



**Practical Course in Professional Foreign Language. Part 1
(English)
Curriculum (Syllabus)**

| Course details | |
|---|--|
| Level of higher education | <i>First (bachelor's)</i> |
| Field of knowledge | 17 Electronics, automation, and electronic communications |
| Special | 172 Electronic Communications and Radio Engineering |
| Educational program | Information and communication radio engineering; Radio engineering computerized systems; Intelligent technologies of radio electronics, Radio-electronic warfare technologies |
| Discipline status | Mandatory |
| Form of study | Full-time (daytime) |
| Year of training, semester | 3rd year (5th, 6th semester) |
| Scope of the discipline | 3 credits (ECTS). Total scope of the discipline 90 hours: practical classes – 72 hours, independent work – 18 hours. |
| Semester control/control measures | Modul C (5th semester), credit (6th semester) |
| Class schedule | 1 class per week according to the schedule http://rozklad.kpi.ua/ |
| Language of instruction | English |
| Information about the course coordinator/teachers | Department teachers: KAMGS No. 3 - https://kamgs3.kpi.ua/ Coordinator: Lecturer Iryna Vitaliivna Boiko Contact phone number: 0991691038 Email: iboykoboyko@gmail.com |
| Course location | The course is hosted on the Sikorsky platform: and on the department website_ https://kamgs3.kpi.ua/ |

Curriculum

1. Description of the academic discipline, its purpose, subject matter, and learning outcomes

The discipline "Practical Course in Foreign Language for Professional Purposes" belongs to the cycle of humanities and socio-economic training. Its distinctive feature is its professionally-oriented nature and interdisciplinary connections, which are reflected in the educational goals and content of the course.

The aim of the course is to develop foreign language communication skills at a level not lower than B2, which is the standard for bachelor's degree programs. At this level, students are able to communicate effectively in typical educational and professional situations in accordance with the norms and cultural traditions of specialists in a particular field.

This discipline is important for future specialists to study as it provides them with the necessary level of knowledge, skills, and abilities in foreign language professional communication and ensures the effective use of English terminology during international cooperation, taking into account the peculiarities of communication within the needs of the relevant profession. The discipline covers the basic needs of document management, business correspondence, and production negotiations in a foreign language.

While studying the discipline, students acquire **general competencies**:

- Ability to apply knowledge in practical situations

- Ability to work in a team
- Ability to learn and master modern knowledge

The acquired competencies form **the** following **program learning outcomes** in students:

- 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).

2. Prerequisites and post-requisites of the discipline (place in the structural-logical scheme of training under the relevant educational program)

Prerequisites: "Practical Foreign Language Course."

Post-requisites: Practical course in a foreign language for professional purposes. Part 2 (English).

3. Contents of the academic discipline

Thematic plan of the educational component 5 Semester

| |
|--|
| Topic 1. Basic task of Radio Engineering |
| Topic 2. Radio Waves |
| Topic 3. Radio Communication System. |
| Topic 4. Radar Systems |
| Topic 5. Radiolocation |
| Topic 6. Robotics |
| Topic 7. Programming in Electronics |
| Topic 8. Drones |

6 Semester

| |
|--|
| Topic 9. Antennas |
| Topic 10. Technical Specifications |
| Topic 11. Giving Instructions |
| Topic 12. Technical Problems and Fixes |
| Topic 13. Security and Privacy |
| Topic 14. Planning in Tech |
| Topic 15. Rules and Regulations |
| Topic 16. Safety Precautions |

4. Learning Materials and Resources

Basic literature:

1. Ibbotson, M. (2008). Cambridge English for Engineering: Cambridge University Press.
2. Grussendorf, M. (2007). *English for Presentations*. Oxford: Oxford University Press.
3. Hollett, V., Sydes, J. (2009). *Tech Talk Intermediate*. Oxford: Oxford University Press.
4. Sklyarenko, T. I., Shcherban, L. M. (2007). *Professional English: Teaching materials for third-year students*. NTUU "KPI".

Supplementary literature:

1. Dooley, J. Evans, V. (2004). Grammarway 3. Express Publishing.
2. Raymond, M. (2019). English Grammar in Use. Cambridge University Press.
3. Thompson, A. (1996) Practical English Grammar. Oxford University Press.

8. Karpenko, N. (2004) Methodological guidelines for conducting presentations for students of all specialties in their third and fourth years. "Professional English" course. "Polytechnic."

