UNIVERSITY OF WARSAW | FACULTY OF Economic Sciences

SPINAKER
June-July 2026

International Education Programme

European Funds
Knowledge Education Development

Republic of Poland

NAWA POLISH NATIONAL AGENCY FOR ACADEMIC EXCHANGE

European Union
European Social Fund
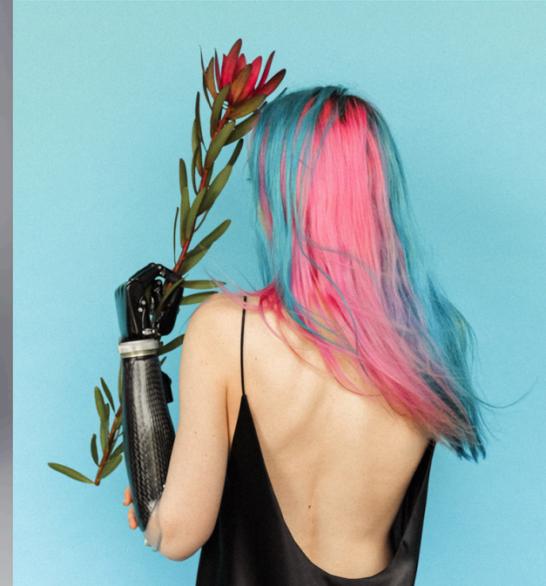
SPINAKER Programme

all you need to know

Welcome to the SPINAKER programme!

Study **Artificial Intelligence in Business and Finance** in Warsaw, Poland – at the top economics faculty in the country.

We invite outstanding students from around the world (excluding Russia) to Warsaw, Poland – to the University of Warsaw, home to the leading economics programme in the country. This is a one-time, exclusive opportunity that will not be repeated in the same format.

Join a unique international Programme that combines artificial intelligence and finance, delivered by experts at the Faculty of Economic Sciences, University of Warsaw.

Who can apply?

1

BA students

Undergraduate students (UW and non-UW) in their 2nd year (or later), including mobility participants (Erasmus+, CEEPUS, etc.)

2

MA students (complementary)

Master's students, including mobility participants (Erasmus+, CEEPUS, etc.)

3

MA students (long-cycle)

Students of long-cycle Master's degree programs (UW and non-UW), in their 2nd year (or later), including mobility participants (Erasmus+, CEEPUS, etc.)

Please note that in addition to meeting the formal requirements, basic knowledge of programming in Python and R is also required!

Participation in a unique programme at the intersection of AI and finance
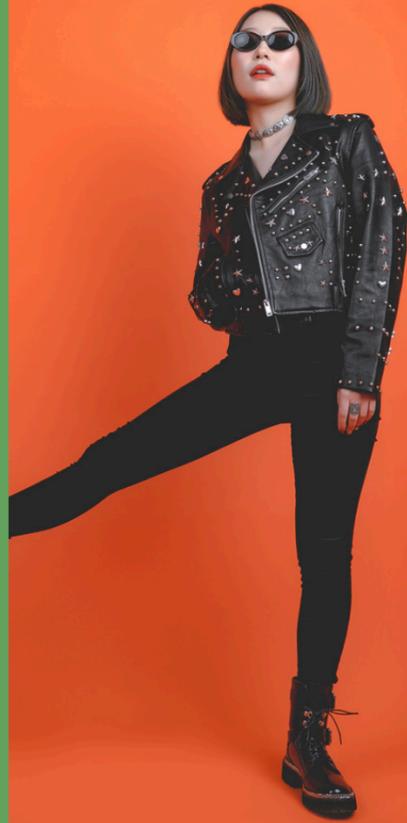
A certificate of completion (micro-credential) confirming your newly acquired skills

Courses in English taught by experienced academics and practitioners from Poland and the UK

The opportunity to take part in hybrid (on-site and online) AI Summer Schools in 2026

What do we offer?

