



WINTER SCHOOL 2024

**IN DATA ANALYTICS
AND MACHINE
LEARNING**

5 – 16 February, 2024
Fribourg, Switzerland



Many firms and organizations have recognized the value of analyzing data based on quantitative tools like regression, machine learning, and deep learning

- for forecasting specific outcomes such as sales or prices: predictive analysis;
- for evaluating the causal impact of specific actions such as offering discounts or running marketing campaigns: causal analysis.

This permits improving the quality of decision-making and thus increasing efficiency and competitiveness.

The “Fribourg Winter School in Data Analytics and Machine Learning” provides training in state-of-the-art quantitative tools for predictive and causal analysis. The winter school takes place in hybrid form, implying that participants can attend courses either in class (face-to-face) or online. The one- to three-days-courses cover both introductory and more advanced topics, using the open source software packages “Python”, “R”, “Julia” and “Knime”. “Python”, “Julia” and “R” are among the most popular programming languages in data science and statistics, while “Knime” is a user-friendly, flow-chart based graphical interface that does not require any programming skills. Among the topics covered in the various courses are

- regression techniques for multivariate statistical analysis;
- machine and deep learning algorithms like lasso, decision trees, random forests, and neural nets;
- text analysis to extract and statistically analyze text information from websites, like sentiments about products.

The working language will be English.

Please note that the sessions will not be recorded.

Participants are free to attend all courses or to select a subset of courses offered in the winter school. The fees for the “Fribourg Winter School in Data Analytics and Machine Learning” are:

BA/MA/PhD students at the University of Fribourg	BA/MA/PhD students at other universities or academic researchers (e.g. post-docs and professors) at any university/ research institution	Private companies or public sector employees
*Flat rate for all courses: CHF 90	Block 1: Knime course (5 Feb) CHF 220	Block 1: Knime course (5 Feb) CHF 330
	Block 2: R courses (6-8 Feb) CHF 550	Block 2: R courses (6-8 Feb) CHF 880
	Block 3: Julia course (9 Feb) CHF 220	Block 3: Julia course (9 Feb) CHF 330
	Block 4: Python courses (12-16 Feb) CHF 650	Block 4: Python courses (12-16 Feb) CHF 990
	All courses: (5-16 Feb) CHF 1050	All courses: (5-16 Feb) CHF 1650

*Please note: Not all courses have to be attended.

The fee includes tuition, course materials, access to the faculty’s library, and internet access.

Online registration deadline: **Jan 28th 2024**

For more information, visit: <https://www.unifr.ch/appecon/en/winterschool/>

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