Online resources:

<https://learnenglish.britishcouncil.org/en/english-emails>

<https://esol.britishcouncil.org>

<https://learnenglishteens.britishcouncil.org/>

<https://www.bbc.co.uk/learningenglish/>

Educational content

5. Methodology for mastering the academic discipline (educational component)

The general methodological approach to teaching the academic discipline "Practical Course in Professional Foreign Language" is defined as communicative-cognitive, activity-oriented, with the student as the subject of learning at its center. The methodology of teaching a foreign language combines the basic principles of communicative methodology aimed at developing foreign language communication skills, in which communication is both the ultimate goal of language learning and the means of achieving it. The work in practical classes is aimed at acquiring knowledge, developing and improving skills and abilities to communicate in a foreign language environment, effectively processing foreign language sources of information, selecting the necessary information, developing critical analysis skills and abilities, and developing foreign language written communication skills and abilities.

| No | Topic | Class hours |
|---------------------|---|-------------|
| 5th semester | | |
| 1 | Topic 1. Introduction to the course. Practical task: completion of entrance testing. | 2 |
| 2 | Topic 2. Basic task of Radio Engineering. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 3 | Topic 3. Radio Communication System. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 4 | Topic 3. Radio Communication System. Mobile systems. Practical task: performing exercises related to the topic of the lesson. | 2 |
| 5 | Topic 4. Radar Systems. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 6 | Topic 4. Radar Systems. How radar works. Practical task: review of the material studied. | 2 |
| 7 | Review of the material studied. Current testing. | 2 |
| 8 | Topic 5. Radiolocation. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 9 | Topic 6. Robotics. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 10 | Topic 6. Robotics. Robot manipulator. Practical task: performing exercises related to the topic of the lesson. | 2 |
| 11 | Topic 7. Programming in electronics. Practical task: performing exercises related to the topic of the lesson. | 2 |
| 12 | Topic 7. Programming in electronics. | 2 |

| | | |
|---------------------|---|-----------|
| | Practical task: performing exercises related to the topic of the lesson. | |
| 13 | Topic 8. Drones and their applications. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 14 | Topic 8. Drones: types and improvements. Practical task: completing exercises related to the topic of the lesson. | |
| 15 | Presentations on professional topics. Discussion and peer assessment of presentations. | 2 |
| 16 | Review of the material studied. Preparation for the module test. | 2 |
| 17 | Modular test | 2 |
| 18 | Analysis of the results of the modular test. Summing up the semester. | 2 |
| 6th semester | | |
| 19 | Topic 9. Antennas. Practical task: diagnostic testing; completion of exercises related to the topic of the lesson. | 2 |
| 20 | Topic 9. Antennas. Practical task: performing exercises related to the topic of the lesson. | 2 |
| 21 | Topic 10. Technical Specifications. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 2 | Topic 10. Technical Specifications. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 23 | Topic 11. Giving Instructions. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 24 | Topic 12. Technical Problems and Fixes. Practical task: performing exercises related to the topic of the lesson. | 2 |
| 25 | Review of the material studied. Current testing. | 2 |
| 26 | Topic 12. Technical Problems and Fixes. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 27 | Topic 13. Security and Privacy. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 2 | Topic 14. Planning in Tech Practical task: completing exercises related to the topic of the lesson. | 2 |
| 29 | Topic 14. Planning in Tech Practical task: completing exercises related to the topic of the lesson. | 2 |
| 30 | Topic 15. Rules and Regulations. Practical task: performing exercises related to the topic of the lesson. | 2 |
| 31 | Topic 15. Rules and Regulations. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 32 | Topic 16. Safety Precautions. Practical task: completing exercises related to the topic of the lesson. | 2 |
| 33 | Topic 16. Safety Precautions. Practical task: performing exercises related to the topic of the lesson. | 2 |
| 34 | Review of the material studied. Preparation for the final test. | 2 |
| 35 | Final test | 2 |
| 36 | Credit | 2 |
| | TOTAL | 72 |

6. Independent work by students

Independent work is the main means of assimilating educational material outside of class time and includes: preparation for practical classes, studying additional material, preparation for presentations, modular

tests and exams, and completing individual assignments. Individual assignments are one form of independent learning that aims to deepen, generalize, and consolidate the knowledge, skills, and abilities that students acquire in the formal learning process. Typical individual assignments may include: completing tasks on the Sikorsky platform, competitive creative works, interactive posters and presentations, virtual trips, writing essays, completing exercises of varying degrees of difficulty on an individual basis, etc.

