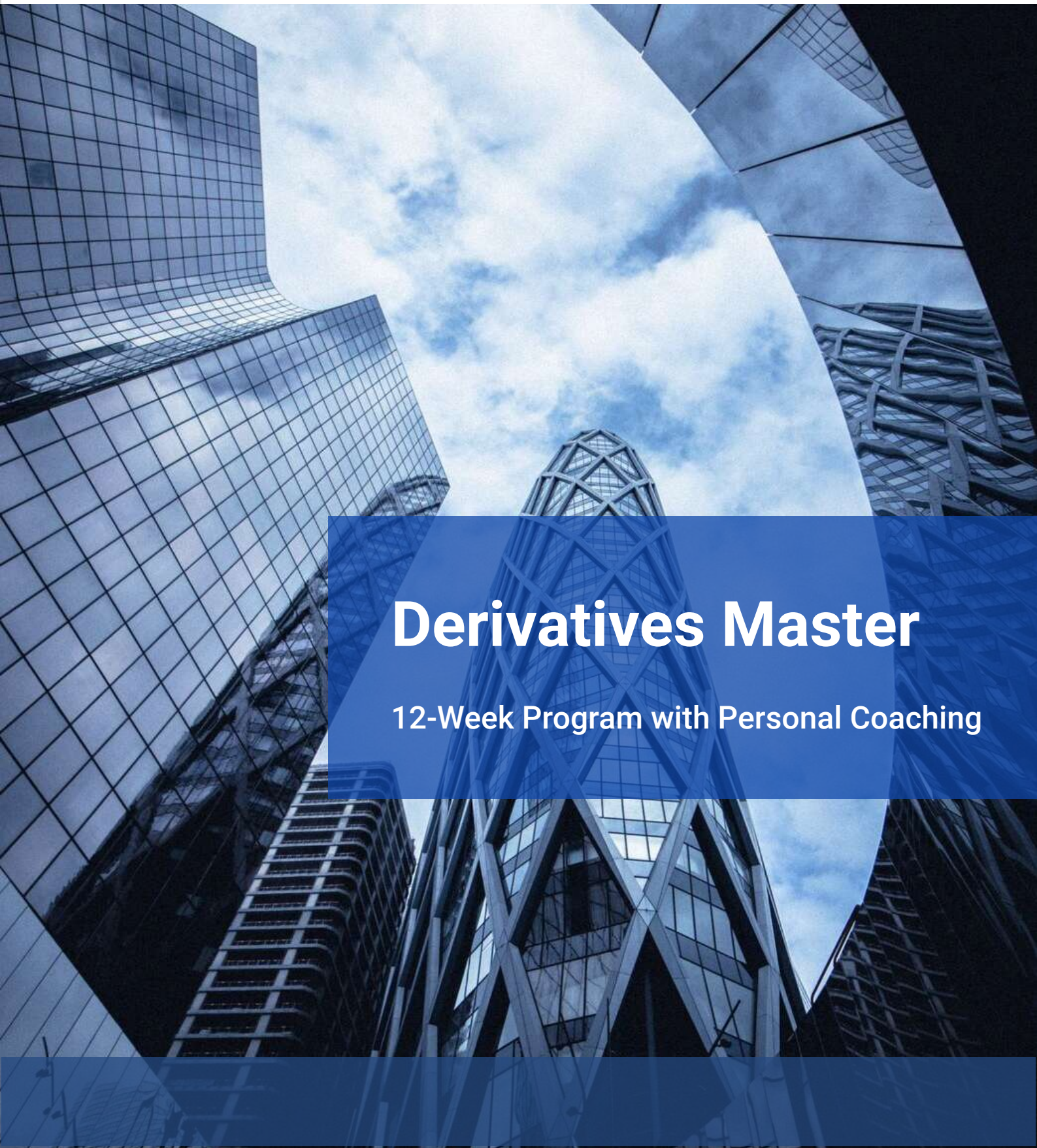
NoscoTraining
Financial Market Insights



Derivatives Master

12-Week Program with Personal Coaching

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Derivatives Master

25 years of insights from the trading floor

If you already have derivative experience but want to take the next step, this is the program to become a real master and boost your career. But be informed, that this is a challenging 12-week program where we will go into the details.

The Derivatives Master class (DMC) has been developed and applied over many years to train derivative traders and derivative sales of a large investment bank. It is now available online to a broader audience. Participants will learn more about how derivatives are used in the different markets and by various clients, how they are risk managed by banks, modelled, and priced in the academic world and in real life.

The course is intended for market professionals that have ongoing interaction with futures and options markets. It is assumed that participants are already familiar with the fundamentals of derivatives. Ideally participants have taken the Derivative Advanced class first.

Course structure and time commitment

Derivatives Master Class is a 12-week program combining self-paced e-learning modules with bi-weekly live review webinars. The course ends with an online test and certification. Expect to spend about 4-5 hours per week on self-study.

