



List of Abbreviations

- **SUTE** SP "Economics" of the third (doctoral) level of higher education, State University of Trade and Economics
- **ZPSU** SP "Public Management and Administration" of the second (master's) level of higher education, Zhytomyr Polytechnic State University
- **KNEU1** SP "Personnel Management" of the second (master's) level of higher education, Kyiv National Economic University named after Vadym Hetman
- **KNEU2** SP "Digital Accounting" of the first (bachelor's) level of higher education, Kyiv National Economic University named after Vadym Hetman
- **KNU** SP "Economic and Social Geography" of the second (master's) level of higher education, Taras Shevchenko National University of Kyiv
- KPI SP "Conflict Resolution and Mediation" of the second (master's) level of higher education, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
- **KUBG** SP "Speech Therapy" of the second (master's) level of higher education, Borys Grinchenko Kyiv Metropolitan University
- LTEU SP "Medical and Health Tourism" of the first (bachelor's) level of higher education, Lviv University of Trade and Economics
- **KrNU1** SP "Electromechanical Automation Systems and Electric Drive" of the second (master's) level of higher education, Kremenchuk Mykhailo Ostrohradskyi National University
- **KrNU2** SP "Electronic Machines" of the second (master's) level of higher education, Kremenchuk Mykhailo Ostrohradskyi National University
- **BNMU** SP "Public Health" of the second (master's) level of higher education, Bogomolets National Medical University
- **NUBiP** SP "Veterinary Medicine" of the second (master's) level of higher education, National University of Life Resources and Environmental Sciences
- **NUPh1** SP "Technology of Pharmaceutical Preparations" of the second (master's) level of higher education, National University of Pharmacy
- NUPh2 SP "Pharmacy" of the second (master's) level of higher education, National University of Pharmacy
- UAP SP "Publishing and Printing" of the third (doctoral) level of higher education, Ukrainian Academy of Printing (Institute of Publishing, Printing and Information Technology of NU "Lviv Polytechnic")



At UQAF-2024, twelve Ukrainian higher education institutions (HEIs) showcased fifteen study programs (SP) for which, based on the accreditation results, NAQA decided to grant accreditation with the designation "Exemplary". Most of the study programmes are offered at the master's level (11 SPs), with two programmes each at the bachelor's and doctoral levels. These are study programmes in the following specialties: 016 Special Education, 051 Economics, 054 Sociology, 071 Accounting and Taxation, 073 Management, 106 Geography, 141 Electric power Engineering, Electrical Engineering and Electromechanics (2 SPs), 186 Publishing and Printing, 211 Veterinary Medicine, 226 Pharmacy, Industrial Pharmacy (2 SPs), 229 Public Health, 242 Tourism, 281 Public Administration.

Concerning the discussed study programmes, exemplary compliance with the following criteria was most frequently determined: 7. Educational environment and material resources (14 study programmes), 6. Human resources (13 study programmes), 1. Design of the study programme (12 study programmes) and 8. Internal quality assurance of the study programme (12 study programmes). Moreover, for both doctoral study programmes, exemplary compliance was identified with criterion 10. Learning through research (see figure 1).

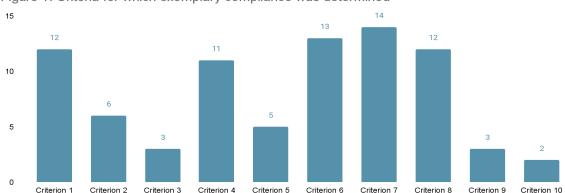


Figure 1. Criteria for which exemplary compliance was determined

These study programmes are offered at the following HEIs: State University of Trade and Economics, Zhytomyr Polytechnic State University, Kyiv National Economic University named after Vadym Hetman, Kyiv National Economic University named after Vadym Hetman, Taras Shevchenko National University of Kyiv, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Borys Grinchenko Kyiv Metropolitan University, Lviv University of Trade and Economics, Kremenchuk Mykhailo Ostrohradskyi National University, Bogomolets National Medical University, National University of Life Resources and Environmental Sciences, National University of Pharmacy, and Ukrainian Academy of Printing (Institute of Publishing, Printing and Information Technology of NU "Lviv Polytechnic").

