

№	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	Master's degree
3.	Code and title of specialty	172 "Telecommunications and radio engineering"
4.	The type and title of the educational program	Educational and professional program "Media Engineering"
5.	Code and title of the discipline	"Electromagnetic compatibility in information electronic systems"
6.	Number of ECTS credits	6
7.	The structure of the course (distribution by type and hours of training)	Lectures - 32 hours; practical classes - 12 hours; laboratory classes - 16 hours; independent work - 108 hours; semester control - combined exam.
8.	Schedule (terms) of study of the subject	Course - 5; semester - 9.
9.	Prerequisites for learning the discipline	Acoustics and acoustic devices", "Signals and processes", "Fundamentals of television", "Radio transmitters and receivers", "Radio access technologies", "Radio electronic systems", "Multimedia information transmission technologies", "Power supply of radio electronic equipment" 10 Compulsory discipline of professional and practical training, contains content modules: 1. Management of the use of radio frequency resources 2. Unintentional electromagnetic interference 3. Technical imperfection of radio transmitters 4. Technical imperfection of radios. 5. Features of antenna devices in terms of EMC. 6. Evaluation of EMC of radio communication networks. 7. Methods of organizational and technical solutions in the field of EMC. 8. Intra-instrument EMC.
10.	Abstract (content) of the discipline	Compulsory discipline of professional and practical training, contains content modules: 1. Management of the use of radio frequency resources 2. Unintentional electromagnetic interference 3. Technical imperfection of radio transmitters 4. Technical imperfection of radios. 5. Features of antenna devices in terms of EMC. 6. Evaluation of EMC of radio

		communication networks. 7. Methods of organizational and technical solutions in the field of EMC. 8. Intra-instrument EMC Topics of practical classes: 1. Characteristics of interference and methods of their calculation 2. Technical imperfection of radio transmitters. Features of antenna devices in terms of EMC .3. Evaluation of EMC of radio communication networks.4. Methods of organizational and technical solutions in the field of EMC 5. Intra-equipment EMC.
11.	Competencies, knowledge, skills, understanding that a higher education acquirer has in the learning process	Ability to design and calculate complex devices, elements of information and telecommunication systems and networks, radio systems and television and radio broadcasting systems, according to the terms of reference in accordance with international standards, using design automation tools, incl. created independently; Ability to model and design, including new (modernize existing) devices, elements (modules, blocks, units) of telecommunication and radio systems and networks, tele-radio broadcasting systems, etc 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	Choose the best research methods, modify, adapt and develop new methods and form a method of processing results. Investigate processes in telecommunications systems and networks, radio systems and devices using automation of engineering calculations, planning and conducting scientific experiments on processing and analysis of results. To generalize modern scientific knowledge and apply them to solve scientific and technical problems, assess the possibility of bringing the obtained solutions to the level of competitive developments, implementation of results in business projects
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. Execute a course project. 5. Get at least 60 points per semester. 6. Pass the combined exam. .; practical classes - 14 hours; laboratory classes - 24 hours Grade for the semester $O_{\text{сем}}$: (2-4) x6 - practical classes + (2-4) x4- laboratory classes + (12-20) x2 -control work + (12-20) - 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	14 The quality of the educational process is based on: - policy of academic integrity (http://lib.nure.ua/plagiat); - continuous updating of the content of the discipline on the basis of obtaining the results of modern scientific research and achievements in the field of media engineering. Update of the working program of the discipline – 2020 Deadline and recompilation policy: Works that are submitted in violation of deadlines without good reason are evaluated at a lower score (75% of the possible maximum number of points for the type of activity of points). Relocation of modules occurs for good reasons (for example, hospital). Academic Integrity Policy: Write-offs during tests are prohibited (including using mobile devices). Mobile devices are allowed to be used only during online testing and preparation of practical tasks during the lesson. Attendance policy: Attendance is a mandatory component of assessment. For objective reasons (eg illness, employment, international internship) training can take place online in consultation with the lecturer.
15.	Methodological support	Комплекс навчально-методичного забезпечення навчальної дисципліни "Електромагнітна сумісність в медіасистемах" підготовки магістра спеціальності 172 «Телекомунікації та радіотехніка», освітня програма «Медіаінженерія» [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