Distribution of hours between classroom and independent work

| Names of content modules | Number of hours | | |
|--------------------------|-----------------|-----------|-----|
| | Total | Including | |
| | | Practical | SRC |
| 5 semester | | | |
| Practical classes | 41 | 34 | 7 |
| Modular test | 4 | 2 | 2 |
| Total (1 semester) | 45 | 36 | 9 |
| 6 semester | | | |
| Practical classes | 35 | 32 | 3 |
| Final test | 2 | 2 | 0 |
| Credit | 8 | 2 | 6 |
| Total (2nd semester) | 45 | 36 | 9 |
| TOTAL | 90 | 72 | 18 |

Policy and control

7. Policy of the academic discipline (educational component)

The educational component "Practical Course in Professional Foreign Language. Part 1" is exclusively practical in nature, therefore, for successful learning, it is necessary to study the materials for preparation for practical classes on the topics, work with basic and additional literature.

All necessary teaching materials are posted by the instructor in the Sikosky online environment, which is accessible to students studying this educational component.

Students receive up-to-date information on the organization of the educational process for the discipline through messages on the Electronic Campus or through the official channel of the department in the Telegram messenger. During blended or distance learning, practical classes are held in the format of video conferences on the Zoom/Google Meet/Microsoft Teams/Blue Button/Discord platform.

Assessment is carried out according to an agreed rating system. Expected learning outcomes, control measures, and deadlines are announced to students at the first class.

Bonus points may be awarded for participation in scientific and practical conferences, competitions, and in the case of recognition of learning outcomes acquired through non-formal and/or informal education.

Bonus points for participation in events of various levels may constitute no more than 10% of the total rating, i.e., no more than 10 points per year.

| Type of event/Level | International | All-Ukrainian | University |
|--|---------------|---------------|------------|
| Scientific conference with a presentation in a foreign language | 5 | 4 | 2.5-0.5 |
| Creative works competition with presentation in a foreign language | 5 | 4 | 2.5-0.5 |

| | | | |
|---------------------------|---|---|---------|
| language | | | |
| Foreign language Olympiad | 5 | 4 | 2.5-0.5 |

Academic integrity

Students must adhere to the Code of Honor of Igor Sikorsky Kyiv Polytechnic Institute, the principles of academic integrity, and the norms of ethical behavior: to demonstrate discipline, politeness, friendliness, honesty, and responsibility.

The policy and principles of academic integrity are defined in Section 3 of the Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute." For more details, see: <https://kpi.ua/code>

Standards of ethical conduct

The standards of ethical conduct for students and employees are defined in Section 2 of the Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute." For more information, visit: <https://kpi.ua/code>

8. Types of control and rating system for assessing learning outcomes (RSO)

Ongoing assessment. The instructor regularly enters the results of ongoing assessment into the "Ongoing Assessment" module of the Electronic Campus in accordance with the Regulations on ongoing, calendar, and semester assessment at Igor Sikorsky Kyiv Polytechnic Institute. For more details, see: https://document.kpi.ua/2020_7-137. Students can view the results of current assessment in their personal account on the Electronic Campus.

During the first class, students are introduced to the rating system of assessment (RSA) for the discipline, which is based on the Regulations on the system of assessment of learning outcomes https://document.kpi.ua/files/2020_1-273.pdf

In particular, a student's grade for a course consists of points that can be earned for answers in practical classes during two semesters and for completing the MCR in the first semester and the final test in the second semester. During the first class of the fall semester, an entrance test is conducted, the results of which are not included in the student's grade. A diagnostic test is conducted during the first class of the spring semester.

According to the Regulations on current, calendar, and semester control of learning outcomes at Igor Sikorsky KPI (<https://osvita.kpi.ua/node/32>) and the Regulations for conducting semester control in a remote mode (<https://osvita.kpi.ua/node/368>) calendar control is conducted in weeks 7-8 and 14-15 of each semester and is implemented by determining the level of compliance of the student's current performance rating with the criteria specified in the RSO.

| No . | Type of event | % | Weight | Number | Total |
|--------------|---|----|--------|--------|-----------|
| 1. | Work in practical classes (5th semester – 14 classes; 6th semester – 16 classes) | 75 | 2.5 | 30 | 75 |
| 2 | Presentation on a professional topic. Discussion and peer assessment of presentations. (5th semester) | 5 | 5 | 1 | 5 |
| 3 | Modular test (5th semester) | 10 | 10 | 1 | 10 |
| 4 | Final test (6th semester) | 10 | 10 | 1 | 10 |
| Total | | | | | 10 |

Criteria for assessing mastery of the educational component

The maximum weight score for work in a practical class is 2.5 points.

