Bucharest University of Economic Studies

Date: 23rd of December, 2025 **Nr. Reg. 18410/23.12.2025**

ANNOUNCEMENT

Bucharest University of Economic Studies is currently holding a selection process for **Master's student** position 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 **42** working hours per month, which may be unevenly distributed.

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

The individual contract of employment will be concluded for a fixed-term period of 7 months with evaluation and possibility of extension until 30 June 2026.

A. In order to enter the selection, candidates need to fulfil the following **general and specific conditions:**

1. General conditions:

a) has Romanian citizenship, citizenship of other member states of the European Union, of states belonging to the European Economic Area and/or foreign states as defined by art. 2 lit. 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 the legal provisions;
c) has full capacity;
d) has a relevant state of health for the position he is applying for.
e) meets the conditions of education and, where appropriate, seniority or other specific conditions by the requirements of the post to be filled;
f) has not been convicted of a crime against humanity, against the State or authority, or of an offence committed in the course of or in connection with the performance of his or her duties which obstructs the course of justice, or forgery or corruption, or of an offence committed with intent which would make him or her incompatible with the performance of his or her duties, unless he or she has been rehabilitated.

2. Specific conditions:

a) level of studies: education completed with a bachelor's degree;
b) area of studies: economics, business administration, cybernetics and statistics, economic informatics, finance, statistics or similar

Responsibilities:

i. to collect, process and analyze large amounts of data from the energy-finance ecosystem .
ii. apply machine learning and statistical techniques to extract patterns and understand information.
iii. to develop and apply information-based models for price prediction for energy and financial markets, as well as other variables of interest.

iv. collaborates with the research team to design and refine ML/AI tools for analyzing financial and energy markets.
v. to publish research results in academic journals and present them at conferences/ workshops .
vi. to contribute to quantinar.com and the dissemination strategy of the research project.

Requirements:

i. bachelor's degree in a relevant field such as business administration, computer science, statistics, finance or related disciplines.
ii. solid knowledge of machine learning algorithms, statistical modeling, and data analysis techniques.
iii. intermediate level in programming languages, e.g. Python (preferred) or R.
iv. good understanding of energy markets and financial concepts.
v. ability to collaborate effectively with researchers and analysts from different backgrounds.

B. The selection process will consist of:

Step 1: Evaluation of the files submitted by the candidates;
Step 2: Structured interview (if there are not at least 2 candidates, the selection committee may decide to simplify the procedure and make the selection without the interview stage):

- *The date and time of the interview* will be communicated concurrently with the results of the evaluation of the files submitted by the candidates;
- *The place of the interview* will be communicated simultaneously with the results of the evaluation of the files submitted by the candidates.

The evaluation samples are eliminatory; the minimum score to be obtained for each sample is 50 points.

C. Topics and bibliography:

1. **Topics:**
    1. Energy Finance
    2. Artificial intelligence
    3. Explainable neural networks
    4. Machine learning
    5. 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
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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. Contents of the competition file to be submitted by candidates:

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 information:

Selection files can be submitted in person between January 08 and 12, 2026, during the following hours: 8:00 AM to 4:00 PM (Monday to Thursday) and 8:00 AM to 1:00 PM (Friday). Submissions should be made at the BUES Registration Office, located in the "Ion Angelescu" Building at Caderea Bastiliei Street, ground floor, room 0016. Alternatively, you can submit your files online at the address provided by the contact person.

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

F. Recruitment and selection calendar:

No. crt.	ACTIVITY	Date
1.	Publishment of the announcement	23.12.2025
2.	Submitting the candidates' competition files at the ASE Registrar's Office	08-12.01.2026
3.	Selection of application files by the members of the competition committee	13.01.2026
4.	Publication of the results of the selection of the application files	14.01.2026
5.	Submission of appeals regarding the results of the selection of application files	15.01.2026
6.	Publication of the results of the appeals	16.01.2026
7.	Interview	19.01.2026
8.	Communication of the results after the interview	20.01.2026
9.	Submission of appeals regarding the interview results	21.01.2026
10.	Publication of the results of the appeal	22.01.2026
11.	Publication of the final results	22.01.2026
12.	Appointment to the position	After approval from the Board of Trustees