

Syllabus Form of Academic Discipline

№	Field name	Detailed content, comments
1.	Name of the faculty	Faculty of Infocommunications
2.	The level of higher education	Master's
3.	Code and title of specialty	175 Information and Measurement Technologies
4.	The type and title of the educational program	Educational professional program «Quality Assurance»
5.	Code and title of the discipline	Testing and Software Quality Evaluation
6.	Number of ECTS credits	6
7.	The structure of the course (distribution by type and hours of training)	Lectures – 36 hours, practical – 4 hours, laboratory – 20 hours, consultations – 12 hours, independent work – 108 hours, semester control – exam.
8.	Schedule (terms) of study of the subject	1 th year, 2 th semester of study
9.	Prerequisites for learning the discipline	Informatics, Basics of Qualimetry should be previously studied
10.	Abstract (content) of the discipline	Content module 1. Software and its life cycle. Content module 2. Quality management of software products. Content module 3. Software quality. Content module 4. Software testing. Principles, types and levels of testing. Content module 5. Software testing methods. Content module 6. Software testing management.
11.	Competencies, knowledge, skills, understanding that a higher education acquirer has in the learning process	General competencies GC1. Knowledge and understanding of the subject area and understanding of professional activity. GC3. Skills in using information and communication technologies. Professional competences PC7. The ability to apply a comprehensive approach to solving experimental tasks using information and measurement equipment and application software. PC9. Ability to develop software, hardware and metrological support of computerized information and measurement systems.
12.	Learning outcomes of a Higher Education applicant	Program learning outcomes PLO13. Apply hardware and software tools of modern information technologies to solve problems in the field of metrology and information and measurement technology. PLO16. Carry out quality management based on modern standards and methods.
13.	Assessment system in accordance with each task for taking tests/exams	Evaluation of the student's work during the semester:

		<p>1. Work out and defend laboratory works. 2. Complete tasks in practical classes. 3. Get at least 60 points per semester. 4. Take a combined exam.</p> <p>Grade for the semester $O_{\text{сем}}$: $(10-17) \times 5 \text{ lab} + (5-7,5) \times 2 \text{ pc} = (60-100)$ points. Grade for the exam $O_{\text{екз}} = (60-100)$ points. Final grade $O_{\text{д}}^{\text{екз}}$ is calculated according to the formula: $O_{\text{д}}^{\text{екз}} = 0,6 \cdot O_{\text{сем}} + 0,4 \cdot O_{\text{екз}}$.</p>
14.	The quality of the educational process	<p>Compliance with the principles of academic integrity (http://lib.nure.ua/plagiat). Update of the work program of the discipline – 2022. The laboratory workshop is equipped with the CodeBlocks integrated development environment and the GNU Octave software package.</p>
15.	Methodological support	<p>Complex of educational and methodological support of the educational discipline "Testing and evaluation of the quality of software tools" of the master's training in the specialty 152 "Metrology and information and measuring technology" of the educational programs "Metrology and measuring technology", "Metrological support of tests and product quality", "Quality, standardization and certification" [Electronic resource] / Edited by: O.V. Zaporozhets. – Kharkiv: KhNURE, 2017. – 296 p.</p>
16.	The developer of the Syllabus	<p>O.V. Zaporozhets, Associate Professor of the IMT Department, Ph.D., Associate Professor E-mail: oleg.zaporozhets@nure.ua</p>