| Assessment | Weight | Assessment criteria |
|------------|--------|---|
| Excellent | 2.5 | Excellent work in practical classes, complete and correct completion of educational tasks taking into account the material studied on the topic of the class (95%-100% of the volume of tasks and number of correct answers); minor errors present |
| Very good | 2 | active work in practical classes, complete and correct performance of educational tasks taking into account the material studied on the topic of the class, not less than (85%-94% of the volume of tasks and the number of correct answers); minor errors errors |
| Good | 1.5 | work in practical classes, partial completion of educational tasks taking into account the material studied on the topic of the class (75%-84% of the volume of tasks and the number of correct answers); minor errors or answer with minor inaccuracies |

| | | |
|-----------------------|-----|---|
| Satisfactory | 1 | satisfactory work in practical classes, partial completion of educational tasks taking into account the material studied on the topic of the class (65%-74% of the volume of tasks and the number of correct answers); errors or answers with inaccuracies are present; if the applicant is not prepared for the practical class but is actively working on using the practical class material, the work will be assessed according to this criterion |
| Sufficient | 0.5 | work in practical classes, completion of educational tasks taking into account the material studied on the topic of the class (60-64% of the volume of tasks and the number of correct answers); gross errors or answers with inaccuracies; if the applicant is not prepared for the practical class but is actively working on using the material from the practical class, the work will be assessed according to this criterion |
| Unsatisfactory | 0 | the applicant is not prepared for the practical class; does not work during the practical class |

Preparation and delivery of a professional presentation

In order to improve skills and abilities for effective processing of authentic professionally-oriented sources, development and improvement of skills and abilities for presentations in English, applicants are offered to analyze English-language resources in their specialty, prepare a presentation and deliver it during the practical class. The topics of the presentations are agreed in advance with the teacher and assigned to the applicants.

The preparation and delivery of presentations are assessed according to the following criteria:

1. Content and structure (1 point):

- Relevance to the topic: adherence to the main topic and task of the presentation.
- Structure of the text and presentation: presence of an introduction, main part, conclusion, and references to the sources used, as well as whether their functions have been fulfilled.
- Logical organization: presence of a clear and consistent logical distribution of ideas and arguments in the presentation.
- Reasonableness of arguments: assessment of the presence of arguments, examples, and evidence that support the ideas of the presentation.

2. Language competence (1 point):

- Grammatical correctness: assessment of the presence of grammatical errors in the text.
- Lexical choice: assessment use of and expressions general and professional use.
- Text integrity and coherence: assessment of the appropriateness of the chosen writing style, use of different types of sentences, connections between sentences and paragraphs.

3. Public speaking skills (2 points):

- Speech competence: assessment of grammatical correctness, lexical choice, integrity and coherence of the speech; assessment of pronunciation, intonation, logical pauses and speech tempo.
- Posture and gestures: use of appropriate posture, gestures, and facial expressions during the presentation.
- Ability to use presentation tools: assessment of the quality of slides, their content, graphic design, and the relationship between text and graphics, as well as the applicant's ability to present information on slides.

4. Answers to questions (1 point):

- Speech competence: assessment of grammatical correctness, lexical choice, integrity, and coherence of the answer; assessment of pronunciation, intonation, logical pauses, and speech tempo.
- Depth and clarity of answers: assessment of the applicant's ability to answer questions with

sufficient depth and understanding of the topic, to express thoughts clearly and concisely.

Calendar control (CC) of students is carried out according to the current rating. The condition for satisfactory certification is that the student's current rating is not less than 50% of the maximum possible at the time of calendar control.

| CC term | | Maximum current rating | Minimum current rating (50%) |
|--------------|-----------------------|------------------------|------------------------------|
| 5th semester | 8 weeks (first CC) | 17.5 | 8.75 |
| | Week 14 (second CC) | 32 | 16.2 |
| 6th semester | 8 weeks (third CC) | 70 | 35 |
| | 14th week (fourth CC) | 85 | 42 |

The modular control work (MCW) is conducted to check students' mastery of the module material in the penultimate class of the fall semester, and **the final test** (FT) is conducted in the penultimate class of the spring semester. The purpose of the MCT and FT is to test the level of language skills in listening, reading, grammar, writing, and speaking.

The module control work/final test consists of the following tasks:

- 1) Listening comprehension (5 questions). Maximum score – 10, each question – 2 points.
- 2) Reading comprehension (10 questions). Maximum score – 20, each question is worth 2 points.
- 3) Use of language to test the student's lexical skills (10 questions). Maximum number of points – 10, each question – 1 point.
- 4) Use of language to test the student's grammar skills (20 sentences). Maximum number of points – 20, each question – 1 point.
- 5) A writing task designed to test the ability to write a coherent and logically complete text in a foreign language. Maximum number of points – 10.
- 6) Speaking: conversation on suggested topics. Monologue: maximum number of points – 10. Dialogue: maximum number of points – 20.

