

# FOREIGN LANGUAGE (ENGLISH)

## COURSE SYLLABUS

<b>Code and name of specialty</b>	<b>172- Telecommunication and Radio Engineering</b>	<b>Institute</b>	<b>Institute of Education and Science in Engineering and Physics</b>
<b>Program name</b>	<b>Telecommunication and Radio Engineering</b>	<b>Department</b>	<b>Radio Electronics</b>
<b>Type of program</b>	<b>Educational and Professional</b>	<b>Language of instruction</b>	<b>English / Ukrainian</b>

### LECTURER

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**Senior lecturer of Cross-Cultural Communication and Foreign Languages Department (NTU “KhPI”)  
 Authored and co-authored over 20 scientific publications. Courses: "Foreign Language"; "Professional Foreign language"; "Foreign language for communication in a scientific and professional environment"**

### GENERAL DESCRIPTION OF THE COURSE

<b>Summary</b>	The course is professionally oriented and communicative in nature. Considerable attention is paid to the formation of lexical competence of higher education students through the development of relevant professionally oriented lexical material and grammatical competence through the study of basic grammatical structures necessary for practical proficiency in a foreign language in various types of speech activities. The course also contributes to the formation of the necessary knowledge to obtain the latest professional information through foreign sources.
<b>Course objectives</b>	The purpose of training is to master a foreign language as a means of intercultural, interpersonal and professional communication in various fields of scientific and practical activity, to form the necessary general and professionally oriented communication competencies, to develop the skills to use a foreign language effectively and adaptively in various types of speech activities, to create a strategy for independent learning of a foreign language.
<b>Types of classes and control</b>	Practical lessons. The course ends with a final exam. (8 <sup>th</sup> term)
<b>Term</b>	1, 2, 3, 4, 5, 6, 7, 8

<b>Student workload (credits) / Type of course</b>	16/ Mandatory	<b>Lectures (hours)</b>		<b>Practical lessons (hours)</b>	256	<b>Self-study (hours)</b>	232
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<b>Program competences</b>	ZK-1. Ability to abstract thinking, analysis and synthesis. ZK-4. Knowledge and understanding of the subject area and understanding of professional activity. ZK-6. Ability to work in a team.
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ZK-7. Ability to learn and master modern knowledge.  
ZK-8. Ability to identify, pose and solve problems.

Learning outcomes	Teaching and learning methods	Forms of assessment (continuous assessment CAS, final assessment FAS)
PRN - 5 - skills of evaluation, interpretation and synthesis of information and data; PRN - 7 - competently apply the terminology of telecommunications and radio engineering; PRN - 10 - communicate on professional issues, including oral and written communication in the state language and one of the common European languages (English, German, Italian, French, Spanish); PRN - 11 - Apply interpersonal skills to interact with others and engage them in teamwork.	Grammar-translation method combined with communicative and interactive methods, as well as mini-lectures, business and role-playing games; project method, case method or situational exercise method; individual, pair, group and team work for interviews, think-pair-share, brainstorming, inside/outside circles, jigsaw reading	Control work on the topics of the modules (CAS), oral test/exam, as well as by testing (FAS)

### ASSESSMENT AND GRADING

Range s of points corres pondi ng to grades	Score (points) for all types of learning activities	ECTS grading scale	The national grading scale	Allocation of grade points	The points are distributed across the different activities in the following proportions: <b>20%</b> in the form of an <b>examination or test</b> , which are conducted orally and by means of tests, and <b>80% of the current assessment</b> , which includes: - <b>20%</b> tests (2 module tests / semester); - <b>30%</b> practical tasks - <b>30%</b> individual tasks (independent work and defense of project works)	
	90-100	A	excellent			
	82-89	B	good			
	74-81	C				
	64-73	D	satisfactory			
	60-63	E				
	35-59	FX	Unsatisfactory (with the exam retake option)			
	0-34	F	Unsatisfactory (with mandatory repetition of the course)			

**Course policy** Students are expected to attend classes regularly, to get to class on time and stay for the duration of the class. In the case of absence, students will be required to submit all assignments to make up for the missed classes. Students are also expected to come to class having read all the required material and being ready to productively participate in the class discussions. Written assignments should be submitted before the specified deadlines.

