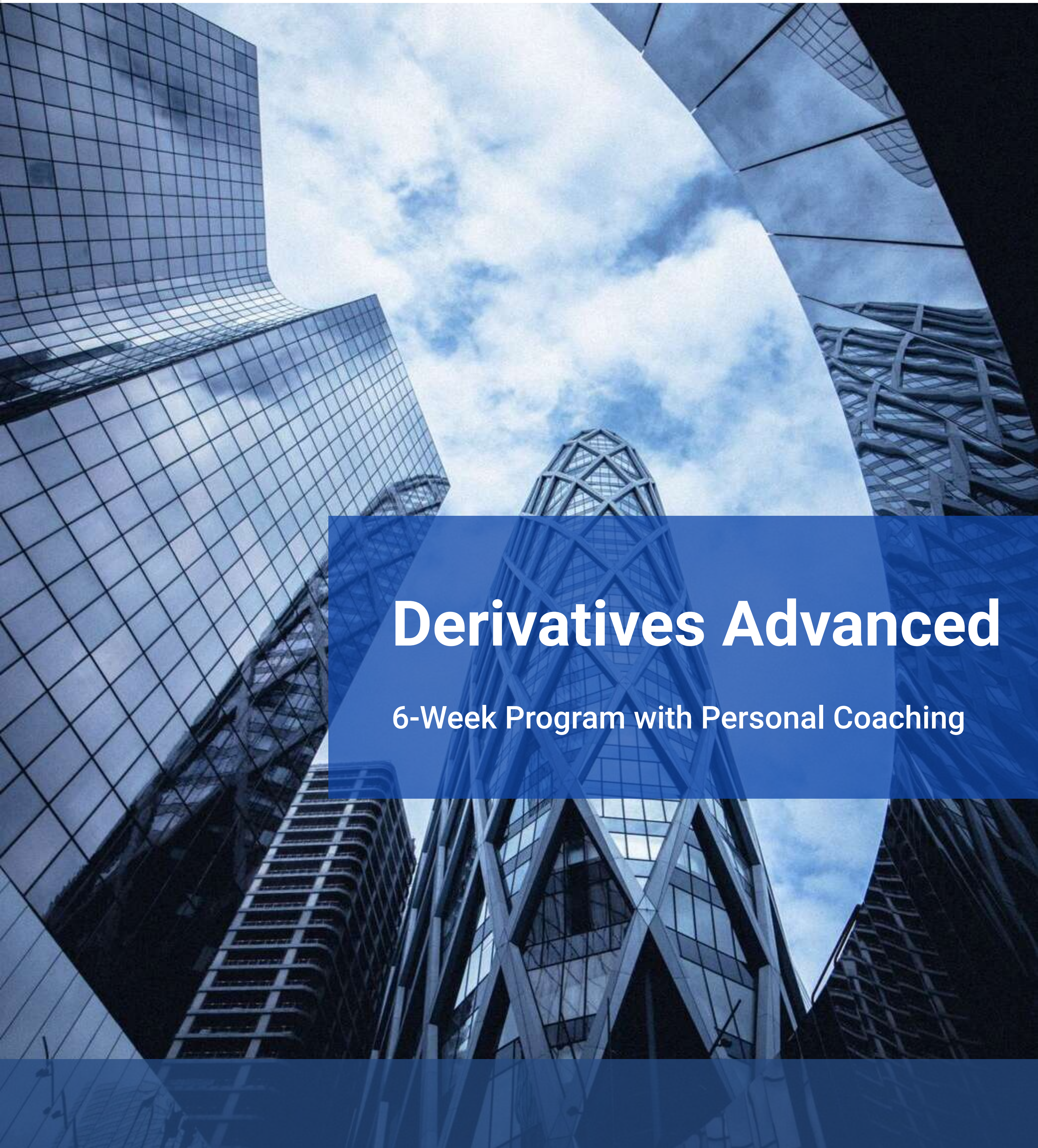
NoscoTraining
Financial Market Insights

Derivatives Advanced

6-Week Program with Personal Coaching



Derivatives Advanced

From fundamentals to advanced: Derivative expertise built step-by-step

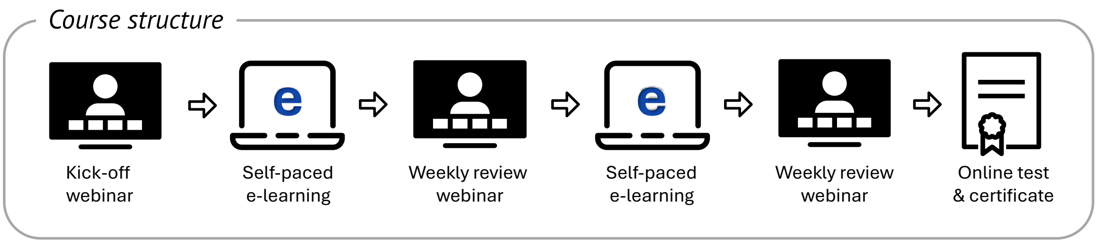
If you are looking for a solid foundation on which to build a career in derivatives but currently have little knowledge and don't know where to start, the Derivatives Advanced course is designed for you.
The course introduces forwards, options, and other derivative instruments in a clear yet rigorous way. Even if you already have some experience, you will gain a more intuitive and structured understanding of derivatives than you may have encountered before.

As the course progresses, the focus shifts from foundational concepts to advanced and practical applications. It examines how derivatives are used, valued, and risk-managed in both trading and investment contexts.

The course requires no advanced mathematical background yet provides sufficient quantitative insight to enable informed discussions with option traders and other derivatives specialists.

Course structure and time commitment

Derivatives Advanced is a 6-week program combining self-paced e-learning modules with weekly live review webinars. The course ends with an online test and certification. During the course you will have access to experienced coaches to address your questions. Expect to spend about 4 hours per week on self-study.



The Derivatives Advanced course is certified by SAQ, the Swiss Association for Quality, and accounts for 24 hours of continuous education.

Who should attend?

Derivatives Advanced is designed for finance & investment professionals who need a clear, practical and structured understanding of derivatives — not just theory, but how they are used, priced and risk-managed in real markets.

Course content

For a detailed overview of the program, watch our course video on the course website or by clicking here.

We will cover the following topics:

- Forwards and futures
- Pricing of forwards and futures