Course structure

The Derivatives Master course is certified by SAQ, the Swiss Association for Quality, and accounts for 60 hours of continuous education.

Who should attend?

The Derivative Master course is intended for market professionals that have ongoing interaction with futures and options markets. It is assumed that participants are already familiar with the fundamentals of derivatives.

Course content

A detailed content description is provided at the end of this brochure and on the website.

We will cover the following topics:

- Derivatives toolkit – Review of the main derivative concepts
- Models and valuation
- Volatility and volatility markets
- Option graphs
- American options and early exercise
- Investor strategies
- Currency management and FX derivatives
- Interest rate derivatives

A detailed content description is provided at the end of this brochure and on the website.

Costs and course details

Course costs:	3'000 CHF per person
Group discounts:	Please contact us
Level:	Master
Course format:	Blended learning: Self-paced e-learning combined with live webinars
Course start dates:	1 September 2026, for more start dates visit course website
Review webinars:	Bi-weekly. For exact time please visit the website.
Course website:	www.nosco.training/course/derivatives-master
Education credits:	60 hours accredited by the Swiss Association for Quality, SAQ

This course is SAQ accredited for 60 hours of continuous education credit.
More on www.saq.ch

Swiss Association for Quality

Who is NoscoTraining?

NoscoTraining is a Swiss based company with international finance experience, servicing banks, asset managers and institutional investors. We combine *financial expertise* with *business experience* and *applied training skills* to deliver practical financial market education programs.

We are practitioners. We worked for many years on the business and education side of a major global bank, where client focus, practical relevance, and implementation solutions were complemented by theoretical thoroughness.

For more about our trainers visit www.nosco.training/about .

A detailed description of each course module is found on the next pages.

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Detailed course content – Derivatives Master

Module 1 **Derivatives Toolkit** This module reviews the main derivative instruments and core concepts that participants are expected to be familiar with. It is intended as a refresher, and we recommend completing it before starting the Master Class.	**Futures and forwards** Derivatives with a symmetric payoff profile are the most fundamental derivatives. Understanding how they are valued and used is the first step to understand derivatives.
	Options & value drivers Several key factors influence the value of an option. Understanding the why and how behind these drivers is central to understanding options.
	Relative Value Put call-parity is the most important relationship between calls and puts. It has far-reaching consequences not only for European options.
	Risk Measures and the Greeks An option's value is the result of a complex interplay between several market factors. Risk measures break this interplay into simple components.
	Option Strategies Investors use options to precisely implement market forecasts and tailor the risk-return profile of their portfolio. We investigate the views and risk profiles of the most popular option strategies.
	Review test A set of questions to help you review your derivative knowledge. Some of the questions are very easy, others need a bit more thinking.
Module 2 **Models & Valuation** Option valuation models are not just tools for pricing options; they provide valuable insights into the inner workings of options.	**Risk-neutral valuation** For the investor, the value of an option depends on their view and risk aversion. The price the trader quotes is driven by the costs to risk manage the option. It is important to understand this dual world and its implications.
	Binomial model The Binomial model is like a mechanical clock. Every time the clock ticks, the spot price moves to one of two values. Being able to see and control all the moving parts makes the binomial model versatile and easily adaptable.
	Black-Scholes The Black-Scholes pricing model (1973) changed the world of finance. Options were no longer just bets, but investment objects with an explainable price behavior. This was the birth of more efficient risk management.
	From normal and lognormal

	Every option model implies a distribution of future spot prices. To judge the value of a model we need to understand to what extent that distribution fits reality.
	How to get to an option value Even once you fully understand all facets of Black-Scholes, it is still quite a calculation to get to the actual call and put values. Our brain is just not made for this. We need a special calculator or at least a way to approximate option values. We give you both!
	Homework In the final homework you will price and risk manage a currency option.

Module 3 **Volatility and volatility markets** Volatility plays a central and subtle role in option valuation. It measures price fluctuations of the underlying, which create option value. Implied volatility reflects option prices and leads to the volatility smile.	**Volatility basics** This module covers the fundamentals of volatility, variance, and standard deviation. We learn how volatility is calculated, why risk is not linear over time, and review key statistical concepts such as biased and unbiased estimators.
	Realized volatility This module introduces realized (historical) volatility as a measure of past market uncertainty. We learn how it is calculated and explore long-term volatility patterns using historical data from equity markets and foreign exchange.
	Uncertainty & distributions We examine how uncertainty and risk can be described using statistical distributions. We derive risk from market prices, compare market-implied distributions, and study how the Black-Scholes framework models uncertainty using normal and lognormal assumptions.
	Implied volatility We introduce implied volatility as a key concept in option markets. We explore the volatility smile, skew, and term structure, the forces behind these patterns, and how traders use strategies such as straddles, butterflies, and risk reversals to trade implied volatility.
	Implied vs. realized volatility This module compares implied and realized volatility and shows how options can be used to trade the difference. We introduce long and short gamma, statistical arbitrage, and gamma scalping as ways to capture future realized volatility.
	Homework True or false? 15 challenging questions.