...but there's more

We also offer

Financial support for international (non-UW) students

For the full 14-day programme, participants may receive **7,250 PLN** in total, including:

- 2,000 PLN – travel costs (round trip)
- 75 PLN/day – stipend
- 300 PLN/day – accommodation and living expenses

Fees and responsibilities

Participants are fully responsible for a range of costs and formalities associated with their involvement in the Programme. Their key obligations include:

- **Covering expenses:** Accommodation, visa*, and healthcare.
- **Obtaining insurance:** Foreign participants (from outside the University of Warsaw) must secure all necessary policies, including health, liability, and accident insurance for the duration of the Programme.

It is important to note that during their stay, participants are only covered by the University of Warsaw's insurance for accidents that occur on the university premises.

Finally, there is no charge for the issuance of the Programme diploma in the form of a micro-credential.

* The University of Warsaw provides support to candidates by providing an invitation letter.

What will you learn?
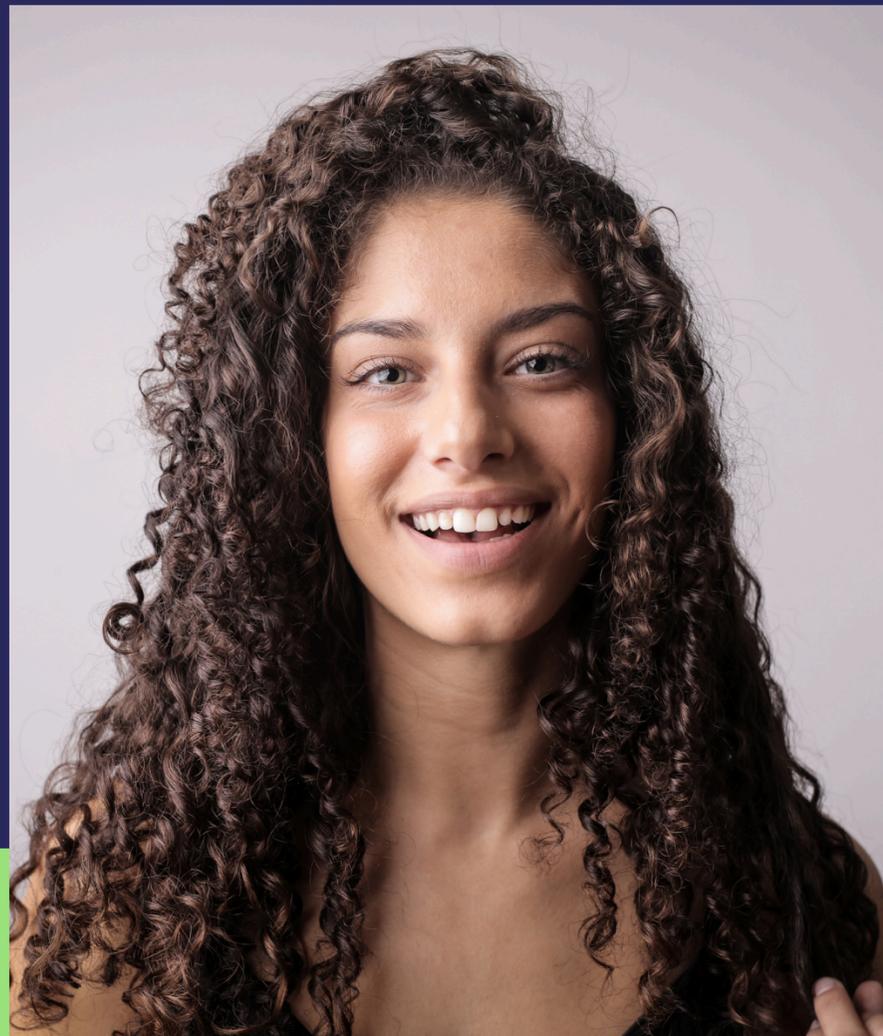
Fundamentals of machine learning and artificial intelligence

Applications of AI in financial and spatial data analysis

Explainability and interpretability of AI models (XAI)

Business process automation with AI tools

Ethical and legal aspects of AI in economics and finance

Practical analytical and programming tools used by modern data scientists

What will you gain?