In this review, we analyzed the best practices implemented in the study programs presented at UQAF-2024, according to the NAQA evaluation criteria.



Criterion 1. Design of the study programme

Best practices under **Criterion 1** were primarily determined based on taking into account global trends in relevant specialities within the goals and programme learning outcomes (KNEU2, KrNU2, BNMU, NUBiP, NUPh2) and modern labour market needs (KNEU2, KUBG, LTEU, UAD), and creating study programmes through direct engagement with stakeholders (KNU, KPI, KrNU1, KrNU2, NUPh1).

Particularly, the study programme development was influenced by global trends and aligned with the International Standard for Pharmacist Training set by the World Association of Pharmacists (NUPh2); based on modern global strategies for training personnel for the public health system, set out in documents of WHO, WHO ERB and recommendations of the ASPHER (BNMU); taking into account the joint programme "One Health" of the World Organization for Animal Health, the Food and Agriculture Organization of the United Nations (FAO) or the Unified Accounting Curriculum for Universities, recommended by the World Bank (KNEU2). For instance, an accredited study programme (NUPh2) has set trends in the development of this speciality in Ukraine. It has also served as the foundation for creating a national higher education standard and a professional standard in the relevant field. The international recognition of the SP's practices is commendable, particularly due to its accreditation by prestigious global professional organisations such as ACCA and SIMA (KNEU2). Additionally, the study programme has achieved high rankings in the international assessments of master's and MBA programs in the area of "Leadership." These rankings are based on feedback from graduates, recruiters, and the salary levels of alums (KNEU1).

Orientation to labour market demands is often characterised by the distinctiveness of the study programmes offered. For example, one of the first programmes in Ukraine focused on training specialists using a neurologopedic approach (KUBG), while another was the first in the country to emphasise digital accounting (KNEU1). Additionally, there are programmes dedicated to training specialists in medical and health tourism (LTEU) and in publishing and printing (UAP). The study programme considered the needs of society and the region, especially during its development through direct interaction with external stakeholders, including leading scientific institutions in the industry., e.g., the Institute of Geography of the NAS of Ukraine (KNU), leading enterprises in the sector (KrNU1, KrNU2, NUPh1), the development of the study programme at the request of the Ministry for the Reintegration of Temporarily Occupied Territories of Ukraine with the support of the embassies of Great Britain and Switzerland as a result of the competitive selection of proposals from universities (KPI). The best practices for designing study programmes focus on considering global industry trends and engaging with external stakeholders.

Therefore, the identified best practices for designing study programmes primarily concern considering global trends in the industry and interacting with external stakeholders. Such examples illustrate the effective practical implementation of the requirements of standards 1.2 and 1.9 of ESG 2015.



Criterion 2. Structure and content of the study programme

According to **Criterion 2**, the following exemplary practices were identified:

- Development within the project "Ensuring Academic Freedom and Inclusion through Digitalisation" (in partnership with other HEIs and research institutions), a digital platform for doctoral students. This platform allowed students to shape their **educational trajectories** by offering a selection of free-choice disciplines (SUTE).
- Correlation of the content of educational components with research developments and inventions of doctoral students and their supervisors, which are successfully implemented in printing companies in Ukraine and Poland (UAP), review of the training courses by employers (KNEU1), development of training courses in cooperation with employers and leading industry specialists, e.g., selective training course "IT recruiting", developed by the director of the recruitment agency (KNEU1).
- Creation of the Consulting Centre for the Development of Communities and Territories of Taras Shevchenko National University of Kyiv as a platform for acquiring professional competencies and soft skills, interaction and participation in sessions of local communities, including public presentation of projects developed by students (KNU).
- **Practice-oriented content of courses** (KNU, KUBG, NUPh1, UAP), in particular, practical training at leading enterprises in the industry (NUPh1), conducting postgraduate research based on cooperation agreements with foreign HEIs and enterprises (UAP).
- **Implementation of a dual form of education**, which provides a unique opportunity to acquire practical skills, study automatic control systems and electric drives on equipment of real production facilities (KrNU1).

