

**KNOWLEDGE OF A FOREIGN LANGUAGE AS A KEY FACTOR FOR WORKING  
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**Abstract:** This article explores the significance of foreign language proficiency as a vital element in the professional training of engineering specialists within the context of innovative development. It highlights the communicative functions of engineers in international settings, including interpreting technical documentation, participating in global projects and conferences, and conducting professional correspondence. The paper reviews current approaches to foreign language instruction in technical universities across Uzbekistan, with emphasis on integrating language education into core professional subjects, implementing project-based learning, and applying the CLIL (Content and Language Integrated Learning) methodology. Key challenges such as limited instructional hours and varying student language levels are discussed, alongside recommendations for improving language training through specialized courses, internships, and immersive environments. Particular attention is given to language competence as an integral part of engineers' soft skills framework.

**Keywords:** foreign language, engineering education, professional communication, language competence, soft skills, CLIL method, technical English, innovation, subject integration, project-based learning, higher education institutions.

In the context of rapid scientific and technological progress, foreign language proficiency has become one of the most essential professional tools for engineers. It is no longer viewed merely as a supplementary subject but is now recognized as an integral component of the professional competence of specialists in technical fields.

One of the key areas where foreign language skills are applied is participation in international projects [1]. Modern engineering developments are often carried out within transnational teams, where English typically serves as the primary medium of communication. Effective interaction in both spoken and written forms, active involvement in meetings, negotiating technical issues, and coordinating documentation and deadlines require engineers to demonstrate a high level of linguistic adaptability and a strong command of professional vocabulary.

Another crucial domain where foreign language proficiency is essential is the ability to read and comprehend technical documentation. A significant portion of modern standards, manuals, technical regulations, scientific articles, and patents is published in English. To stay

informed about cutting-edge technologies and maintain competitiveness, engineers must navigate specialized literature in English with confidence and possess the skills to interpret complex professional texts accurately.

Equally important is participation in international conferences, forums, and symposia, where engineers present their developments, exchange experiences, and establish professional contacts. In such contexts, knowledge of a foreign language allows not only for understanding presentations but also for delivering one's own reports, posing questions, and engaging actively in discussions. This contributes to the engineer's professional development and fosters integration into the global engineering community [2].

Another key aspect of engineering communication is professional correspondence. Engineers regularly interact with clients, partners, equipment suppliers, and colleagues from other countries. The ability to correctly draft technical specifications, explain project proposals, conduct business correspondence, and prepare technical reports in a foreign language is an essential component of engineering communication [3].

Thus, for an engineer, a foreign language is not merely a means of communication, but a vital professional tool that enables full participation in innovative activities, collaboration with the international community, and the adoption and implementation of advanced technologies. Therefore, the development of communicative competence in a foreign language should be considered a strategic priority in the training system of engineering professionals [4].

Foreign language instruction in technical higher education institutions is aimed at developing students' professional communicative competence in a non-native language, which is essential for effective work in international technical environments [5]. Language training programs are often tailored to align with the students' field of specialization: learners acquire the lexico-grammatical structures typical of technical descriptions, patents, and regulatory documents, while simultaneously enhancing their oral and written communication skills within their professional domain.

The teaching of foreign languages in technical universities is primarily focused on fostering professional communicative competence in a second language, which is vital for operating effectively within an international technical environment [5]. Language training curricula are typically designed in alignment with the student's area of specialization: learners master the lexico-grammatical patterns characteristic of technical descriptions, patents, and normative-technical documentation, while also developing the oral and written communication skills necessary for their professional field.

Key elements in designing foreign language courses include:

- The use of authentic materials, such as technical texts, manuals, equipment specifications, and excerpts from specialized literature;
- Instruction in reading and translating technical documentation, as well as developing skills to efficiently locate and process relevant information;
- Development of oral business communication competencies, including project presentations, negotiations, debates, and participation in technical meetings;
- Integration of intercultural components by familiarizing students with norms of business communication and etiquette in different countries [6].

The integration of language learning with engineering subjects (Content and Language Integrated Learning - CLIL) not only aids in developing language competence but also

contributes to deepening professional knowledge. The most common forms of integration include:

- Joint teaching by language and technical subject instructors;
- Completing project assignments in a foreign language, such as developing schemes, diagrams, descriptions, and manuals;
- Preparing presentations for scientific and educational projects, with the use of professional terminology;
- Translating professional texts (e.g., content articles, papers, technical reports) and then discussing the terminology and structure;
- Business role-playing games in English, Russian, and other languages, simulating negotiations, presentations, and meetings within international teams.
- This approach helps students assimilate language material in a natural, professionally relevant context, which enhances both motivation and the practical application of knowledge [7].

