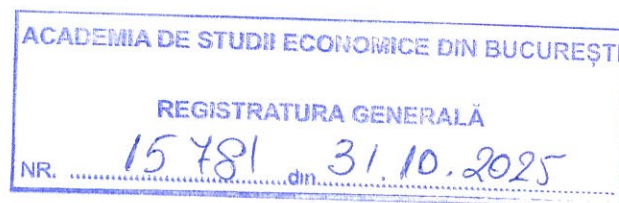Bucharest Academy of Economic Studies

Date: 31.10.2025

ANNOUNCEMENT

The Bucharest Academy of Economic Studies is organizing a recruitment and selection process for **one** position of **PhD Researcher** within the project *"AI for Energy Finance (AI4EFin)"*, project code 162/15.11.2022

The employment offered for this position is part-time, with a maximum of **42hours/month** which may be unevenly distributed.

The gross hourly wage for this position is **86,50 lei/hour**.

The individual contract of employment will be concluded for a fixed-term period of time until the **30th of June, 2026**.

A. To participate in the recruitment and selection process , candidates must meet the following **general and specific conditions :**

1. General conditions:

a) has Romanian citizenship, citizenship of other member states of the European Union or of states belonging to the European Economic Area and/or foreigners as defined by art. 2 letter a) of GEO 194/12.12.2002 with subsequent amendments and completions, respectively persons who do not have Romanian citizenship, citizenship of another EU member state or citizenship of the Swiss Confederation ;

b) has the minimum age regulated by legal provisions;

c) has full capacity to exercise;

d) has a state of health appropriate to the position for which he/she is applying,

e) meets the educational requirements and, where applicable, seniority or other specific conditions according to the requirements of the position for which the recruitment and selection process is being carried out.

f) has not been definitively convicted of a crime against humanity, against the state or against authority, of duty or in connection with duty, which impedes the administration of justice, of forgery or acts of corruption or of a crime committed intentionally, which would make him/her incompatible with the exercise of the function, except in the case where rehabilitation has occurred.

2. Specific conditions:

a) level of education: higher education completed with a master's degree;

b) field of study: economics, business administration, cybernetics and statistics, economic informatics, finance, statistics or similar;

c) PhD student enrolled in the institutions organizing doctoral studies in Romania (the list of eligible institutions can be consulted here: https://www.edu.ro/IOSUD_2022)

d) other specific conditions:

i. master's degree diploma in a relevant field such as informatics, statistics, finance or any other similar fields;

ii. solid knowledge of machine learning algorithms, statistical modeling and data analysis techniques;

iii. advanced level in programming languages, such as Python(preferrably) or R;

iv. good understanding of power markets and of the financial concepts;

v. the ability of effectively collaborating with the researchers and analysts of different kind of backgrounds.

e) specific responsibilities:

i. to collect, process and analyze big amounts of data coming from the energy-finance ecosystem.

ii. to apply machine learning and statistical techniques to extract patterns and understand the data.

iii. to develop and apply information based models for price prediction for the energy and financial markets, as well as other variables of interest.

iv. to collaborate with the resarch team in order to develop and refine the ML/ AI tools for the financial and power markets analysis.

v. to publish the results coming from their research activity in academic journals and to present them during conferences/ workshops.

vi. to contribute to quantinar.com and the dissemination strategy of the research project.

B. The recruitment and selection process will consist of :

1. **Test 1 - Evaluation of the files submitted by the candidates**
2. **Test 2 – Structured interview** (in the event that the number of registered candidates is less than or equal to the number of positions available in the recruitment and selection process, the committee may decide to simplify the procedure and carry out the selection exclusively by verifying the fulfillment of the minimum conditions (general and specific) included in the published selection announcement)

   - *date and time of the interview* : will be communicated simultaneously with the display of the results of the evaluation of the files submitted by the candidates :

- *venue interview* : will be communicated simultaneously with the display of the results of the evaluation of the files submitted by the candidates :

The tests are eliminatory, with the minimum score obtained in each test being 50 points.

C. Topics and bibliography :

1. **Topic:**

   2. Energy Finance
   3. Artificial intelligence
   4. Explainable neural networks
   5. Machine learning
   6. Risk management