- Financing, securities lending and short selling
- Total return swaps
- Options and option strategies
- Option valuation and value drivers
- Put-call-parity and arbitrage trades
- Risk measures and hedging

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

Costs and course details

Course costs:	1'500 CHF
Level:	Advanced
Course format:	Blended learning: Self-paced e-learning combined with live webinars
Course start dates:	20 May, 2 September 2026, for more start dates visit course website
Review webinars:	Weekly. For exact time please visit the website.
Course website:	www.nosco.training/course/derivatives-advanced
Education credits:	24 hours accredited by the Swiss Association for Quality, SAQ

This course is SAQ accredited for
24 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 of the 11 course modules is found on the next pages.

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Detailed course content overview

Module 1 **Forwards** Forward contracts are the most basic financial derivatives, yet they are fundamental to understanding all other derivatives.	**What are forwards?** In this session we formally introduce you to forwards and explain all the related jargon.
	Uses of forwards Forward contracts are very versatile. They can be used for hedging, speculation, or form part of an investment strategy. But their non-standardized and tailored nature makes forwards particularly suitable for hedging. We show you 3 hedging examples.
	Basic forward pricing The spot price is the price agreed today for a trade that settles immediately. The forward price is the price agreed today for a trade that settles in the future. But what drives the difference between the spot price and the forward price? Here a first answer.
	Cash vs. physical settlement At maturity, a forward contract can have significant value. A positive value for one counterparty means a negative value for the other. But how are these values realized? There are 2 different methods for settling the contractual obligations between the two counterparties.
	Knowledge check Finally, 10 simple questions for you to test your understanding of forwards.