Project-based learning is one of the most effective forms of instruction in language courses at technical higher education institutions. It assists students in solving real professional tasks in a foreign language: preparing reports, participating in scientific conferences, drafting technical-economic justifications, developing business plans, and creating engineering solutions in English.

The CLIL method (Content and Language Integrated Learning) involves students learning their specialized subjects (such as computer science, mechanics, energy, and others) in a foreign language. The advantages of the CLIL approach include students simultaneously acquiring both professional content and language skills. This method is implemented through specialized courses (e.g., "Engineering English," "Scientific Writing for Engineers") and through distinct modules within the core curriculum.

Business and academic communication includes the following:

- Skills in writing resumes, written inquiries, and business correspondence;
- Preparation of scientific articles, abstracts, and conference presentation theses;
- The ability to deliver project presentations and participate in public defenses;
- Oral communication in meetings, video conferences, and collaborative networking environments;
- Preparation for participation in international internships and exchange programs.

Foreign language instruction in technical higher education institutions is now considered an integral part of professional training, rather than a supporting discipline [8]. The proper integration of language and engineering training helps future specialists to successfully engage in innovative international projects, remain competitive in the global labor market, and establish effective communication in a multilingual professional environment.

In recent years, the teaching of foreign languages at technical higher education institutions in Uzbekistan has become more targeted and focused on specific professional fields. For example, the integration model of professionally-oriented English with specialized subjects has been implemented at Tashkent State Technical University (TSTU). According to the head of the Department of Foreign Languages at TSTU: Special attention is paid to developing students' skills in working with technical documents, participating in international projects, and presenting research results effectively.

At the Tashkent Institute of Railway Engineering (TIIRE), the CLIL (Content and Language Integrated Learning) project is being implemented, where students study specialized subjects such as "Engineering Mechanics" and "Automation Systems" in English. This approach helps in the development of professional vocabulary and the enhancement of academic and business communication skills.

In addition, project-based activities are actively utilized. For example, within the Erasmus+ international program, students from the Tashkent Institute of Architecture and Construction (TIAC) participated in online project work with higher educational institutions in Poland and Italy, with English being the working language. Such practical experiences help in the development of strong language competence that aligns with modern engineering tasks.

Modern engineers cannot be imagined without access to international databases, ISO standards, scientific publications, and open knowledge platforms. All of these require a high level of proficiency in a foreign language, primarily English. According to the faculty at Namangan Technological University: "Without the ability to work with English-language sources, a technical higher education student faces the risk of being excluded from the global scientific and technical context."

Participation in international grants such as Tempus, Erasmus+, or DAAD requires students and faculty to have proper language training. Language competence becomes a key element of an engineer's soft skills system, alongside critical thinking, teamwork, and adaptability. Therefore, at the Bukhara Engineering and Technology Institute, additional courses in technical English have been introduced as part of the module system for training specialists.

Despite the positive trends, there are still some issues. First of all, in many higher education institutions, the number of hours allocated for foreign language study is limited. Secondly, there are significant differences in the language proficiency levels among graduates. Students who have undergone international internships or graduated from specialized lyceums tend to have a good command of the language, while others often face difficulties in reading technical literature or participating in discussions in a foreign language.

To address these issues, the following measures are proposed:

- Increasing language preparation in higher courses for students;
- Organizing specialized courses in technical English at departments;
- Establishing summer language schools;
- Creating a language environment through academic collaborations and online communication with foreign higher education institutions.

These measures will help strengthen the professional skills of engineers in higher education institutions.

Furthermore, since 2022, Samarkand State Architecture and Construction University (SDAKU) has been implementing the "Language for Engineers" program, which allows students to take short-term online courses at partner universities in South Korea and Germany. The main problem in teaching foreign languages at technical higher education institutions is the limited number of hours allocated for language preparation. In many engineering education programs, foreign language is taught only for 2–4 semesters, which leads to:

- Superficial acquisition of vocabulary and grammar in writing;
- Lack of practice in legal and written communication;

- Insufficient in-depth preparation in specialized vocabulary (technical English, business letters, project documentation);
- Limited opportunities for understanding professional texts and developing written speech.

Current challenges require more intensive and practical-oriented language preparation. To address these issues, the following measures are suggested:

- Introduction of additional specialized courses in technical English;
- Organization of internships and language exchange programs for students;
- Creation of an English language environment at universities through participation in international programs.

Thus, in modern conditions, knowing a foreign language is the most important tool for professional communication for engineers. This enables specialists to work with technical documents, participate in international projects and conferences, exchange skills, and remain in demand in the global labor market. To organize effective language training in technical universities, it is essential to implement integrated programs, project activities, and international collaboration in Uzbekistan.

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