Consequently, the best practices identified for ensuring the content of the study programme are primarily focused on their practical orientation, as well as the involvement of employers in the development, review, and implementation of training courses. The connection between the study programme's content and the needs of the labour market and society aligns with standards 1.2 and 1.9 of ESG 2015.

Criterion 3. Access to the study programme and recognition of learning outcomes

According to **Criterion 3**, exemplary practice is defined as, for example, taking into account in the admission rules and requirements for applicants the study programme's features that are focused on the formation of discursive neurospeech therapy thinking in applicants, in particular, solving a practical case during the entrance test (KUBG). The practice mentioned above illustrates exemplary implementation of the recommendations aligned with standard 1.4 of ESG 2015.

Criterion 4. Learning and teaching in the study programme



According to **Criterion 4**, the following exemplary practices were identified:

- Use of **innovative forms and methods of learning and teaching**, in particular: conferences, teleconferences and electives with industry specialists (SUTE, KNEU2, KrNU1, NUPh2), standardization of the minimum volume of interactive learning and teaching methods at least 20% of each course (SUTE), application of the case method when studying clinical disciplines with HEI's own clinical cases database (NUBiP).
- Updating the content of training courses based on modern achievements of the industry through the involvement of expert teachers and cooperation with professional organizations (Administration of the President of Ukraine, Accounting Chamber of Ukraine, Federation of Professional Accountants and Auditors of Ukraine) (KNEU2); development together with industry specialists of training courses, for example "HR Analytics", "Project Management", "Reengineering of Business Processes of Personnel Management" (KNEU1).
- Internationalization of activities, primarily implemented through conducting individual practical online classes synchronously with a foreign university (Ukrainian and German students perform a joint task, and then discuss it together online) (KNEU1), taking into account the results of academics' participation in academic mobility programs when updating the content of disciplines (KNU, NUBiP, KNEU2, NUPh1, KrNU1), active participation of applicants in international academic mobility programs, preparation of qualification projects during academic mobility, using the experience and resources of foreign HEIs (ZPSU, NUPh1, KrNU1).
- A combination of education and research during the study programme's implementation, primarily through the interaction of education, science and business. In particular, the effectiveness of the creation of educational and scientific centres based on HEIs was noted: conducting economic experiments with the involvement of business mentors based on the virtual trading network of the Educational and Scientific Centre for Business Simulation (SUTE); the Startup School of NUBiP of Ukraine (NUBiP) and the InDeSchool Research Laboratory (LTEU).

Research projects involving students that have practical applications significantly contribute to the development of local communities and should be given special attention at the **intersection of education and research**. For example:

- As part of the EU Tempus project implementation, HEI established centres to guide start-up entrepreneurs. This initiative aimed to expand employment opportunities for applicants and ensure the development of modern, high-quality research competencies (KNEU1).
- As part of the applied project implemented in collaboration with territorial communities, the GIS portal "Yasinya Turistychna" was created. Students contributed to the development of the Concept of Integrated Development for the Petrivska STG. In partnership with students from the Faculty of Computer Science and Cybernetics,



they worked on a social project to create an application for city residents. Additionally, students participated in the research project "Strengthening the Capacity of Communities for Reconstruction through Piloting Their Interaction with Universities," which received support from the International Renaissance Foundation (KNU).

- Students were involved in the "EU4Business" initiative with the "STAREP" program, aimed at strengthening audit and reporting in the Eastern Partnership countries (KNEU2).

