

Teaching in Kyiv Institute for Publishing and Printing in the conditions of Bologna Process

Petro Kyrychok, Tetiana Kyrychok

Ukraine joined the Bologna Process in May 2005.

The directions of implementation of the Bologna Declaration's concepts in the Institute for Publishing and Printing are following:

1. Preparation of new educational curriculums for two-cycle training of Bachelors and Masters using the unitary system of credits (European Community Course Credit Transfer System - ECTS);
2. Increasing of students', postgraduate students', lecturers' and researchers' mobility;
3. The whole life education;
4. Increasing of education quality standards and development of system of knowledge's assessment.

The Bachelors' training in the IPP comprises 4 years (8 semesters). During this period a student must complete the educational curriculums in 247 ECTS including the Bachelor's thesis.

For majors "Technology of Printing" and "Technology of Packaging" as well as for all majors within the NTUU "KPI" 247 ECTS consist of the following: 30 ECTS – Cycle of the Humanities and Socio-Economic Training. This cycle and its content are general for all majors of the University; 60 ECTS – Cycle of Natural-Science Training (fundamental sciences); 157 ECTS – disciplines for professional practical training.

Among these 157 ECTS 65 credits of so-called normative part of curriculum are disciplines for professional practical training according to the Educational and Skills Standard for major approved by the Ministry of Education (printing technology, material science, metrology and standardization, prepress data processing etc).

Another 73 credits are so-called disciplines of a university's choice ("Special Parts of Printing", "Technology of Electronic Media", "Technology of Issues Protection" etc).

20 ECTS are disciplines of students' free choice. Among these are "Logistics", "Ergonomics", "Storing and Restoration of Issues", "Packaging Utilization".

Present 3- and 4-year students have an opportunity to be trained for 1.5 years and obtain the Specialist's Diploma or to earn the Master Degree after 2 years of training. The educational curriculum for future Specialists is 80-85 ECTS, for Masters – 105-110 ECTS including Diploma theses.

For graduates who have already obtained the Specialist Diploma and would like to obtain Master degree IPP proposes correspondence 1 year study with separate curriculum (48 credits) which is completed with Master thesis.

Ukraine joined the Bologna Process not long ago, i.e. in May 2005. However, since that moment the National Technical University of Ukraine "Kyiv Polytechnic Institute" and Institute for Publishing and Printing (IPP) as one of the advanced institutes of our University have contributed a lot to implement the Bologna Declaration's concepts in our educational process.

This work coincided with the process when our former Printing and Publishing Department was reorganizing to the Institute for Publishing and Printing. Such reorganization can be considered as high recognition of our work taken into account that in the NTUU "KPI" the status of institute can be given only to the advanced departments.

The implementation of the Bologna

Declaration's concepts in the IPP is realized in several directions.

1. Preparation of new educational curriculums for two- cycle training of specialists such as Bachelors and Masters using the unitary system of credits (European Community Course Credit Transfer System - ECTS) (Fig. 1).
2. Increasing of students', postgraduate students', lecturers' and researchers' mobility.
3. The whole life education.
4. Increasing of education quality standards and development of system of knowledge's assessment.

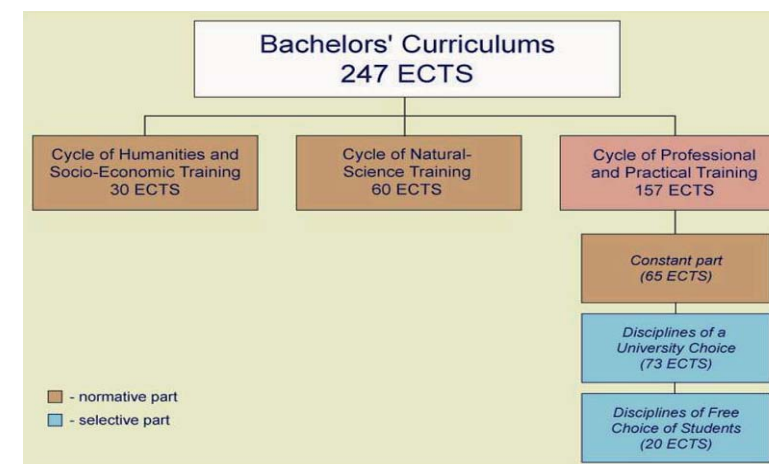
Let's dwell on some of these directions. The NTUU "KPI" as one of the leading universities was one of the first educational institu-

tions in Ukraine that started the implementation of new curriculums conformed to the concept of a common European Higher Education Area. We have already been working according to such curriculums for more than a year.

It should be mentioned that the Bachelors' training in the IPP comprises 4 years (8 semesters). During this period a student must complete the educational curriculums in 247 ECTS including the Bachelor's thesis. Hereinafter we are talking about educational curriculums for 2007-2008 academic year. That is why such precise data is mentioned.

For majors "Technology of Printing" and "Technology of Packaging" as well as for all majors within the NTUU "KPI" 247 ECTS consist of the following (Fig.1):

Fig. 1
Bachelors' Curriculums
General Principles.



30 ECTS – Cycle of the Humanities and Socio-Economic Training (foreign language, philosophy, study of culture, psychology, history, etc). This cycle and its content are general for all majors of the University; 60 ECTS – fundamental sciences, so-called "Cycle of Natural-Science Training" (higher mathematics, general physics, chemistry, theoretical and applied mechanics, theory of colors, etc); 157 ECTS – disciplines for professional practical training.

Among these 157 ECTS 65 credits are disciplines for professional practical training according to the Educational and Skills Standard for major approved by the Ministry of Education.

