SCHEDULE

Day	Topic	Type	Academic hours	Date/time	Class-room	Target group
1	Introduction to financial engineering. Review of forwards, futures, options. Review of Python.	Lectures	4	2022-05-23 18:10-21:30	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
2	Object oriented structures of Python code for fnancial applications.	Practical exercises	3	2022-05-25 18:10-20:40	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
3	Forwards, futures, options. Review of Python. Object oriented structures of Python code for fnancial applications.	Consulting	2	2022-05-26 18:10-19:45	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
4	Synthetic option contracts using the underlying asset for hedging.	Lectures	4	2022-05-30 18:10-21:30	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
5	Synthetic option contracts using the underlying asset for hedging.	Lectures	3	2022-05-31 18:10-20:40	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
6	Synthetic option contracts using the underlying asset for hedging.	Consulting	3	2022-06-02 18:10-20:40	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
7	Building a synthetic option with the underlying in Python.	Lectures	3	2022-06-06 18:10-20:40	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
8	Synthetic options using a futures contract for hedging.	Practical exercises	3	2022-06-07 18:10-20:40	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
9	Building a synthetic option using a futures contract in Python.	Practical exercises	4	2022-06-08 18:10-21:30	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
10	Portfolio insurance with synthetic options using futures.	Lectures	3	2022-06-13 18:10-20:40	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
11	Building a portfolio insurance program in Python.	Practical exercises	4	2022-06-14 18:10-21:30	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
12	Building a portfolio insurance program in Python.	Practical exercises	3	2022-06-15 18:10-20:40	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21
13	Building a portfolio insurance program in Python.	Consulting	1	2022-06-16 18:10-18:55	VK	FTfm-21, FTfmu-21, FTfmuc-21, IVfm-21

Requirement for participants: background in mathematics (linear algebra and analysis), statistics (probability, variation, co-variation, correlation, regression), finance and economics. Ability in programming would be an advantage, but not essential. The language of instruction is English.