WSB MERITO UNIVERSITY WARSAW

ICT Systems Programming

BACHELOR'S DEGREE - SPECIALITY

Form: Full-time

Study form: Hybrid • Traditional (on-site)

Features: Engineer's degree • From October • English • 7 semesters

City: Warszawa

What will you learn?

- You will learn to analyse reality and design **effective computer systems** that reflect real-world processes.
- You will gain the ability to develop and expand **computer system projects**, both independently and as part of a team.
- You will become familiar with modern **programming tools**, enabling you to design and develop a wide range of applications.
- You will learn to search for and solve problems in **computer systems**, enabling you to efficiently fix software errors.
- You will master using **technical documentation of computer systems**, which is essential for every programmer.
- You will learn the principles of web application programming and **information systems design**, opening up new career opportunities for you.

Work opportunities

- As a **front-end/web developer**, you will be responsible for designing and creating user interfaces for web applications.
- You can become a **back-end developer**, specialising in building application logic and managing databases.
- You can work as a **mobile application developer**, creating solutions for smartphones and other mobile devices.
- You can work as an **embedded systems specialist**, creating software for devices such as IoT hardware and control systems.
- As an **information systems programmer**, you will develop and integrate systems within business organisations.
- You can take on the role of an **IT helpdesk specialist**, supporting users in resolving software-related issues.

Study program

Practical studies

We teach in a way that prepares you as well as possible for the real challenges you will encounter in your professional work.

- **Group projects** – real business problems.
- **Simulations** – decisions in market conditions.
- **Internships and placements** – experience in companies.

Dane zamieszczone w niniejszej karcie kierunku mają charakter wyłącznie informacyjny. Dane te nie stanowią oferty zawarcia umo wy w rozumieniu art. 66 i nast. kodeksu cywilnego. Zgodnie z art. 160 ust. 3 ustawy z dnia 27 lipca 2005 roku Prawo o szkolnictwie wyższym, umowa między Uniwersytetem WSM Merito we Wrocławiu a studentem zawierana jest w formie pisemnej.

- **Lectures with practitioners** – market experts.
- **Modern tools** – up-to-date technologies.
- **Case studies** – analysis of real cases.

Selected major-specific courses

- Linear algebra
- Object-oriented programming
- Operating systems
- Process mapping and design (UML and BPMN)
- Discrete mathematics
- Fundamentals of databases
- Fundamentals of artificial intelligence and expert systems
- Innovation and the future of the IT industry
- Automation and robotics
- Advanced programming
- Information systems design

Selected specialization courses

- Administration of information systems
- Design of distributed applications
- Case study – programming in a development team
- Design patterns
- Advanced programming
- Software integration with the AZURE platform
- MVC web application programming
- Information system design project

Foreign language study

In full-time studies:

- 120 hours of foreign language learning (30 hours per semester) from the 1st to the 4th semester.

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Form of delivery:
all classes are conducted on campus with a language teacher.

In part-time studies:

- 120 hours of foreign language learning (30 hours per semester) from the 1st to the 4th semester.

Form of delivery:

- 16 hours of classes in a classroom with a language teacher (weekend sessions)
- 14 hours delivered in an e-learning format

Languages to choose from: English, German, Spanish.

Internships and practical training

Student internships are an important part of the study program. Students of bachelor's and long-cycle master's studies complete 960 hours of internships (24 weeks), gaining professional experience. If you work in a profession related to your field of study, you can have your internship credited based on your employment. During your studies, you also have the opportunity to take a paid internship. Internship programs are designed by cooperating employers, tailoring requirements to specific positions, which helps you take your first professional steps.

Study completion requirements

You create a major project that addresses a practical or theoretical problem related to your field of study. By studying literature and conducting your own analyses, you work on an original problem-solving proposal. Everything you learn during your studies enables you to create a professional project based on real data and actions. To earn your bachelor’s degree, you must defend this project before a committee. You set the direction of your own project!

Programme partners

How to become a WSB Merito University student

You can enroll in a **first degree (e.g. Bachelor's or Engineer's) program** if you have successfully completed your secondary education and have a secondary school-leaving certificate.
Learn more

Take the first step – register now!

Applicants are admitted on a first-come first-served basis. If you are to complete your secondary education this year, or you are studying for your first degree but have not yet earned it, **you can secure a place with us by signing up online.** Your educational service contract can be drawn up later as you have collected all of the required documents.
Create an account or log in

Journey of Dmytro, an IT student

In 20 years' time, I would like to enjoy my life, as I actually try to do all the time. My education at WSB Merito University in Warsaw will help me a lot with that. My plan is to open my own business and in 20 years' time just, you know, collect the harvest of my life. This field seems to be the one that is most applicable to my future business. It relates to real calculations and making sure that you are going to be profitable and will achieve success.

Dmytro Fedorov, IT student