Module 4 **Option graphs** Option models link market parameters to option values, but formulas are hard to grasp intuitively. Graphs help visualize option behavior and make these relationships easier to understand.	**Forward price and carry costs** We review how a bank risk manages a forward position over time. The bank's resulting net hedging costs are also referred to as net carry costs. Net carry costs drive the forward price.
	Arbitrage-free pricing We explain the concept of arbitrage-free pricing and derive a universal formula to price any financial forward. We demonstrate how to take advantage of a mispricing should the forward price deviate from its arbitrage-free price.
	Pricing equity index futures Our universal pricing formula can also be applied to equity index futures. But the devil lies in the details. We show you how to do it and discuss the operational challenges to arbitrage-free pricing.
	Pricing currency forwards The pricing of currency forwards is also based on the concepts of carry costs and arbitrage. But what defines the net carry costs of an FX underlying and what are the implications for the forward price? Get all the answers to your FX forward questions in this session.
	Risk in forwards and futures Forwards and futures have the same price risk as the underlying instrument. But on top of it, they are exposed to changes in the basis. We introduce the concept of basis risk.
	Knowledge check Time to test your knowledge on forward pricing and show what you have learned.

Module 5 **American options and early exercise** Equity options are usually American style, allowing early exercise. This module explains why early exercise can matter, when it is optimal, and how the value of an American option compares to a European option.	**American basics** The basic framework for deciding whether and when to exercise.
	American equity options This module explains why most equity options are American style and how dividends make early exercise valuable. We analyze when it is optimal to exercise American call and put options before expiry.
	Model DIY workshop We extend the binomial model to value American options, incorporating early exercise and dividends. We build the model step by step and analyze how market parameters affect the value, delta, and expected life of American calls and puts.
	American vs European We compare American and European options and shows when early exercise becomes important. We study the impact of dividends, differences in option pricing, and how put-call parity changes for American options.

	American options: The graphs An American option is a European option plus the right to early exercise. How is this "plus" reflected in the graphs?
	Homework 12 multiple choice questions for you to test your skills and gain further insights. Some questions are very easy, while others are more subtle and need more thinking. You will need to carry out some calculation, so get you calculator ready

Module 6 **Investor strategies** Many investment strategies use options to shape the risk-return profile. This module reviews common strategies, how derivatives change returns, and how to measure the benefits of asymmetric payoff structures.	**Introduction to options** Our focus shifts to the investor and his / her perspective. We examine the risk–return trade-offs in different investments, rational vs. behavioral decision making, and how options help tailor investment outcomes. We end by considering the role of market makers.
	Investment characteristics We study how different investments create different return distributions. We compare symmetric and asymmetric risk profiles, their impact on the Sharpe Ratio, and develop a framework to evaluate option strategies using distributions and a strategy dashboard.
	Yield enhancement and optimization Yield enhancement and optimization is for investors who can tolerate some risk. The strategies aim to optimize the return structure for the investor. They either trade potential future capital gains against a known cash income, or leverage some potential returns and cap others.
	Capital protection: Worked examples This module explains capital protection strategies for investors who want upside potential with limited downside risk. We build protection structures step by step and show how different protection levels and participation rates change the investment outcome.
	Homework: Build your own "Reverse Convertible"

Module 7 **Currency management and FX derivatives** Currency risk is the inevitable by-product of international trading and investing. We investigate how FX exposure can be managed using forward, vanilla options or more exotic derivatives.	**FX warm-up** This module reviews the basics of foreign exchange markets and terminology. We revisit FX forwards, understand pricing through arbitrage relationships, and practice identifying arbitrage opportunities in FX and FX option markets.
	Anchor points Options with extreme strikes provide us with “anchor points” when thinking about option values.
	What is volatility? Volatility is an “overloaded” word. It has many different meanings. In this session we summarize the basic facts about volatility.
	Volatility and time How does volatility and time interact? We start with a simple example to illustrate why risk is not linear and then translate our insights into a handy rule of thumb.
	Knowledge check Finally, some questions for you to test your knowledge.

Live webinar **Extra topics** Additional topics we will cover during the live webinars.	**Interest rate derivatives** The concepts we learned so far also apply to interest rate derivatives. We adapt our framework to the rates world and study key instruments such as short-term interest rate futures, swaps, and swaptions.
	Volatility derivatives Volatility derivatives allow investors to trade pure volatility and manage volatility exposure. In this session, we introduce the main instruments, explain how they are used and hedged, and connect them to the concepts developed earlier.

Online test & certification	Apply what you have learned in a final online exam and earn your course certificate.

For more information visit https://www.nosco.training/course/derivatives-master

Or email info@nosco.training