

# Advanced Database Systems

MASTER'S DEGREE - SPECIALITY

**Form:** Full-time

**Study form:** Hybrid • Traditional (on-site)

**Features:** Master's degree • From October • English • 4 semesters

**City:** Poznań



## What will you learn?

- You will learn to manage and handle **distributed data resources**, which is crucial in modern Big Data projects.
- You will discover methods for searching and obtaining valuable data from global information collections, increasing your effectiveness in **Big Data** analysis.
- You will learn how to store and process data in the cloud, using the **economies of scale** and sharing resources with your team.
- You will become familiar with standards for building Big Data systems, such as **Lambda architecture and Hadoop**, as well as the MapReduce processing model.
- You will learn advanced data processing methods, including algorithms for handling **semistructured data**, graphs and spatial data.

## Work opportunities

- You will find employment as a **advanced data analysis specialist**, supporting companies in turning data into real business benefits.
- You will be able to work as a **Big Data solutions developer**, creating innovative systems for processing and analysing large data sets.
- You will take a job as a **Big Data consultant**, helping organisations implement advanced data processing technologies.
- You will be employed as a **data researcher**, analysing and modelling data to support strategic business decisions.
- Working as a **Big Data application developer**, you will create advanced software that supports data projects.
- You can develop your career as a **reporting systems developer**, designing tools for data analysis and visualisation.

## Study program

### Practical studies

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

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



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

## **Selected major-specific courses**

- Object-oriented languages (Python, Java)
- Business process modelling
- Design of augmented reality systems
- Computer network security
- Database administration
- Mobile application programming
- Cloud management systems
- Simulation and modelling of complex systems
- Professional internship
- Diploma seminar

## **Selected specialization courses**

- Algorithms and data structures 2
- Advanced Database Systems
- Analysis and presentation of complex information resources
- Administration of distributed databases
- Cloud computing

## **Foreign language study**

- During your studies, you complete one core subject in English. In the Management programme, this subject is Leadership.
- In the 4th semester, you are required to complete a subject in English tailored to your chosen specialisation.
- Additionally, you can choose two more subjects in this language – one lecture-based and one practical.



- This is a great opportunity to develop your language skills and gain knowledge in an international context.

## Internships and practical training

Internships are an important part of the study program. Master's students complete **480 hours of internships throughout their studies**, gaining valuable work experience. If you are employed in a profession relevant to your field of study, you may have your internship credited based on your employment. During your studies, you also have the opportunity for a paid internship. Internship programs are prepared by our partner employers, adapting requirements to specific positions, which makes starting your professional career easier.

## This is a program for people

- who are interested in modern technologies and want to develop their programming skills,
- who have an analytical mind and cope well with solving problems,
- who enjoy logical thinking and want to work in the dynamically developing IT industry,
- who are interested in artificial intelligence, cybersecurity, data analysis or cloud solutions,
- who want to gain competences in IT project management and in implementing IT systems.

### How to become a WSB Merito University student

To be eligible for a **second degree (Master's) program**, you must have completed a prior higher education program concluded with the award of a first degree (Bachelor's or equivalent).

[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](#)