Module 2 **Futures** Futures are the exchange traded equivalent of forwards. Futures contracts are highly standardized and cleared through a central counterparty.	**Forward vs futures** Forwards can be tailored to specific investor needs. Futures on the other hand are standardized and trade over the exchange. As a consequence, they are more liquid and have less counterparty risk.
	How futures are used This lecture guides learners through examples illustrating how futures contracts are used to create long and short exposure to an underlying asset. It explains the mechanics of a futures trade, including daily settlement and the mark-to-market process, as well as final settlement and the rolling of futures contracts.
	A worked example – Lifecycle of a future This lecture walks through the lifecycle of a futures contract, from the trade date when the position is initiated and the central clearing process, through daily mark-to-market and its impact on the margin account over the life of the contract, to final settlement.
	Liquid future contracts An introduction to some of the most important future contracts around the globe.
	Knowledge check Finally, time for more exercises and an opportunity to test your knowledge.

Module 3 **Financing a trade** The ability to finance long and short positions is essential for liquid markets — especially in derivatives. Without financing, arbitrage cannot exist and the pricing relationship between spot, forwards, and options breaks down.	**Financing basics** In the professional wholesale market, finance trades are typically done on a collateralized basis. The trades are driven by either the need of cash or the need of a specific security. This first session is an introduction into the topic.
	Repo & Securities lending In the professional wholesale market, financing a trade is typically done on a collateralized basis. There are two very similar markets for collateralized funding, the repo market and the securities lending and borrowing market.
	Short selling Short selling means selling a security you do not own. In that case you will have to borrow the security from a third party in order to deliver it to the buyer. We take you through a detailed short selling example.
	Knowledge check Finally, some questions for you to advance and test your knowledge.

Module 4 **Forward price** The forward price is the price agreed today for delivery of the underlying at a future point in time. But what defines the forward price? Are market makers free to set the forward price they want, or is it defined by market forces?	**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 **Total return swaps** In this module we explain what total return swaps are, how they are used, priced and hedged. We end the module with a map of all instruments with the same risk as the underlying.	**Total return swaps: The mechanics** In a total return swap, one party pays the total return of a reference asset and the other party pays a fixed or floating interest rate. We discuss the cashflow and mechanics behind these OTC contracts.
	Hedging total return swaps Hedging a total return swap is similar to hedging a forward or a future. But there are some subtle differences. Especially when the underlying is a dividend paying share.
	Delta one All delta-one products have the same price risk as the underlying, but they can differ in all other aspects. This session explains the world of delta-one products.
	Knowledge check Finally, some questions for you to advance and test your knowledge.

Module 6 **Option Basics** In this session we formally introduce you to options and explain all the related jargon. The module lays the foundation on which we can then expand in the subsequent modules.	**Introduction to options** We introduce you to all the main contracts and all the jargon.
	Upside and downside With options we can slice and dice the risk of an underlying. A long call option represents the upside risk, a short put option the downside risk of the underlying asset.
	Moneyness Moneyness relates an option’s strike price to the market price of the underlying. Moneyness is an important driver of an options value. This section introduces you to the concepts of moneyness and parity.
	Simple option graphs A profit-and-loss graph is a simple but powerful tool. It helps you understand the risk and profit potential of an option or option strategy. In this session you learn to graph basic option positions. We will come back to graphing later when we talk about option strategies.
	The use of options We introduce the basic market scenarios in which options are used. Any option strategy you will encounter is ultimately just a refinement of one of these eight scenarios.
	The happy investor – a case study In this case study we investigate how a bullish equity investor can use options to refine his investment strategy.
	Knowledge check Finally, some questions for you to test your knowledge.

Module	Session
Module 7 **Volatility & value drivers** Moneyness, volatility and time are the key factors that drive the value of an option. This module will simplify and straighten your thinking about options.	**Parity and volatility value** We decompose an option's value into a component related to moneyness and another component linked to volatility.
	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.