Effective are the practices of students' involvement in research and educational projects funded by the state budget and foreign organizations (ZPSU, KNEU1, KNU), joint publications of teachers and students in professional journals (KrNU1) and journals indexed in international scientometric databases (KNU, ZPSU), organization of all-Ukrainian events for students, postgraduates and young scientists (KNU, NUPh1).

The following practices are recognized as positive: students completing qualification projects in collaboration with partner employers (KNEU1, LTEU, NUPh1), qualification projects are commissioned by the Ministry for the Reintegration of Temporarily Occupied Territories of Ukraine (KPI), a significant experimental component is included in student qualification projects (KrNU2, NUPh2), students participate in the development of virtual laboratory stands, which incorporate the developed laboratory equipment into the educational process (KrNU1). Furthermore, an exemplary practice highlighted is the achievement of an international accreditation certificate from the Higher Council for the Evaluation of Scientific Research and Higher Education in France, which is a confirmation of the compliance of the program content with modern European requirements (SUTE).

Criterion 5. Control measures, assessment of students and academic integrity

Among the exemplary practices under **Criterion 5**, specific measures to promote academic integrity are highlighted through the implementation of international projects such as the "Academic Integrity and Education Quality Initiative" and "Anti-Corruption Compliance in Higher Education: Foreign Experience and National Practice" (KNEU2).

Criterion 6. Human resources

For nearly all the presented study programs, the experts noted the **firm staffing of educational components**, significant scientific achievements of the teachers, their high publication activity, and the activities of scientific schools (SUTE, ZPSU, KNEU1, KNEU2, KNU, KPI, KUBG, LTEU, KrNU1, KrNU2, BNMU, NUBiP, NUPh1, NUPh2, UAP). Specifically, this presents a systematic and targeted involvement of teachers with unique experience at the national policy level in the relevant field (SUTE), as well as specialists with international expertise (NUBiP) and foreign educators (SUTE, UAP). In selecting teachers for a study program, a two-stage procedure was recognised as exemplary practice: the first, at



the level of the HEI, and the second, at the level of the department and the scientific and methodological council of the respective institute (KrNU1, KrNU2).

Expert groups emphasised the importance of **strategic planning for the professional development of teachers** in higher education institutions. For example, within the framework of the Erasmus+ project, HEI developed the Teaching Improvement Strategy, which is based on the university framework for teaching excellence, which is formed based on the mission, strategic goals and values (KNEU1, KNEU2).

The approaches of higher education institutions (KUBG, NUPh1, SUTE) to the continuous professional development of teachers through their advanced training systems are characterised by exemplary performance, in particular: a flexible modular advanced training system aimed at the development of teaching, research, digital, and leadership competencies, when the content of the modules is adapted to the needs of the teacher, conducting adaptation trainings for teachers who are starting their professional activities (KUBG); organisation of such events as the "School of Professional Mastery of Teachers", "School of Methodists", the training cycle "Support for LMS Moodle Distance Courses", "School of the Guarantor of Higher Education", "School of Academic Awareness" (NUPh1); implementation by the HEI's Institute of Higher Qualification and the innovative Academy of Educational Design of both basic training programs mandatory for all teachers, and innovative certificate programs "Braincrossfit: Launch of Creative Potential", "Artificial Intelligence in Education: Opportunities, Risks, Prospects. Practical Cases", etc. (SUTE), implementation of professional development programs in cooperation with other organisations, for example, joint programs of the Center for Advanced Training and Professional Adaptation of Higher Education Institutions and the University of Educational Management, which belongs to the Academy of Pedagogical Sciences (KrNU1). A good practice for ensuring the professional development of teachers as industry experts is programs in cooperation with Ukrainian and foreign organisations (LTEU, KNEU1, NUPh1, UAP).