Knowledge

Participants will gain advanced and up-to-date knowledge from the intersection of economics, finance, modern information technologies and legal regulations (such as the EU AI Act). They will learn the theoretical foundations of artificial intelligence, the mechanisms of machine learning algorithms, as well as how they can be used in time series analysis, investment portfolio management and risk assessment.

Skills

Participants will gain practical skills in tools like R, Python, ASANA, and Cardanit Pro. They will learn to independently analyze data, build predictive models, interpret results, and visualize findings to support decision-making. Additionally, they will acquire project management skills for data-driven initiatives, assess risks, and work effectively in remote or hybrid settings using modern collaboration tools.

Social competencies

The Programme will significantly enhance the ability to work in international and intercultural teams. Through intensive workshops and collaborative tasks, participants will develop openness, flexibility, and tolerance. They will improve communication skills, learn to share knowledge, and take responsibility for common goals. Contact with international experts and modern teaching methods will prepare them for a global work environment based on cooperation and respect for diversity.

Our Team

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Associate Professor

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Department of Quantitative Finance
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University of Warsaw

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Associate Professor

Department of Data Science
Research Group Spatial Warsaw,
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Ewa Weychert, MA
PhD Student, Specialist

LabFam
Department of Data Science,
University of Warsaw

Time frames

	START	END
1st Edition	June 8	June 21
2nd Edition	June 15	June 28
3rd Edition	June 22	July 5

Sample schedule

(the order of classes may change)

⚠ ON-LINE   **Module**   **0**   Asynchronous classes conducted at home BEFORE the start of full-time classes at the University of Warsaw (ca. 80 hrs)

Day 1   Introduction to AI (6 hrs)   **Day 6**   AI in Business, part 1 (6 hrs)

Day 2   Advanced Python Programming (6 hrs)   **Day 7**   AI in Business, part 2 (6 hrs)

⚠ ON-SITE (Warsaw)   **Day 3**   Advanced R Programming (6 hrs)   **Day 8**   AI in Finance (6 hrs)

Day 4   Large Language Models, AI for Text Data (6 hrs)   **Day 9**   AI in Spatial data (6 hrs)

Day 5   AI in Investments (6 hrs)   **Day 10**   Explainable AI (6 hrs)

Detailed schedule / Registration start / Registration deadline / Results announcement: TBA

Module 0: Introduction

ATTENTION!

Basic knowledge of Python and R is essential, will be verified and is required to complete the Spinaker Programme!

Module 0 is the introductory part of the Spinaker Programme, completed entirely **ONLINE** on our training platform **BEFORE** arriving in Warsaw and beginning in-person classes at the University of Warsaw. It covers the basics of programming in Python and R. After meeting the formal criteria and qualifying for the Programme, participants will receive access to a training platform with instructional videos, assignments, and quizzes that will allow them to familiarize themselves with the Programme content and test their knowledge.

Each section of the online training will conclude with a test. **Passing the online tests is required to complete the entire Programme.** Failure to pass the online tests in the introductory part will result in ineligibility for a micro-credential confirming Programme completion.

The introductory part can last up to approximately 80 hours of training, but its duration depends on the participant's initial knowledge.

Draft of teaching modules

Introduction to AI

Introduction to AI, creating correct scripts, ethical principles, problems, advantages, using various tools e.g. ChatGPT, Gemini, AI as an assistant in analytical work.

Advanced Python Programming

Advanced Python programming, object-oriented programming, creating advanced functions and scripts, implementation of the most important machine learning models and statistical methods in Python (also discussion of the basics of unsupervised machine learning - clustering, and supervised - neural networks, random forest, XGBoost, etc.).