They are to be general for all profile universities of Ukraine. Such disciplines include the following: printing technology, material science, metrology and standardization, prepress data processing as well as 9 credits for practice and 9 credits for preparation of the bachelor thesis. All above mentioned is so-called normative part of curriculum.

Another 73 credits are so-called disciplines of a university's choice. In our opinion there should be the notable disciplines which are target for the definite university and attracting potential students. In our case such disciplines are "Special Parts of Printing", "Technology of Electronic

Media", "Technology of Issues Protection" etc. 20 ECTS are disciplines of students' free choice. Among these are "Logistics", "Ergonomics", "Storing and Restoration of Issues", "Packaging Utilization".

Present 3- and 4-year students have an opportunity to choose one of the following directions after gaining of Bachelor's degree, i.e. to be trained for 1.5 years and obtain the Specialist's Diploma or to earn the Master Degree after 2 years of training but on condition that the student has good results and takes part in the scientific work.

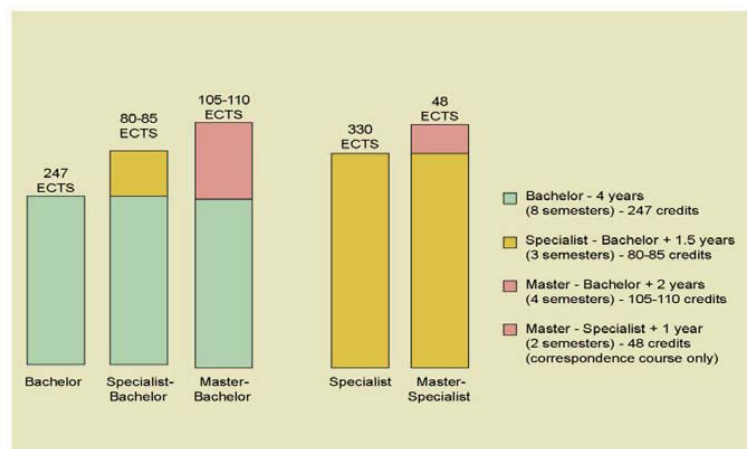


Fig. 2
General Structure of
Bachelors', Specialists'
and Masters' Training.

The educational curriculum for future Specialists is 80-85 ECTS, for Masters – 105-110 ECTS (Fig. 2). In both cases their training is completed by Diploma theses. Naturally, the requirements to Master's are higher. Besides the project part Master theses must include scientific researches. It is obligatory for Masters to implement the curriculum of Specialists (80-85 credits) and besides it to study the disciplines necessary for future scientists and lecturers, i.e. "Mathematical Simulating of Systems and Processes", "Mathematical Methods of Optimization", "Higher School Pedagogies", "Patent Science", etc. The certain time (30 credits) is devoted to scientific researches and preparation of diploma thesis.

The IPP is the constituent of such powerful university as the NTUU "KPI". That's why it has all possibilities to implement Masters' training

and to take for training the best graduates from other educational institutions. At the moment our University is even examining the possibility to train preferably Masters, Candidates and Doctors of Sciences. For the moment, it is only an idea. Now the number of Masters is 10-20% in the total number of graduates. Usually it is the potential scientific elite.

This year students for the first time were admitted to the Master course on the basis of preliminary examination. Bachelors, graduates of the IPP, have passed those exams as well. Bachelors passed two exams, i.e. complex exam on special subjects and foreign language.

To train the high-level specialists, Master course requires intensive teaching of fundamental disciplines (higher mathematics, physics and chemistry) that always has been characteristic

feature of the Kyiv Polytechnic Institute. It should be mentioned we have taken this peculiarity of the NTUU "KPI" in our educational curriculums increasing the number of hours for that disciplines (higher mathematics – 15 ECTS, physics – 9 ECTS and chemistry – 7 ECTS).

Masters training on the basis of the IPP requires both highly qualified teaching staff, i.e. professors, associate professors having scientific degrees and experience of scientific activity, and improvement of research laboratory base. We have the first condition. Among 117 lecturers we have 16 professors and 44 associate professors. To realize the latter IPP is supported by the leading printing enterprises and companies.

Under the direction of our lecturers, future Bachelors and Masters take an active part in the annual international conference "Drukars'tvo Molode" or "Young Printing". They successfully publish their scientific progress in the scientific issues of our institute.



Petro Kyrychok

Institute for Publishing and Printing of the National Technical University of Ukraine "Kyiv Polytechnic Institute"

t_kyrychok@vpf.ntu-kpi.kiev.ua



Tetiana Kyrychok

Institute for Publishing and Printing of the National Technical University of Ukraine "Kyiv Polytechnic Institute"

t_kyrychok@vpf.ntu-kpi.kiev.ua

Some words about education during the whole life. For today we have the situation when our graduates of before-Bologna period who have already obtained the Specialist Diploma have the strong desire to obtain Master degree.

For such students IPP proposes correspondence 1 year study which is completed with Master thesis. Separate curriculum (48 credits) has been worked out for such students to allow them to implement the whole Master's course (including their credits for Specialist's Degree) (Fig.2).

Taking into account the Credits System we prepared the curriculums for the second higher education to be gained in our institute on the basis of the already obtained first education. We offer such education as the correspondence one. However, it is much more intensive, i.e. the same 247 credits but for 2 years. It is meant for 4 semesters achieved due to longer examination periods and studies and more intensive independent work of students. It should be mentioned that these students are more responsible and gifted in training than ordinary students of correspondence course.

We have just started our work. Obviously, our activity will be modified by the results of our dispute with colleagues from other universities including the respectful colleagues from the International Circle of Educational Institutes for Graphic Arts, Technology and Management as well as by life itself.

(first received: 28.01.08)