

Syllabus of Academic Discipline
“Comprehensive quality management tools”

№	Field name	Detailed content, comments
1.	Name of the faculty	FACULTY OF INFOCOMMUNICATIONS
2.	The level of higher education	Bachelor's educational and scientific
3.	Code and title of specialty	152 – Metrology and Information-Measuring Technology
4.	The type and title of the educational program	Educational program – Technical Expertise
5.	Code and title of the discipline	
6.	Number of ECTS credits	5
7.	The structure of the course (distribution by type and hours of training)	20 h. – 10 L., 20 h. – 10 P., 10 h. – 5 C., h. – 100 independence, type of control: credit
8.	Schedule (terms) of study of the subject	III year, V semester
9.	Prerequisites for learning the discipline	Previously, the disciplines «Higher mathematics», Standardized approach to building modern quality management systems, Modern quality management tools, Statistical methods of quality management, The basics of standardization should be studied.
10.	Abstract (content) of the discipline	Selective discipline of basic (professional) studying in the specialty, contains content modules: 1. Concepts, types and evolution of complex models of quality management. 2. Comprehensive quality management model TQM. 3. Complex quality management models Lean Production and "Six Sigma". 4. Complex models of business process management and models of self-assessment in the field of quality.
11.	Competencies, knowledge, skills, understanding that a higher education acquirer has in the learning process	Knowledge of the types, essence, methodology and tools of complex quality management models. The ability to make a reasonable choice of the quality management model depending on the size, direction of activity and development strategy of the organization; apply the toolkit of complex models to solve problems in the field of quality management. Mastery of the methodology of development and implementation of complex quality management models to increase the competitiveness of the organization.
12.	Learning outcomes of a Higher Education applicant	Ability to demonstrate knowledge and understanding of the definition, types and functions of complex quality management

		models; essence, principles and methodology of TQM, Lean Production, Six Sigma, RBP, FVA models; tools for implementing TQM, Lean Production, Six Sigma, BPR, FVA models; method of self-assessment of the organization according to the complex models of M. Baldrige and EFQM.
13.	Assessment system in accordance with each task for taking tests/exams	4 tests on practical classes. Credit score (C) is calculated by the formula: $C=(25)P_{\text{№}1}+(25)P_{\text{№}2}+(25)P_{\text{№}3}+(25)P_{\text{№}4}=(60-100)$ credit score.
14.	The quality of the educational process	Adherence to the principles of academic integrity (http://lib.nure.ua/plagiat). Update the work program of the discipline – 2022 year.
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. Metodichni vказivky do praktychnykh zaniat z dystsyplin «Modeli zahalnoho keruvannia yakistiu» dlia studentiv usikh form navchannia spetsialnosti 152 «Metrolohiia ta informatsiino-vymiriuvalna tekhnika» osvitho-profesiinoi prohramy «Tekhnichna ekspertyza» / Uporiad. I.O. Moshchenko. – Kharkiv: KhNURE, 2021. – 32 s.
16.	The developer of the Syllabus	I.Moshchenko, Department of Information and Measurement Technology, PhD E-mail: inna.moshchenko@nure.ua