Syllabus of Academic Discipline
"Certification and Audit of Management Systems"

№	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	OPP "Quality of Products, Processes and Software"
5.	Code and title of the discipline	StASM Certification and audit of management systems
6.	Number of ECTS credits	5
7.	The structure of the course (distribution by type and hours of training)	20 h. – 10 l, 12 h. – 6 p, 12 h. – 6 lb, 10 h. – 5 c, 100 h. – independent work, type of control: test
8.	Schedule (terms) of study of the subject	4th year, 7th semester
9.	Prerequisites for learning the discipline	Earlier, the disciplines "Fundamentals of Standardization", "Conformity Assessment", "Fundamentals of Quality Management" should be studied
10.	Abstract (content) of the discipline	Selective discipline of professional and practical training, contains content modules: 1. Standardization of management systems. 2. ISO 9000 series standards as a basic model of standards for management systems. 3. Standards in the field of sustainable development of the organization. 4. Certification of management systems.
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 standardization, certification and audit of management systems, 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-2 Ability to communicate in the state language, both orally and in writing GC-5 Ability to search, process and analyze information from various sources. GC-8. Ability to learn and master modern knowledge. GC-11 Ability to realize one's rights and obligations as a member of society, to realize the values of a public (free, democratic) society and the need for its sustainable development, the rule of law, human and citizen rights and freedoms. GC-12 Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and development of the subject area, its place in the general system of knowledge about

		nature and society and in the development of society, technology and technology, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle. GC-13 Ability to make decisions and act in compliance with the principle of inadmissibility of corruption and any other manifestations of dishonesty **Professional competencies:** PC 7 Ability to provide metrological support of technological processes and certification tests PC 8 Ability to carry out technical measures to ensure traceability, correctness, repeatability and reproducibility of measurement and test results according to international standards 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-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-13 Ability to carry out conformity assessment procedures, in particular declaration, certification and accreditation of objects of various nature
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-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-20 Understand and be able to apply modern standards of management systems, develop and assess the compliance of the quality management system of enterprises PLO 21 Know the main regulatory documents in the field of conformity assessment; principles, types and procedures of conformity assessment; procedure for certification, declaration of conformity, accreditation of conformity assessment bodies, market surveillance
13.	Assessment system in accordance with each task for taking tests/exams	Perform 6 tests in practical classes and 6 laboratory works. Credit score (C) is calculated by the formula: C=(5-8)PZNo1+(5-8)PZNo2+(5-8)PZNo3+(5-8)PZNo4+(5-8)PZNo5+(5-8)PZNo6+(5-8)LBNo1+(5-8)LBNo2+(5-8)LBNo3+(5-8)LBNo4+(5-10)LBNo5+(5-10)LBNo6=(60-100) points
14.	The quality of the educational process	Compliance with the principles of academic integrity (http://lib.nure.ua/plagiat). Update of the discipline work program – 2025.

15.	Methodological support	Complex of educational and methodological support of the academic discipline "Certification and Audit of Management Systems" of training bachelors of specialty 152 - Metrology and Information and Measuring Equipment [Electronic resource] : educational and professional program "Quality of products, processes and software" / NURE; development. I. O. Moshchenko. – Kharkiv, 2024. – 200 p.
16.	The developer of the Syllabus	I.Moshchenko, Department of Information and Measurement Technology, associate professor, PhD E-mail: inna.moshchenko@nure.ua