

Syllabus Form of Academic Discipline

№	Field name	Detailed content, comments
1	Name of the faculty	Faculty of Cybersecurity, Academic and Research Institute of Laser and Biomedical Engineering (ILBE)
2	The level of education of higher	First (bachelor's)
3	Code and title of specialty	G6 – Information and measurement technologies
4	The type and title of the educational program	Educational professional programs: "Quality of products, processes and software"; "Engineering of optical information and laser systems"
5	Code and title of the discipline	VdS - Introduction to the specialty
6	Number of ECTS credits	3
7	The structure of the course (distribution by type and hours of training)	Lectures – 18 hours, practical – 18 hours, laboratory – 0 hours, consultations – 6 hours, independent work – 48 hours, semester control – test.
8	Schedule (terms) of study of the subject	1-th year and 1-th semester of study
9	Prerequisites the discipline for learning	-
10	Abstract (content) of the discipline	The mandatory discipline of professional and practical training includes content modules: Module 1 Structure of Information and Measurement Technologies, their place in Industry 4.0. Quantum foundations of IMT. Module 2 Technical means and standards base of Information and Measurement Technologies. Module 3 Measurement information: information aspects, accuracy, uncertainty, reliability, reproducibility, precision.

11	Competencies, knowledge, skills, understanding that a higher education acquirer has in the learning process	General competencies GK8. Ability to learn and master modern knowledge. Professional competences PC2. Ability to use information and measurement technology.
12	Learning outcomes of a Higher Education applicant	Program learning outcomes IIPH7. to know: theoretical and legislative provisions of information and measuring technology.
13	Assessment system in accordance with each task for taking tests/exams	Evaluation of the student's work during the semester: 1. Work out and defend practice works. 2. At least 60 points will be deducted for the semester. 3. Pass the test. 4. Take a credit. Grade for the semester $Q_{\text{ссМ}}$: $(8-13) \times 8\text{pz} = (60-100)$ points. Grade for the credit $O_3 = (60-100)$ points. Final grade is calculated according to the formula: $Q_{\text{ссМ}} \times 0,6 + Q_3 \times 0,4 = (60-100)$ points.
14	The quality of the educational process	Compliance with the principles of academic integrity (http://lib.nure.ua/plagiat). Update of the work program of the discipline - 2026. The laboratory workshop is equipped with modern analog and digital Measuring devices.
15	Methodological support	1. Lecture plan to the discipline "Introduction to the specialty" for students of the specialty G6 – Information and measurement technologies [Text] / Edited by. Degtiarov O.V. - Kharkiv: Knure, 2026. - 15 p. 2. Methodological instructions for practical classes in the discipline "Introduction to the specialty" for students of the specialty G6 – Information and measurement technologies [Text] / Edited by. Degtiarov O.V. - Kharkiv: Nure, 2026. - 45 p.

		3. Methodological instructions for independent work from the discipline "Introduction to the specialty" for students of the specialty G6 – Information and measurement technologies [Text] / Edited by. Degtiarov O.V. - Kharkiv: Nure, 2026. - 17 p.
16	The developer of the Syllabus	O.V. Degtiarov, Assoc. prof. of Department IMT, Ph.D., associate professor E-mail: oleksandr.egtiarovs@nure.ua