

GENERAL DESCRIPTION OF THE PROGRAMME OF STUDY
for the 2024/2025 enrollment

1. **FACULTY OF TECHNICAL SCIENCES**
2. **FIELD OF STUDY:** COMPUTER SCIENCE
3. **EDUCATIONAL PROFILE:** PRACTICAL
4. **LEVEL OF STUDY:** FIRST-CYCLE STUDIES
5. **FORM OF STUDY:** FULL-TIME STUDIES
6. **PROFESSIONAL TITLE GRANTED TO GRADUATES:** INŻYNIER (B.Eng)
7. **ASSIGNMENT TO THE AREAS OF SCIENCE:** ENGINEERING AND TECHNICAL SCIENCES
8. **ASSIGNMENT TO SCIENTIFIC DISCIPLINES (in accordance with ECTS points) ALONG WITH THE INDICATION OF THE LEADING DISCIPLINE (min. 50% ECTS points)**

Scientific disciplines: Computer Science	ECTS points	
	number	%
Technical informatics and telecommunications – leading discipline	210	100

9. Summary indicators characterising the programme of studies

No	NAME OF THE INDICATOR	VALUE	
		full-time studies	part-time studies
1.	Total number of semesters and ECTS credits required for graduation	7 / 210	–
2.	Total number of teaching hours	3231	–
3.	Total number of ECTS points which the student obtains in classes with the direct participation of academic teachers or other persons who conduct classes	111	–
4.	Total number of ECTS points which the student obtains in practical skills classes	186	–
5.	Total number of ECTS points which the student obtains in classes in humanities or social sciences– for fields of study assigned to the disciplines within the areas of science other than humanities or social sciences respectively)	5	–
6.	Total number of ECTS points which the student obtains in elective subjects	102	–
7.	Total number of ECTS points which the student obtains in professional internships	36	–
8.	Professional internships (hours)	960	–
9.	In the case of full-time first-cycle studies and unitary master's studies, the number of hours of physical education classes	60	–
10.	Total number of hours of classes conducted using distance learning methods and techniques	754	–

Terms and forms of professional internships are determined by the Internship Programme.

10. THE CONCEPT AND GOALS OF EDUCATION AS WELL AS GRADUATE PROFILE

Studies in the field of computer science last seven semesters and are conducted at the first degree level with a practical profile. The studies are fully compatible with the University's development strategy.

The educational concept in the field of computer science provides students with comprehensive preparation in the area of the latest technologies and skills in designing, implementing, and managing information systems. Particular emphasis is placed on the use of artificial intelligence methods in various areas of computer science. The education is conducted in one of three modules. The programming and mobile technologies module focuses on creating applications for various mobile platforms and integrating them with information systems. Internet technologies and computer graphics is a module that develops skills in creating web applications, user interfaces, and graphics. Computer networks and cybersecurity offer knowledge in the field of building and administering networks and methods of protection against cyber threats. Each module provides comprehensive preparation for work in a specialized area of computer science, taking into account the needs of the dynamically developing IT market. Collaboration with companies in the IT industry allows gaining practical experience through internships and professional internships, contributing to a better understanding of market needs and adjusting the study program to contemporary requirements. The introduction of artificial intelligence elements into the study program allows for a deeper understanding of the potential and challenges associated with this field and prepares students for work on innovative projects in the future. During their studies, students combine theoretical knowledge with the practical needs of contemporary computer science. An addition to the education obtained by students in the field of computer science is the knowledge of a foreign language at the B2 level of the Common European Framework of Reference for Languages, including the ability to use industry-specific language. Lectures may be conducted using distance learning methods and techniques.

The educational objectives focus on three main areas:

- knowledge, within which the student knows and understands in an advanced degree selected facts, objects, and phenomena as well as related methods and theories explaining complex relationships between them, constituting knowledge in the field of computer science and selected issues from the areas of detailed knowledge of programming, graphics, and computer networks, as well as the practical applications of this knowledge in the professional activity of a computer scientist,
- skills, within which they can utilize their knowledge by formulating and solving complex and unusual problems and can perform tasks under conditions not fully predictable, through proper selection of sources and information derived from them, conducting evaluation, critical analysis, and synthesis of this information, selection and application of appropriate methods and tools, including advanced information and communication techniques, communicate with the environment using specialized terminology, present and evaluate opinions and positions as well as discuss them, as well as use a foreign language at the B2 level of the Common European Framework of Reference for Languages, plan and organize individual work as well as in a team, cooperate with other people in team tasks, and independently plan and realize their own learning throughout life,
- social competences, within which they are ready for critical evaluation of their knowledge and received contents, recognizing the importance of knowledge in solving cognitive and practical problems, and seeking expert opinions in case of difficulties with independent problem solving, fulfilling social obligations, co-organizing activities for the social environment, initiating actions for the public interest, thinking and acting in an entrepreneurial way, responsibly performing professional roles, including adhering to professional ethics and requiring it from others, and caring for the heritage and traditions of the profession.

A graduate of the field of computer science obtains the title of B.Eng (engineer) and possesses advanced technical knowledge and practical skills in the field of modern information technologies, including artificial intelligence. They are ready to act effectively in a dynamically changing IT environment and are prepared to work in various sectors of the IT industry, both in the role of creator and administrator of information systems and in conducting business activities. They also possess social competences necessary for teamwork, communication with clients and users, and adherence to professional ethics. A graduate of first-degree studies in the field of computer science is prepared to undertake second-degree studies or postgraduate studies.