Module	Session
Module 8 **Valuation & models** Option models don't need to be black boxes. The main principles and assumptions behind a model are often relatively simple. After working through this module, you have a better understanding of what option models do, how they work and how to use them.	**Absolute and relative valuation** In finance there are two fundamentally different approaches to value an instrument: Relative valuation and absolute valuation. This session is a brief outline of how the two methods are used when valuing derivatives.
	The 5-stick valuation model The 5-stick model is our main option model in this course. Its simplicity is its beauty. We can see and understand all its inner workings.
	Model calibration An option model needs to be properly calibrated to produce useful results; we need to adjust the parameters of the model to reflect the current market conditions. Thinking about calibration yields additional insights about value drivers.
	5-Stick calculator Even with the simple 5-stick model, getting to an option's value requires a good number of keystrokes. A dedicated calculator would be handy. In this session we introduce you to your new friend, the five-stick option calculator.
	Valuation Lab A model is a laboratory we can use to experiment and test how options behave in different market situations. Off to the laboratory then. We will work through 2 experiments using the 5-stick-calculator.

	Extra - Black-Scholes calculator We show you how to use a Black-Scholes calculator. This is an “extra” for those who want a calculator that reflects the dynamics of the underlying more accurately than our simple 5-stick calculator.
	Knowledge check Finally, some questions for you to test your knowledge.

Module 9 **Put-call parity** Put call-parity is the most important relationship between European call and put options. It has far-reaching consequences not only for European options.	**An example to start** In the valuation lab we made some observations about the volatility value of call and put options at the same strike. What is the reason behind that?
	Put-call parity – the facts Put-call parity is a relationship between a forward, a call option, and a put option. This relationship can be formulated in different ways.
	Put-call parity – the trades A guide of how to trade and harvest put-call parity violations.
	A futures example The underlying is an equity index. We analyze the market prices, search for arbitrage opportunities and harvest mispricings.
	A stock example The underlying is a single dividend paying share. We analyze the market prices, search for arbitrage opportunities and harvest mispricings.
	Knowledge check Time to test your knowledge on relative valuation and show what you have learned.

Module 10 **Option strategies** Option strategies are combination of multiple option contracts, tailored to capture a specific investment view. This module introduces the major option strategies and how investors use them.	**How to graph**	How do you visualize the aggregated profit and loss of multiple option contracts? This is more complicated than one might think. This lecture introduces as step-by-step guide how to draw complex option graphs.
	Option strategies	An introduction to option strategies and how they are used by investors. Common structures such as straddles and butterflies are analyzed and illustrated with practical examples.
	Option value before expiry	Option graphs resemble “hockey sticks” only at expiration. Prior to expiration, the option’s value changes as time passes. This lecture illustrates how an option’s value evolves over time.
	Leverage	Are derivatives dangerous? The concept and risk impact of leverage is explained in this session. Investors must understand leverage in order to safely handle derivatives.
	Leverage Lab	What drives leverage and how can you steer it? Your turn to experience how leverage relates to how a position is funded and what option strike you select. Experiencing leverage is just as important as understanding it.
	Knowledge check	Time to practice and test your knowledge

Module 11 **Risk measures** A trader's profit and an investor's expected return are endangered when market conditions change. Risk measures quantify the amount of risk caused by changes in market conditions.	**Risk and risk measures** Risk is exposure to change; risk measures, referred to as the Greeks, quantify this exposure. In this session we discuss what risk means for the investor and what it means for the trader.
	Delta The first risk to be managed is delta risk. Delta is the "speed" at which option values change when the underlying price changes. Delta risk can be managed by trading the underlying.
	Vega and volatility Option values depend on the volatility of the underlying. Vega measures how the option value changes, if volatility increases or decreases.
	Theta and time As time to expiry get smaller, the option value decays. Theta is the measure this decay. It is the rate at which your option "ages".
	Gamma Delta risk is typically the most important risk of a derivative. But delta is not a constant. Delta is likely to change due to spot movement. Gamma is the measure of how delta will change as spot moves.
	Knowledge check Time to practice and test your knowledge

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

For more information visit http://www.nosco.training/course/derivatives-advanced

Or email info@nosco.training