<b>Practical lesson 1</b>	Familiarization with the course content. Convergence in the field of telecommunications and IT. The structure of a simple sentence. Types of sentences in English. The declarative sentence and its structure.	S e l f - s t	Convergence of telecommunication networks and services.
<b>Practical lesson 2</b>	Convergence in technology. Convergence in business. Convergent future. Application, definition and circumstance in a simple sentence.		New generation television systems.
<b>Practical lesson 3</b>	Mobility. Mobile devices. Interrogative questions and peculiarities of their formation. Imperative sentences and the formation of imperatives.		Multiservice communication networks of the next generations.

<b>Practical lesson 4</b>	Mobile technologies in retail. Verbs of the Simple group: Present Simple Active, Past Simple Active, Future Simple Active.	<b>u d y</b>	Information security systems.
<b>Practical lesson 5</b>	Software. The process of software development. Software solutions. Verbs of the Continuous group: Present Continuous Active, be going to, Past Continuous Active, Future Continuous Active.		Optical technologies in telecommunications.
<b>Practical lesson 6</b>	Project management. Passive Voice Simple.		Methods of designing multiservice systems and networks.
<b>Practical lesson 7</b>	Networks. Global infrastructure. Features of the professional activity of a trainer-teacher. The role and importance of professional knowledge and skills of the trainer. Continuous Passive. Perfect Passive		Internet services and cloud computing service platforms.
<b>Practical lesson 8</b>	Corporate networks. Network management. Modal verbs (features of the form, meaning: possibility, necessity, assessment of probability) Modal verbs of the 1st group (can, must) and their equivalents (be able, be allowed, be permitted, be forbidden)		Home networks "at home"
<b>Practical lesson 9</b>	Data centers and security. Present Continuous Active, be going to Information security. Banking security. Past Continuous Active		Service-oriented technologies and infocommunication services.
<b>Practical lesson 10</b>	Information security. Banking security. Past Continuous.		Broadband optical telecommunication systems.
<b>Practical lesson 11</b>	Active Services. Managed services. Future Continuous Active.		Means of communication of computerized systems.
<b>Practical lesson 12</b>	Service Level Agreement. Negotiating a service level agreement. Acquisition, features of use. Passive voice of verbs. Simple Passive.		Radio communication systems.
<b>Practical lesson 13</b>	Media. Television. Media startups. Continuous Passive.		Radio electronic systems.
<b>Practical lesson 14</b>	Ease of use of the site. Perfect Passive		Mobile communication systems.
<b>Practical lesson 15</b>	Social. Healthcare. Monitoring. Modal verbs (peculiarities of form, meaning: possibility, necessity, probability assessment)		Modeling of information network channels
<b>Practical lesson 16</b>	Introduction of technologies in society. Modal verbs of group 1 (can, must) and their equivalents (be able, be allowed, be permitted, be forbidden)		Technique of modern radiating systems

<b>Practical lesson 17</b>	Consumer electronics. Modal verbs of the 2 group (must, needn't, should, ought to) and their equivalents (be, have).	Specialized microprocessors in information networks
<b>Practical lesson 18</b>	Electronics basics part 1. Modal verbs of the 1 group (must, can't, should, may, might, could).	Antennas with signal processing
<b>Practical lesson 19</b>	Fundamentals of Electronics part 2. Modal verbs with complex infinitive forms.	Radio frequency identification
<b>Practical lesson 20</b>	Tools part 1. Functions of the verbs to be, to have.	Energy saving technologies
<b>Practical lesson 21</b>	Tools part 2. Grammar: The structure of a complex sentence.	Evolutionary electronics
<b>Practical lesson 22</b>	Soldering tools. Compound sentences of different types, conjunctions.	Sensor networks
<b>Practical lesson 23</b>	Counters. Non-conjunctive sentences.	Digital signal microprocessors
<b>Practical lesson 24</b>	Workspace. Indirect speech, tense agreement. Indirect narrative sentences. Indirect questions.	Broadband information transmission technologies
<b>Practical lesson 25</b>	Job responsibilities part 1. Subjunctive mood. Types of conditional sentences (I, II, III)	Information and communication technologies
<b>Practical lesson 26</b>	Job descriptions part 2. Sentences with the verb wish.	Global information infrastructure
<b>Practical lesson 27</b>	Working conditions. Functions of the verb should.	Planning and design of information networks
<b>Practical lesson 28</b>	The working environment. The participle (Participle I). Forms and functions.	Converged service platforms for next generation networks
<b>Practical lesson 29</b>	Electrical safety. The participle (Participle II). Forms and functions.	Wireless sensor networks