2. Bibliography:

1. Bock, K. W. D., Coussement , K., & Lessmann , S. (2020). Cost- Sensitive Multicriteria Ensemble Selection : A Framework For Business Failure Prediction When Misclassification Costs Are Uncertain . *European Journal of Operational Research* , *285* (2), 612-630. https://doi.org/https://doi.org/10.1016/j.ejor.2020.01.052
2. Craja , P., Kim, A., & Lessmann , S. (2020). Deep learning for detecting financial statement fraud . *Decision Support Systems* , *139* , 113421. https://doi.org/https://doi.org/10.1016/j.dss.2020.113421
3. Haupt , J., & Lessmann , S. (2022). Targeting customers under response -dependent costs . *European Journal of Operational Research* , *297* (1), 369-379. https://doi.org/https://doi.org/10.1016/j.ejor.2021.05.045
4. Kim, A., Yang, Y., Lessmann , S., Ma , T., Sung , MC, & Johnson, JEV (2020). Can Deep Learning Predict Risky Retail Investors ? A Case Study in Financial Risk Behavior Forecasting . *European Journal of Operational Research* , *283* (1), 217-234. https://doi.org/https://doi.org/10.1016/j.ejor.2019.11.007
5. Kozodoi , N., Jacob, J., & Lessmann , S. (2022). Fairness in credit scoring : Assessment , implementation and profit implications . *European Journal of Operational Research* , *297* (3), 1083-1094. https://doi.org/https://doi.org/10.1016/j.ejor.2021.06.023
6. Lessmann , S., Baesens , B., Seow , H.-V., & Thomas, LC (2015). State-of- the- art benchmarking - art classification algorithms for credit scoring : An update of research . *European Journal of Operational Research* , *247* (1), 124-136. https://doi.org/10.1016/j.ejor.2015.05.030
7. Lessmann , S., Haupt , J., Coussement , K., & De Bock, KW (2021). Targeting customers for profit: An ensemble learning framework to marketing decision-making support . *Information Sciences* , *557* , 286-301. https://doi.org/https://doi.org/10.1016/j.ins.2019.05.027
8. Lux, M., Härdle , WK, & Lessmann , S. (2019). Data Driven Value -at- Risk Forecasting using a SVR-GARCH-KDE Hybrid . *Computational Statistics* , *35* , 947-981. https://doi.org/10.1007/s00180-019-00934-7

9. Schirmer , M., Eltayeb , M., Lessmann , S., & Rudolph, M. (2022, July 17-23). Modeling Irregular Time Series with Continuous Recurring Units. *Proceedings of Machine Learning Research* Proc . of the 39th Intern. Conf. on Machine Learning (ICML'2022), PLMR, Baltimore, MD, USA. https://proceedings.mlr.press/v162/schirmer22a.html

10. Srivastava , S., & Lessmann , S. (2018). A comparative study of LSTM neural networks in forecasting day-ahead global horizontal irradiance with satellite data. *Solar Energy* , *162* , 232-247. https://doi.org/10.1016/j.solener.2018.01.005

D. Composition of the competition file:

1. A record of the enclosed documents
2. Application for the recruitment and selection process addressed to the Rector of ASE;
3. Copy of the identity document or any other document attesting the identity, according to the law, as the case may be;
4. Copy of marriage certificate or proof of name change, if the candidate changed his name (proof of name change);
5. The criminal record or a self-declaration that it has no criminal record that makes it incompatible with the position for which it is applying;
6. Medical certificate attesting the appropriate health status issued no more than 6 months prior to the selection by the family doctor of the candidate or by the competent medical units, or the declaration on its own responsibility, with the obligation to fill in the selection file with the medical certificate at the latest by the date of the first test of the recruitment and selection process, if applicable
7. Declaration on own responsibility if the candidate has or does not have a husband/wife or relatives and affines, up to the III-th degree inclusively, who are employees of the Academy of Economic Studies of Bucharest in a position of leadership, control, authority with the post taken out for selection and not the post, to which they apply, is not in a position of leadership, control, authority with husband/wife or relatives, up to and including III degree, employees of the University;
8. Statement for the processing of personal data;
9. Curriculum vitae in European format (www.cveuropean.ro/cv-online.html) – signed and dated on each page;
10. Copies of documents that certify the completed level of education and any other additional documents that attest to the completion of specializations, as well as copies of documents certify the fulfilment of the specific conditions required for the position, as outlined in Chapter A, point 2.

E. Contact details:

The competition files are due on November 10th,2025, by 16:00, at the BUES Registrar's Office, located in the "Ion Angelescu" Building, Căderea Bastiliei Street, ground floor, room 0016.

Contact:

-Contact person: Daniel Traian Pele – e-mail: danpele@ase.ro

-For information regarding the recruitment and selection process: e-mail: dru@ase.ro

F. Recruitment and selection process calendar

No. crt.	ACTIVITY	Date
1.	Posting the announcement	31.10.2025
2.	Submitting the candidates' competition files at the ASE Registrar's Office	10.11.2025
3.	Selection of application files by the members of the competition committee	11.11.2025
4.	Publication of the results of the selection of the application files	12.11.2025
5.	Submission of appeals regarding the results of the selection of application files	13.11.2025
6.	Publication of the results of the appeals	14.11.2025
7.	Interview	17.11.2025
8.	Communication of the results after the interview	18.11.2025
9.	Submission of appeals regarding the interview results	19.11.2025
10.	Publication of the results of the appeal	20.11.2025
11.	Publication of the final results	20.11.2025
12.	Appointment to the position	After approval from the Board of Trustees