Among the exemplary practices of involving employers in the educational process, the following are highlighted:

- Conducting practical classes based on the research centres, field classes at modern enterprises and veterinary clinics (NUBiP).
- Involving employers as co-authors of teaching materials in professionally oriented courses (LTEU).
- Involving practicing professionals, leading specialists in the field to teaching based on part-time work (ZPSU, KNEU1, NUBiP), significant industry experience of full-time academic staff, their membership in professional associations (KNEU2), joint classes with representatives of a company developing specialized software (KNEU2), conducting guest lectures, organizing internships, consulting students on final qualification projects, introducing a dual form of education (KrNU1).



- Concluding cooperation agreements with employers, including with international entities, the purpose of which is to involve key stakeholders (UAP) in the training of doctoral students.

The effective delivery of the study programme by professional teachers depends significantly on their experience in research and professional activities. This experience is essential for reinforcing the connections between education, research, and the labour market. It fosters innovation in teaching methods and the use of new technologies, while also providing opportunities for the professional development of teachers (Standard 1.5 ESG 2015).

Criterion 7. Educational environment and material resources

Best practices in **Criterion 7** are identified considering equipping the study programme with modern educational and research tools (KNEU2, KNU, KrNU1, KrNU2, KUBG, BNMU, NUBiP, NUPh2, UAP) and providing access to unique, high-quality professional software for students and teachers (LTEU, KNEU1, KNEU2, KNU, KPI), in particular:

- Creation in cooperation with employers of quality control laboratories, immunological research, pharmaceutical development, vivarium, and pharmacy model (NUPh2).
- Arrangement in cooperation with leading companies "IT-Enterprise", "ISpro", "CaseWare" of specialised computer laboratories with licensed software, constant support and updating of software, consulting teachers and students, participation in conducting training sessions (KNEU2).
- NSC Animal Blood Bank, Centre for Cellular Technologies in Veterinary Medicine, Centre for Animal Reproduction with a Sperm and Embryo Bank, NNVL Clinical Centre "Vetmedservice", six unique modern laboratories (NUBiP).
- Availability of accreditation certificates in the laboratories of the HEI following the requirements of DSTU EN ISO/IEC 17025:2019 (EN ISO/IEC 17025:2017, IDT; ISO/IEC 17025:2017, IDT) "General requirements for the competence of testing and calibration laboratories" (BNMU).
- Functioning of the department of practical training centres "Logotrainer", "Autism-Academy", and the Centre for Inclusive Education, which are provided with the necessary correctional and developmental equipment, teaching materials, and appropriate software (KUBG).
- Construction of laboratory stands through the renewal and modernisation of the university's energy systems (KrNU1), sponsorship by regional stakeholders, and implementation of scientific achievements of teachers and students of the department into the educational process (KrNU2).
- Establishment by the department of the Expert and Advisory Centre for the Development of Communities and Territories (KNU).
- Functioning of the Educational and Research Centre for Business Simulation in the format of a virtual trading enterprise as an environment for economic experiments within the framework of dissertation research (SUTE).



Among the exemplary practices, the digitalisation of the educational process is also highlighted (SUTE, ZPSU, KrNU1), in particular:

- Cloud placement of digital resources: access to library resources of leading EU and US universities; full-text databases of Forbes, Financial Times and other magazines; guarantee of continuity in blackouts (SUTE).
- An Educational Portal, which is successfully used to organise and manage various educational processes (ZPSU).
- Functioning of the Digital Campus and a developed e-learning system with the ability to process educational material offline (KUBG).
- Virtual laboratory stands for distance learning that allows for improved understanding of processes occurring in real laboratory facilities (KrNU1).
- Creation of an interuniversity virtual campus as a joint platform with Ukrainian HEIs, within which training takes place based on virtual internal mobility (SUTE).

Some notable practices for implementing anti-corruption policies and addressing conflict situations include the establishment of an educational ombudsman (LTEM) and the HEI's involvement in the "Transparent University" project, which aims to prevent corruption.

