

**Sales & Trading:
ASSOCIATE Program**

Sample Outline

Overview: ASSOCIATE Sales & Trading

- This two week training course covers the main financial markets with a focus on the fixed income and FX markets. It focuses on the practical as opposed to the theoretical, and discussions focus on monetising views and taking advantage of relative value opportunities that arise in these markets.
- The course includes short refreshers that acknowledges that not all MBAs are equal in terms of their content. This will ensure that all of the participants will have the key building blocks in place before moving onto the subject matter that is more detailed. The course will comprise a mix of exercises, cases and computer-based exercises.

Course Overview

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
Week 1	Fixed Income Analysis <ul style="list-style-type: none"> ▪ Pricing Bonds ▪ Measures of Bond Market Risk ▪ Yield curve analysis ▪ Bond Credit Risk 	Derivative Review I <ul style="list-style-type: none"> ▪ Futures ▪ FRAs ▪ Swaps 	Derivative Review II <ul style="list-style-type: none"> ▪ Calls & Puts ▪ Caps, Floors and Collars ▪ Swaptions 	Bond Trading in the Cash & Derivative Markets <ul style="list-style-type: none"> ▪ Cash Bond Trading including curve / spread trading ▪ Bond Futures 	Trading Derivatives <ul style="list-style-type: none"> ▪ STIRs ▪ Interest Rate Swaps ▪ Options
	DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
Week 2	Interest Rate & FX Derivative Applications <ul style="list-style-type: none"> ▪ Liability Structures ▪ Asset Structures ▪ Structured Products 	Equity & Commodity Derivatives <ul style="list-style-type: none"> ▪ Equity / commodity Forwards ▪ Equity / commodity Options ▪ Convertible Bonds 	Exotic Options <ul style="list-style-type: none"> ▪ Mechanics and pricing and risk ▪ Structured Liability Products ▪ Structured Asset Products 	Credit Derivatives <ul style="list-style-type: none"> ▪ CDS & Index Products ▪ TRS ▪ Credit Spread Products ▪ Structured Credit Products 	Risk Management in Derivatives <ul style="list-style-type: none"> ▪ Market Risk Management ▪ Credit Risk Management ▪ Capital Adequacy

DAY 1: Fixed Income Analysis

Pricing Bonds

- Pricing bonds
 - Conventional methods
 - Quoting conventions
 - Yield to maturity
 - Limitations of yield to maturity

Market Risk

- Macaulay duration
- Modified duration
- DV01
- Convexity

Yield Curve Analysis

- Yield curve construction
 - Par curves
 - Spot curves
 - Forward curves
 - Discount factors
- Sources of rates
 - Deposits
 - Futures
 - Swaps
- Yield curve modelling
 - Different methods of interpolation
- Applications
- Relative value
- Derivative pricing

Credit Risk and Spreads

- Option adjusted spreads
- Z spreads
- Swap spreads

DAY 2: Derivative Review I: Forwards

Futures and FRAs

- Futures vs. OTC forwards
 - Features of futures contracts
 - Role of the exchange
 - Margining provisions
 - Variation vs. initial margins
 - Pricing concepts
- STIRs (Short term interest rate futures)
- FRAs

Interest Rate Swaps

- Basic principles of swaps
 - Key terminology
 - Quoting conventions
- Swap valuation
 - Forward rates
 - Zero coupon rates
 - Discount factors
- Applications of swaps
 - Liability applications
 - Asset applications

DAY 3: Derivative Review II: Options

Option Overview

- Understanding the basic terminology
 - Calls / puts
 - Strike price
 - American v. European options
- Applications of options
 - Forwards v options
 - Single-period options
- Multi-period options
 - Premium reduction strategies(zero cost collars, participations)

Option Valuation

- An intuitive pricing approach
- The various pricing models
 - Closed form analytical solutions
 - Binomial pricing solutions
- Factors that influence the value of an option
 - Spot
 - Interest rates
 - Time
 - Volatility

Option Risk Management

- Defining and interpreting the main option Greeks
 - Delta
 - Vega
 - Gamma
 - Rho
 - Theta
 - Other Greeks: vanna, vomma etc.

