional areas of higher education in Ukraine
5. Bringing Ukraine's academic qualification degrees to EU standards

Therefore, this study allows to formulate a number of important points and suggestions regarding development prospects of Ukraine's education system:

- integration of science and education must facilitate development of university sector of science, preservation of scientific schools and increase of scientific potential of Ukrainian universities;
- close interaction between science and technology must be combined with preparation of modern-generation specialists and highly-skilled research cadres;
- universities must be given greater autonomy and academic freedom and their rights to manage financial resources must be broadened, which is an indispensable condition of their further development.

Therefore, while the reconstruction of the education system of Ukraine and introduction of educational technologies, methods and tools that suggest its introduction in the framework of the Bologna process, we should not forget about the peculiarities of the national education system and cultural features. Moreover, the Bologna process involves variability of pedagogical techniques and approaches. Therefore, in collaboration with institutions of higher education of the European countries, the Ukrainian higher education system should strengthen the links between the existing systems of education, retaining the strengths of its own traditional high school.

Realization of the aforementioned areas in Ukraine's higher education system will help: improve its effectiveness and quality; resolve the problem with recognition of Ukrainian diplomas abroad; increase mobility of students, academic and research staff; strengthen positions and achieve equal partner's status of Ukrainian universities and citizens on European and world markets and on educational services market.

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