Advanced R Programming

Advanced programming in R, object-oriented programming, creating your own functions and packages, implementation of the most important machine learning models and statistical methods in R.

AI in spatial data

Application of artificial intelligence in spatial data analysis – modeling spatial relationships between geographically close observations, growing importance of location data (including from phones, e-commerce, logistics), need to integrate AI with spatial statistics and econometrics methods in order to adapt the analytical approach.

Large Language Models, AI for Text Data

Application of AI in text data analysis and construction of large language models – extraction of information from customer opinions, statements and surveys, creation of chatbots and contact automation tools, understanding text modeling as the basis for the operation of modern AI systems.

AI in Investments

AI in investments, implementation and use of high-frequency time series analysis methods, investment portfolio management, investment valuations, etc.

AI in business (part 1 & 2)

Analysis of AI applications in project management and decision-making, with a focus on risk, resource and budget management, and practical case studies demonstrating the opportunities and challenges of AI integration, including ethical and data protection aspects.

AI in Finance

Application of AI in assessing the situation of enterprises and financial institutions, review of analytical tools and practical workshops on financial data analysis from an interdisciplinary perspective.

Explainable AI (XAI)

Explainability of AI models in the context of increasing transparency requirements – a review and implementation of methods to increase the understandability of "black-box" models, with particular emphasis on applications in medical data analysis and their specificity.

How to join?

Read documentation*

Familiarize yourself with the project documentation: Regulations, Information Clause, Declaration of Participation

Write cover letter

Write a cover letter to justify your participation in the program

Confirm your status

Obtain a certificate / confirmation from the Dean's Office of your university confirming: the name of the university, your student status, field of study, type and degree of study

Send the Declaration

Complete the Declaration of Participation and then send it together with the cover letter and a certificate/confirmation from the Dean's Office via registration form available at project website.

* Until the recruitment begins, the content of the project documentation may undergo minor changes (not affecting the project conditions).

Declaration of Participation

IMPORTANT NOTE 1:
The Participation Declaration must be accompanied by a cover letter justifying the need to participate in the Spinaker Programme. Lack of a cover letter will result in the automatic rejection of the application without consideration.

IMPORTANT NOTE 2:
The Participation Declaration must be accompanied by a document confirming the current student status at the home university (indicating the name of the university, field of study, and level/degree of study). The certificate of student status must indicate the exact validity period ("from–to") so that it confirms that the participant will hold an active student status for the entire duration of the summer school. Failure to provide the above-mentioned document will result in the application being automatically rejected without consideration.

All fields mandatory / Wszystkie pola obowiązkowe:

Name of the University / Nazwa Uczelni: ....

University address / Adres Uczelni: ....
....

Faculty (optional) / Wydział (opcjonalnie): ....

Mark the correct answer / Zaznacz właściwe:

I am a student at: / Jestem studentem:

☐ 2nd year (or later) of undergraduate studies / studiów licencjackich na 2. roku (lub późniejszym)

☐ second cycle master's studies / studiów magisterskich II stopnia

☐ 2nd year (or later) of unified master's studies / jednolitych studiów magisterskich na 2. roku (lub późniejszym)

☐ doctoral studies / studiów doktorskich

Full name / Imię i nazwisko: ....

Index number / Numer indeksu: ....

Name of the current degree programme / Aktualny kierunek studiów: ....

Date of birth / Data urodzenia: ....

PESEL (if applicable) or ID card/passport no. / PESEL lub numer dowodu os./paszportu: ....

Home address / Adres domowy: ....
....

E-mail address / Adres e-mail: ....

Phone number / Numer telefonu: ....

I confirm that I have knowledge of English at least at B2 level *(check the box)*
Potwierdzam znajomość języka angielskiego na poziomie min. B2 *(zaznacz pole)* ☐

I confirm that I know the basics of programming in Python and R *(check the box)*
Potwierdzam że znam podstawy programowania w Python i R *(zaznacz pole)* ☐

Learn more

courses@wne.uw.edu.pl

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