DAY 4: Trading Bonds in the Cash and Derivative Markets

Understanding the Yield Curve

- Understanding how the yield curve can move
 - Why parallel movements never happen
 - DV01 neutrality

Yield Curve Strategies

- Roll-down and carry
- Curvature trades
 - Different ways of constructing the hedge ratio
 - Yield betas
- Credit spread trades
- Constant maturity structures
 - CMS floaters

Bond Futures

- Forward pricing: a review
 - OTC vs. bond futures
 - Factors that drive the forward price
- Mechanics of bond futures
 - Conversion factors
 - CTD concepts
 - Gross basis v net basis
- Trading applications

DAY 5: Trading in the Derivative Markets

Trading Forwards

- STIRs
 - Mechanics: conversion factors, CTD etc.
 - Basis
 - Hedging applications
 - Trading applications
- Interest rate swaps
 - Trading the swap spread
 - Trading anticipated changes in the shape of the curve
 - Basis swaps

Trading Options

- Option trading overview
 - Directional trades
 - Volatility trades
- Volatility revisited
 - Smiles and skews
 - Fat tails
- Trades in detail
 - Bull/ bear spreads
 - Straddles and strangles
 - Risk reversals
 - Calendar spreads
 - Trading volatility using caps, floors and swaptions
 - Variance swaps

DAY 6: Interest Rate and FX Derivative Applications

Non-generic Swaps

- Non-generic swaps:
 - Basis swaps
 - Forward-starting swaps
 - LIA swaps
 - CMT and CMS swaps

Structured Interest Rate Applications

- Asset swaps:
 - Par Floaters
- Swaption applications:
 - Combining with puttable/callable debt
 - Enhancing yield
 - Debt cost reduction
- Structured Notes:
 - Yield curve plays
 - Range Accrual

Currency Swaps

- Cross Currency Swaps
 - FX forwards v cross currency swaps
 - Currency basis swaps
 - Bond issuance arbitrage in the international capital markets

Structured FX Applications

- Zero-coupon currency swaps
- Cross currency swaptions
- Cancellable FX swaps

DAY 7: Equity and Commodity Derivatives

Equity Forwards

- Equity forwards:
 - Equity futures
 - Equity swaps
 - Beta

Equity Options

- Options:
 - Calls and puts
- Structured equity investments
 - Equity-linked notes

Convertible Bonds

- Convertible bond mechanics
 - Conversion ratio
 - Parity
 - Bond floor
- Convertible bond pricing
- Trading applications
 - Trading volatility
 - CB asset swaps

Commodity Derivatives

- Commodity futures
 - Oil, copper
- Commodity swaps
 - FFAs, Coal
- Commodity options
 - Average rate options
 - Quanto structures
- Structured commodity trades

DAY 8: Exotic Options

Exotic Options I

- Mechanics and pricing:
 - Average rate options
 - Binary options
 - Barrier options
 - Basket options
- Applications in the IR and FX markets for the above mentioned options:
 - Liability structures
 - Investment structures
- Option greeks:
 - Delta
 - Vega
 - Gamma
 - Theta

Exotic Options II

- Mechanics and pricing:
 - Rainbow options
 - Compound options
 - Quanto options
 - Binary options
- Applications in the equity and commodity markets for the above mentioned options:
 - Liability structures
 - Investment structures
- Option greeks:
 - Delta
 - Vega
 - Gamma
 - Theta

DAY 9: Credit Derivatives

Credit Default Swaps

- Features of CDS:
 - Key terminology
 - CDS documentation
- CDS pricing:
 - Asset swap approach
 - Technical approach
- CDS indices:
 - Features and mechanics
 - Pricing
 - Index trading
- CDS trading:
 - Basis trading
 - Credit curve trades
 - Spread trades
 - Relative value trades

Total Return Swaps

- Features of TRS
- TRS applications

Credit Spread Products

- Features of credit spread products
- Credit spread product applications

Structured Credit Derivatives

- FTD products
 - The importance of correlation
- Collateralised Debt Obligations
 - CLOs v CBOs
 - Mechanics
 - Pricing
 - Applications

DAY 10: Bank Risk Management

Market Risk

- Market risk management methodology
 - Measurement
 - Analysis
 - Control
- Market risk analysis:
 - Factor sensitivity
 - Trading v accrual accounts
 - VAR
- Market risk control:
 - Factor sensitivity limits
 - Triggers
 - Correlation and portfolio risk

Credit Risk

- Credit risk management methodology
 - Identification
 - Analysis
 - Control
- PFE v. PFLE
- Credit Risk mitigation
 - ISDA
 - Credit risk mitigation techniques
 - Netting
 - Collateralisation
 - Single swap resets

Capital Adequacy

- Basle II & III
 - Credit risk
 - Market risk
 - Operational risk
 - Liquidity Risk