№	Field name	Detailed content, comments
1.	Name of the faculty	Faculty of Information Radio Technologies and Technical Information Protection
2.	The level of higher education	Bachelor's degree
3.	Code and title of specialty	171 Electronics
4.	The type and title of the educational program	Educational and professional program "Systems, technologies and computer media"
5.	Code and title of the discipline	"**Measurements at sound and ultrasonic frequencies**"
6.	Number of ECTS credits	5
7.	The structure of the course (distribution by type and hours of training)	Lectures - 24 hours; practical classes - 8 hours; laboratory classes - 16 hours; independent work - 64 hours; semester control - combined exam.
8.	Schedule (terms) of study of the subject	Course - 4; semester - 7.
9.	Prerequisites for learning the discipline	The disciplines "Physics", "Theoretical foundations of acoustics", "Sound recording and editing", "Psychoacoustics" should be studied earlier.
10.	Abstract (content) of the discipline	Compulsory discipline of professional and practical training, contains content modules: 1. General characteristics and classification of acoustic measurement techniques 2. Metrological support and mathematical processing of acoustic measurement results 3. Methods of processing acoustic signals 4. Technique of acoustic measurements in air. 5. Technique of acoustic measurements in liquids. 6. Measuring volumes in air and liquid. 7. Acoustic measurements indoors.
11.	Competencies, knowledge, skills, understanding that a higher education acquirer has in the learning process	Ability to test and install devices and models of information and telecommunication systems and networks, radio systems and television and radio broadcasting systems in accordance with technical regulations, tasks and other regulations. Ability to diagnose and investigate the state of objects, their elements, equipment (modules, blocks, nodes) and models of information, telecommunication systems and networks, radio systems and television and radio broadcasting systems. Ability to choose methods and practical means of measuring parameters and performance of devices, their elements, equipment (modules, blocks, nodes) and services of information, telecommunication systems and networks, radio systems and

		radio broadcasting systems and their elements.
12.	Learning outcomes of a Higher Education applicant	Apply experimental skills (knowledge of experimental methods and procedures for conducting experiments) to test hypotheses and study the phenomena of electronics, be able to use standard equipment, plan, make diagrams; analyze, model and critically evaluate the results.
13.	Assessment system in accordance with each task for taking tests/exams	1. Practice and defend laboratory work. 2. Perform 2 counter. work in practical classes 3 Prepare an abstract. 4. Get at least 60 points per semester. 5. Pass the combined exam. Grade for the semester: (2-4) x4 - practical classes + (3-5) x4 - laboratory classes + (15-25) x2-control work + (8-14) abstract = (60-100) points. Grade for the semester $O_{\text{сем}}$: (3-5) x4 - practical classes + (2-4) x4- laboratory classes + (15-25) x2 -control work + (6-10) - abstract = (60-100) points. Grade for the exam $O_{\text{екз}}$ = (60-100) points. The exam is combined. The final score $O_{\text{д}}^{\text{екз}}$ is calculated by the formula:. $O_{\text{д}}^{\text{екз}} = 0,6 \cdot O_{\text{сем}} + 0,4 \cdot O_{\text{екз}}$
14.	The quality of the educational process	Adherence to the principles of academic integrity (http://lib.nure.ua/plagiat). Update of the work program of the discipline - 2019. The laboratory workshop is equipped with modern measuring devices, including digital oscilloscope SDS-E and generator FY6800, external 4-channel sound card Bherindger, modern measuring microphones.
15.	Methodological support	Комплекс навчально-методичного забезпечення навчальної дисципліни " Вимірювання на звукових та ультразвуковихчастотах " підготовки бакалавра спеціальності 171 «Електроніка» ,освітня програма «Системи, технології і комп'ютерні засоби мультімедіа» [Електронний ресурс] / ХНУРЕ ; розроб. В.М. Олейніков. – Харків, 2019. – 353 с. http://catalogue.nure.ua/knmz.
16.	The developer of the Syllabus	Professor, Vladimir Oleynikov, E-mail: vladimir.oleinikov@nure.ua