<b>Practical lesson 30</b>	Mathematics. Participial phrases (compound application, independent participial).	Mobile communication networks of the 4th and 5th generations
<b>Practical lesson 31</b>	Units of measurement. Gerund. Forms and functions.	4G/5G network operation
<b>Practical lesson 32</b>	Prefixes. Gerund phrases.	Technologies of the next generation mobile communication network
<b>Practical lesson 33</b>	Personality. Publicity. Media. Digital media	Methods of multimedia information processing
<b>Practical lesson 34</b>	Problems. Personal problems. Feelings. Crimes	Information security of mobile communication network
<b>Practical lesson 35</b>	Traditions and customs. Culture. Verbal and non-verbal communication.	Internet of things and smart devices
<b>Practical lesson 36</b>	American English and British English. Distinctive and common features	Telecommunication and information networks
<b>Practical lesson 37</b>	Vacation and tourism. Varieties of outdoor activities. Types of traveling.	Logistics in information and communication systems
<b>Practical lesson 38</b>	Connections. Relationships. Relationships	Management and network administration of enterprises
<b>Practical lesson 39</b>	Health. Nutrition. Diseases. Treatment	Configuration and engineering of new generations of information and communication networks
<b>Practical lesson 40</b>	Healthy lifestyle. Healthy nutrition. Eco-cities	Service-oriented technologies and infocommunication services
<b>Practical lesson 41</b>	Urban legends. Information wars. Fake news. Fact-checking	Infocommunication services and quality of service in ICS
<b>Practical lesson 42</b>	Protests. Hashtag activists	WEB-programming

<b>Practical lesson 43</b>	Consumption. Money. Shopping	Development, testing and operation of applications in cloud technologies
<b>Practical lesson 44</b>	Online shopping. Culture of online consumers	Hardware and software platforms for mobile communications

### RECOMMENDED READING

<b>C o m p u l s o r y</b>	1. Academic Writing Course. R.N. Jordan, Longman, 2008.	<b>R e c o m m e n d e d</b>	1. Williams, E.Y. (2018) Presentations in English. Macmillan.
	2. Career Paths English: Information Technology. Virginia Evans, Jenny Dooley, Stanley Wright, Express Publishing, 2011.		2. Grussendorf, M. (2017) English for Presentations. OUP.
	3. Check Your English Vocabulary for Computers and Information Technology. Vocabulary Workbook. Jonathan Marks, A & C Black Publishers Ltd, 2007.		3. Powell, M. (2012) Presenting in English. Thomson. Heinle.
	4. English for Emails. Oxford University Press, 2007.		4. Thomson, K. (2017) English for Meetings. OUP.
	5. English for Socialising. S. Gore, D.G. Smith, Oxford University Press, 2007.		5. Thomson, K. (2018) English for Negotiations. OUP.
	6. English for Telephoning. Oxford University Press, 2006.		6. Murphy, R. (2012) English Grammar in Use. CUP.
	7. English for Telecoms and Information Technology. Tom Ricca-McCarthy		7. Hewings, M. (2015) Advanced Grammar in Use. CUP.
	8. Michael Duckworth Oxford University Press, 2017.		8. Eastwood, J. (2016) Oxford Practice Grammar (inter). OUP.
	9. English Grammar in Use. R. Murphy, Cambridge University Press, 2006.		9. Yule, G. (2016) Oxford Practice Grammar (adv). OUP.
	10. Esteras S. R. Infotech 4. English for computer users. Cambridge, 2009		10. Oxford Business English Dictionary. (2015) OUP.
	11. Esteras S. R. Infotech 4. English for computer users. Workbook- Cambridge, 2009		
	12. Exam Booster. Preparation for B2+ Level Exams. Virginia Evans, Jenny Dooley. Express Publishing, 2020.		
	13. Oxford English for Computing. Keith Boeckner, P. Charles Brown, Oxford University Press, 2005.		
	14. Professional English in Use ICT. For Computers and the Internet. Santiago Remacha Esteras, Elena Marco Fabre, Cambridge University Press, 2007.		
	15. Solutions. Upper-intermediate. Student's Book/ Workbook. 3rd Edition. Tim Falla, Paul A Davies. Oxford University Press, 2017.		

### Academic integrity

Students are expected to adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KhPI".

The content of this syllabus is consistent with the Telecommunication and Radio Engineering course program.