Criterion 8. Internal quality assurance of the study programme

Among the best practices for implementing internal procedures to ensure the quality of education in higher education institutions (HEIs) are the following: annual indexing of educational quality at the faculty and study programme levels (KPI); systematic audits of study programmes (KNEU1, KNEU2); local yearly monitoring of the quality of the educational process at the study programme level, which is conducted at the department level (KNU). These practices play a crucial role in upholding high standards in education.

To ensure effective participation of employers, graduates, and other external stakeholders in the periodic review and updating of study programs, the roles of various councils and committees were highlighted. These include the Employers' Council (KUBG, NMU, NUBiP, NUPh1, NUPh2), the Alumni Council (KUBG), the Stakeholder Council by speciality (KrNU1, KrNU2), and the Professional Advisory Committee, which includes representatives from both employers and graduates (KNEU1, KNEU2).

In exemplary practices, we observe support from professional sociologists in developing and conducting surveys among students, employers, and academic staff, along with a thorough analysis of the results (KNU, KNEU1, KNEU2, KrNU1, KrNU2).

The international accreditation of the study programme in the Higher Council for the Evaluation of Scientific and Research Work and Higher Education (HCERES), France (SUTE), as well as the certification of the quality management system for compliance with the requirements of the international standards ISO 9001:2015 (quality management system),



ISO 14001:2015 (environmental management system) and ISO 50001:2018 (energy management system) (NUPh1, NUPh2) are also highlighted as exemplary practices.

Also, exemplary practices for the professional development of guarantors of study programmes were identified, for example, the ongoing training "Accreditation Coaching" for guarantors, members of SP project groups and other academic staff, which allows implementing quality standards of educational activities in HEIs on a systematic basis (KNEU1, KNEU2), "School of the SP Guarantor" (NUPh1, NUPh2), thematic training for study programme guarantors (KNU).

Criterion 9. Transparency and publicity

In the context of disseminating information about the study programme and HEI's educational activities, the following exemplary practices have been identified: the development of a unified information system "Portal of Zhytomyr Polytechnic" (DUZHP), providing information about the study programme, adapted, in particular, for foreign students, not only on the HEI website and the official page of the department, but also on Facebook, YouTube, Instagram, X, TikTok, etc. (KPI); implementing a chatbot that enables 24/7 communication with all participants in the educational process (LTEU).

Criterion 10. Learning through research

For both presented doctoral study programmes, exemplary compliance with **Criterion 10** was determined. In particular, the following was determined:

- Possibilities for a wide choice for in-depth study of disciplines necessary for the implementation of the selected topic of dissertation research (SUTE, UAP).
- Institutional requirement for active experience in performing scientific research work by supervisors (SUTE).
- Research centres, which are teams of scientists with joint and/or related specialisation, in particular the Educational and Scientific Centre for Business Simulation, which provides postgraduate students with infrastructure for virtual economic experiments (SUTE).
- Involvement of students in project activities (SUTE, UAP).
- Ensuring broad opportunities for conducting research, using the resources of foreign HEIs, through concluded cooperation agreements with foreign universities (SUTE) and leading enterprises in the relevant industry (UAP).

Therefore, the exemplary fulfilment of the requirements of Criterion 10 was primarily determined by the creation in HEIs of conditions for the formation of a scientific community that is as favourable as possible for planning and implementing research by higher education students.

Thus, the best practices for implementing study programs discussed at UQAF-2024 highlight the significance and effectiveness of collaboration between HEIs and employers. This



partnership creates opportunities to develop modern educational content that not only meets the demands of the labour market but also helps establish trends in the field. This ensures that the academic components and the overall study program remain relevant by utilising innovative teaching and learning methods. It involves updating the material and technical resources of HEIs, providing participants in the education process with access to the latest software, and engaging leading industry professionals.