



Patision 76, Athens 104 34 Greece. Tel.: (+30) 2108203112-3 / www.aueb.gr Ioannis Ntzoufras, Tel. (+30) 2108203968, E-mail: ntzoufras@aueb.gr www.stat-athens.aueb.gr/~jbn

Head of the Department

PRESS RELEASE

"Methods for Fintech and Artificial Intelligence in Finance – Blended Intensive Program (BIP)"





















The Department of Statistics, Athens University of Economics and Business (AUEB) has been participating in the Erasmus+ Blended Mobility for Studies Program since the academic year 2022-23. This is a short and intensive program that employs innovative methods of learning and teaching on a subject of interest, including both physical presence (physical mobility) at the host institution and online (virtual) collaboration thereafter.

Within this program, groups of higher education students (from at least three universities in different European Union countries) have the opportunity to participate in an intensive blended learning, teaching, and training program. During this program, students experience a short-term physical mobility abroad (7 days), combined with online collaboration, upon their return to Greece, allowing them to exchange knowledge, and engage in teamwork.

This year, undergraduate students from the Department of Statistics, AUEB had the opportunity to apply for the Blended Intensive Program (BIP) titled "Methods for Fintech and Artificial Intelligence in Finance," which took place at the Università degli Studi di Napoli Federico II, Italy.



Consequently, six (6) undergraduate students from the Department were selected to visit the University of Naples (Università degli Studi di Napoli Federico II, Italy) in person, for a seven-day short visit, from September 4th to September 10th, 2024.





The goal of BIP was to create an interdisciplinary course on advanced topics in statistics and probability, with applications in financial technology (Fintech) and Artificial Intelligence (AI), addressing key issues outlined in the United Nations Sustainable Development Goals.

This highly interdisciplinary event brought together experts, academics, students, and professionals from statistics, data science, finance, and economics to explore advanced topics with a specific focus on Fintech and AI applications, aligning with key UN Sustainable Development Goals (SDGs). Participants engaged in an intensive program that combined online and in-person sessions, offering a comprehensive curriculum designed to develop

analytical skills, critical awareness of Fintech trends, and practical experience with programming tools for financial data analysis. BIP emphasized real-world case studies and hands-on workshops, ensuring participants gained an in-depth understanding of the current landscape of AI applications in finance.

The event began with online sessions and transitioned into face-to-face lectures and interactive workshops in Naples, Italy. The first online session on **September 2** introduced the course's general theme, featuring representatives from partner universities across Europe (AI & FinTech). The following day included a seminar on data integration, preprocessing, and data fusion in R, laying the groundwork for the in-person activities that would follow (Data integration, pre-processing and data fusion in R).

On the evening of **September 4**, participants attended a seminar on "Digitalization and Financial Awareness," led by representatives from the Banca d'Italia's Directorate General for Consumer Protection and Financial Education. The next morning, the program continued with an in-depth session on "Methods for dimension reduction and clustering in Fintech surveys", which explored clustering techniques for mixed data types, followed by hands-on laboratory lectures in the evening.

The morning of **September 6** focused on topics such as **Generalized Linear Models for rating data** and **Panel data for assessing Fintech, financial inclusion and income per capita**. In the evening laboratory sessions, participants engaged in supervised tutorial teamwork. **On September 7**, the morning sessions explored the **Applications of ML in Finance**, followed by **social activities that provided opportunities to network and experience the vibrant culture of Naples**.





September 8 was dedicated to intensive laboratory sessions, allowing participants to deepen their engagement with practical applications. The next day, <u>Latent variable models</u> <u>for Financial knowledge</u> were examined, incorporating Classical Test Theory and Item Response Theory, followed by laboratory lectures in the evening. The program concluded on **September 10** with a session on the <u>Hybrid approach for the analysis of complex data structures</u>, ending with an evening wrap-up where participants shared their experiences, provided feedback, and discussed alternative methods.





A final hybrid meeting will be held on October 21, during which participants will present their projects. This meeting will feature a keynote seminar titled Copula Additive Distributional Regression, delivered by Giampiero Marra, Department of Statistical Science, University College London (http://www.homepages.ucl.ac.uk/~ucakgm0), and Rosalba Radice, Bayes **Business** School City, University of London (https://www.bayes.city.ac.uk/faculties-and-research/experts/rosalba-radice) It will be followed by a panel discussion between the members of the scientific committee and the concluding papers of the participants of the Blended Intensive Program: "Methods for Fintech and Artificial Intelligence in Finance." The day will conclude with an informative seminar entitled "Sustainable Finance: Insights and Data for an Assessment," delivered by Rita Cappariello from the Bank of Italy.

The program was enriched by the mentorship of experts such as Rosa Fabbricatore, Lucio Palazzo, Valeria Policastro, and Roberto Rondinelli. Moreover, the Program Committee, chaired by Maria Iannario from the University of Naples Federico II, included esteemed academics from prestigious universities across Europe, ensuring a high-quality learning experience.



Participants also enjoyed a variety of social activities designed to immerse them in the rich cultural heritage of Naples. These included a captivating tour of the historic center on September 5, a classical concert on September 6, a guided tour of the Herculaneum excavations on September 7, and a visit to the picturesque island of Procida on September 8, which included a full lunch at a local restaurant.





Ultimately, BIP successfully achieved its goal of fostering an environment of interdisciplinary learning and collaboration, equipping participants with essential skills in data analysis and financial modeling. By attracting individuals from diverse academic backgrounds, the event facilitated a dynamic exchange of knowledge and ideas, greatly enriching the fields of Fintech and Artificial Intelligence.

The University of Naples Federico II and the Department of Statistics, AUEB extend their heartfelt gratitude to the Program Committee, Local Scientific Committee, and the dedicated Conference Secretariat coordinated by Maria Giovanna Porzio for organizing this enriching event. Special thanks go to the mentors, guest speakers, and participants, whose contributions ensured the Program's success and to Synergia, which supported the project for social activities. We all look forward to more interdisciplinary initiatives in Fintech and Artificial Intelligence in the near future!



Please note that AUEB will be part of the next BIP programme on Sport Analytics to be hosted by the University of Naples Federico II in September 2025!