Syllabus of Aacademic Discipline
"Standardized Approach to Quality Management"

№	Field name	Detailed content, comments
1.	Name of the faculty	Faculty of Cybersecurity
2.	The level of higher education	Bachelor's
3.	Code and title of specialty	175 Information and Measurement Technologies
4.	The type and title of the educational program	EP "Quality of Products, Processes and Software"
5.	Code and title of the discipline	SPUYa Standardized Approach to Quality Management
6.	Number of ECTS credits	6
7.	The structure of the course (distribution by type and hours of training)	24 h – 12 l, 24 h – 12 p, 12 h – 6 c, 120 h. – independent work, including coursework 33 h., type of control: combined exam.
8.	Schedule (terms) of study of the subject	2nd year, 4th semester
9.	Prerequisites for learning the discipline	Previously, the disciplines "Qualimetry" should be studied; "Higher Mathematics (Special Chapters)".
10.	Abstract (content) of the discipline	Compulsory discipline of professional and practical training, contains content modules: 1. Basic concepts in the field of quality management. 2. Modern concepts and models of quality management. 3. Quality control tools. 4. Self-assessment and quality management.
11.	Competencies, knowledge, skills, understanding that a higher education acquirer has in the learning process	Integral competence: Ability to solve complex specialized tasks and practical problems in the field of quality management, which are characterized by complexity and uncertainty of conditions, which involves the application of theories and methods of quality management. **General competencies:** GC-1 Ability to apply professional knowledge and skills in practical situations. GC-5 Ability to search, process and analyze information from various sources. GC-8. Ability to learn and master modern knowledge. GC-9 Ability to be critical and self-critical GC-10. Ability to ensure and evaluate the quality of work performed. **Professional competencies:** PC-10. Ability to develop a regulatory and methodological framework for quality assurance and technical regulation and develop scientific and technical foundations for quality management systems and certification tests. PC-11. Ability to form quality models and quantify the quality of objects of various nature. PC-12 Ability to apply modern standardized principles, in particular the PDCA cycle, process approach, risk management, to the development of management systems based on international standards

		PC-14. Ability to apply quality management methodologies, justify and defend the decisions made.
12.	Learning outcomes of a Higher Education applicant	**Program learning outcomes:** PLO-3 Understand the broad interdisciplinary context of the specialty, its place in the theory of cognition and evaluation of objects and phenomena. PLO-4 Be able to choose, based on the technical task, a standardized method of evaluation and measurement control of the characteristic properties of products and parameters of technological processes. PLO-9 Understand the applied methods and methods of analysis, design and research, as well as the limitations of their use. PLO-15 Know and understand the subject area, its history and place in the sustainable development of engineering and technology, in the general system of knowledge about nature and society PLO-19 Understand global trends in the professional approach to the quality of products, processes and software, in particular modern quality models and principles of forming a nomenclature of quality indicators; regulatory support and general methodology for quantitative quality assessment PLO-20 Understand and be able to apply modern standards of management systems, develop and assess the compliance of the quality management system of enterprises
13.	Assessment system in accordance with each task for taking tests/exams	1. 11 tests on practical classes. 2. To get 60 credit score during the semester. 3. Pass the exam. Credit score for semester (C_s) is calculated by the formula: C_s=(6-9)РЊ№1+(6-9)РЊ№2+(6-9)РЊ№3+(6-9)РЊ№4+(6-9)РЊ№5+(5-9)РЊ№6+(5-9)РЊ№7+(5-9)РЊ№8+(5-9)РЊ№9+(5-9)РЊ№10+(5-10)РЊ№11=(60-100) credit score. Credit score for exam C_e=(60-100) credit score. The combined exam carries out in the form of an answer to exam papers (4 tasks, duration 60 minutes). Final exam score $S=0.6*C_s+0.4*C_e$
14.	The quality of the educational process	Adherence to the principles of academic integrity (http://lib.nure.ua/plagiat). Update of the discipline's work program – 2026.
15.	Methodological support	1. Complex of educational and methodical support of the educational discipline "Models of total quality management" for the bachelor of a specialty 152 "Metrology and information-measuring technology", educational program "Technical expertise" [Electronic resource] / KhNURE; Compiler: I.Moshchenko. - Kharkiv, 2018. http://catalogue.nure.ua/knmz. 2. Methodological instructions for practical classes in the disciplines "Models of general quality management" for students of all forms of study of specialty 152 "Metrology

		and information and measuring equipment" of the educational and professional program "Technical expertise" / Compiled by I.O. Moshchenko. - Kharkiv: KhNURE, 2021. - 32 p. 3. Methodological instructions for course work in the discipline "Models of general quality management" for students of specialty 152 - "Metrology and information and measuring equipment" of the educational and professional program "Technical expertise" / Compiled by: I.O. Moshchenko, O.M. Nikitenko. - Kharkiv, KhNURE, 2021. - 28 p.
16.	The developer of the Syllabus	I.Moshchenko, Department of Information and Measurement Technology, associate professor, PhD E-mail: inna.moshchenko@nure.ua