To simplify the calculation, we introduce a coefficient of 0.1. Thus, the maximum number of points for MCR/PT: $100 \text{ points} \times 0.1 = 10 \text{ points}$.

Retaking the modular test is not allowed.

Semester control in the form of a test is conducted during the last class of the spring semester. During the penultimate class of the spring semester, the final calculation of the RD rating is made for students, and incentive points are added for creative work.

Students who have earned $RD \geq 60$ points have the opportunity to:

- receive a credit grade (credit) automatically according to the rating obtained. In this case, *RD* points and corresponding grades are entered into the credit-examination record;
- take a credit test in order to improve their grade.

If the grade for the credit test is higher than the "automatic" grade based on the rating, the student receives a grade based on the results of the credit test.

If the grade for the test is lower than the "automatic" grade based on the rating, a "strict" RSO is applied — the student's previous rating is canceled, and they receive a grade based on the results of the test.

Students who have scored less than 60 points in the educational component over two semesters are required to complete a test.

Structure of the test:

Test task No. 1 (listening comprehension).

The maximum number of points is 10, with each question worth 2

points. Test tasks No. 2 and No. 3 (reading).
 Maximum number of points – 20, each question – 2 points. Test task No. 4 (vocabulary knowledge).
 Maximum number of points – 10, each question – 1 point. Test task No. 5 (grammar knowledge).
 Maximum number of points – 20, each question – 1 point.
 Test task No. 6 (writing). Maximum number of points – 10.
 Test task No. 7 (monologue and dialogue speech). Maximum number of points – 30.

Grading scale:

95–100 points "excellent"
 85–94 points "very good"
 75–84 points "good"
 65–74 points: "satisfactory"
 60–64 points: "sufficient" Less than 60 points: "unsatisfactory"

The conversion of rating scores from the educational component for entry into the transcript is carried out in accordance with the table:

Table of correspondence between rating points and grades on the university scale:

| Number of points | Grade |
|------------------|----------------|
| 100-95 | Excellent |
| 94 | Very good |
| 84 | Good |
| 74-65 | Satisfactory |
| 64-60 | Sufficient |
| Less than 60 | Unsatisfactory |

9. Additional information on the discipline

Recognition of learning outcomes obtained in non-formal/informal education, in particular an international certificate in a foreign language at level B2 and above (a list of recommended international tests of knowledge of English as a foreign language is given in Appendix 1 to Order No. 13 of the Ministry of Education and Science of Ukraine dated 14.01.2016, see <http://old.mon.gov.ua/files/normative/2016-03-04/5162/nmo-13.pdf>), is regulated by the relevant current "Regulations on the recognition of learning outcomes acquired in non-formal/informal education at Igor Sikorsky Kyiv Polytechnic Institute" (<https://osvita.kpi.ua/node/179>).

To validate learning outcomes, a subject committee is created by order of the dean of the faculty, which includes: the head of the department; a scientific and pedagogical worker responsible for the educational component proposed for enrollment; a scientific and pedagogical worker of the department of the technical faculty/institute, as a rule, the curator of the applicant's academic group or his/her scientific supervisor. The subject committee reviews the submitted documents, analyzes their compliance with the syllabus (work program of the academic discipline/educational component), interviews the applicant (if necessary), and makes one of the following decisions:

1. recognize the results obtained during informal education and count them as a semester assessment for the relevant academic discipline/educational component;
2. recognize the results obtained during informal education and count them according to the rating system as a current assessment for the relevant academic discipline/educational component, with a maximum of 15 points per academic year;
3. not to recognize the results obtained during non-formal/informal education;
4. set a date for an extraordinary assessment, in accordance with the curriculum for the academic discipline/educational component, which may be credited.

Inclusive education. The educational component may be taught to most students with special educational needs who are unable to perform tasks using personal computers, laptops, and/or other technical means. For more information on ensuring the inclusiveness of education at Igor Sikorsky KPI, please visit <https://osvita.kpi.ua/node/172>.

Work program for the academic discipline (syllabus):

Compiled by M.V. Petrenko, lecturer at the Department of AMGS No. 3.

Approved by the Department of AMGS No. 3 (Minutes No. 12 of June 12, 2025)

Approved by the Methodological Commission of the Faculty of Linguistics (Minutes No. 11 of June 19 2025)

Approved by the Methodological Commission of the RTF (Minutes No. 06/2025 dated June 26, 2025)