

! SUBJECT TO THE APPROVAL BY THE ACADEMIC BOARD !

PART-TIME ACADEMIC POSITION IN BIG DATA

0.15 FTE OF A FULL-TIME POSITION, FOR A TOTAL VOLUME OF 45 HOURS/YEARS)

FACULTY SOLVAY BRUSSELS SCHOOL OF ECONOMICS AND MANAGEMENT

Reference : 2025/A059

Application deadline : 15/05/2025

Start date : 01/10/2025

Job description

The Solvay Brussels School of Economics and Management (SBS-EM) is the economics and management faculty of the University of Brussels, one of continental Europe's leading research universities. The Faculty is proud of its programmes, which combine scientific rigour, contextual engagement and problem-solving skills.

It invites applications for a part-time post in 'Advanced Analytics in the Era of Big Data'. The course is taught in English on the MSc in Business Engineering, in the second semester of the academic year.

Educational and scientific goals :

This course introduces the fundamental concepts and practical applications of Artificial Intelligence (AI) and Machine Learning (ML). Designed for students wishing to develop expertise in AI-based solutions, the programme emphasises theoretical understanding and practical experience. Through a structured programme, participants will explore the cutting-edge technologies and methodologies that power today's AI systems.

Module overview:

1. Modern data infrastructure
Learn about the infrastructure needed to support AI and ML solutions. Topics include data pipelines, distributed storage and compute solutions, and data processing frameworks.
2. Fundamentals of Machine Learning
Understand the fundamental concepts and algorithms of Machine Learning, including supervised, unsupervised and reinforcement learning. Learn how to prepare datasets, train models and evaluate their performance.
3. Product recommendation
Discover how Machine Learning is used to design personalised recommendation systems. Explore collaborative filtering approaches, content-based filtering and hybrid methods used in e-commerce and streaming platforms.
4. Deep Learning and image recognition
Dive into the world of deep neural networks and their applications in image recognition. Learn about convolutional neural networks (CNNs), transfer learning and advanced image processing techniques.
5. Natural language processing

Explore how AI understands and processes human language. This module covers text mining, sentiment analysis, language modelling and advances in large-scale language models (LLMs).

Courses covered at the time of recruitment:

GEST-S420 - Advanced Data Science and Machine Learning- MA INGE – taught in English – second term

Qualifications required

Master's degree in economics and management, computer science, statistics or a related field. Holding a PhD in these fields is an advantage for this position, but not a requirement.

Skills required

- Excellent command of English (C1).
- Solid disciplinary knowledge of distributed infrastructure, very large-scale data processing, machine learning, automatic language processing, image recognition and product recommendation.
- Experience of teaching to large audiences.
- Knowledge of French considered an asset.

Interested ?

For more information, please contact Catherine Dehon (email : catherine.dehon@ulb.be).

Your application will consist of a Curriculum Vitae (*if you wish, a standard CV can be downloaded from the website: <https://www.ulb.be/fr/documents-officiels/emplois-academiques-et-scientifiques-cv-type>*) and a document completed using the template available at this URL address <https://www.ulb.be/fr/documents-officiels/3e-applic-form-acad-tps-partiel-au-fh-docx>.

This template structures your application by including the following elements:

- an application letter
- a teaching dossier including a 7,000-character report (4 pages) on the applicant's previous teaching activities and a teaching project for the first five years in this position; these must be relevant to the faculty and to the teaching profiles for the programmes to which the applicant is to contribute
- the names and e-mail addresses of five referees (respecting the gender balance) who may be contacted by those in charge of evaluating applications. These referees should not have conflicts of interest because of family or emotional ties.

Incomplete applications or applications that do not use the template provided will not be examined by the selection committee.

Where to go to apply?

Click here: <https://jobs.ulb.be/job-invite/1470/?isInternalUser=true>

For any connection problems or questions about our application, consult our FAQ : [e-recrut-mode-d-emploi-candidat-en-1734942996246-pdf](#)

Equal opportunities policy

ULB's personnel management policy is geared towards diversity and equal opportunities.

We recruit candidates on the basis of their skills, irrespective of age, gender, sexual orientation, origin, nationality, beliefs, disability, etc.

Would you like to be provided with reasonable accommodation in the selection procedure because of a disability, disorder, or illness? Please contact Marie Botty, the person in charge of diversity aspects for the academic and scientific staff (marie.botty@ulb.be). Be assured of the confidentiality of this information.

More details on the ULB gender and diversity policy are available at <https://www.ulb.be/en/about-ulb/gender-equality-at-ulb>.

You will find all the regulations relating to academic careers on our site at <http://www.ulb.ac.be/emploi/academique.html>.