MASTERCLASS
Fundamentals of Capital Markets

GENERAL PRINCIPLES

- Programme combining online and in-class training
- Programme in **5 phases.** **Phases 2, 3** and **4** alternate:
  . **1st stage of individual work preceding the seminar** in the form of self-assessment quizzes, online consultations of technical sheets and e-learning modules
  . **One-day course:** revisions, lectures and case studies
  . **2nd stage of individual work post-seminar:** quizzes, case studies and exercises in EXCEL™ (accessible online after the seminar)
  . **The first phase** does not include days of in-class seminars
  . **Phase 5** consists in bestowing a FIRST FINANCE certificate to delegates who have successfully completed the programme.

  Trainees may take the evaluation tests more than once. What is important is that the knowledge be truly acquired.
- This programme is linear. Delegates will have to follow the phases in their sequential order.

EDUCATIONAL HIGHLIGHTS

- Anchor knowledge and skills using:
  . an appropriate rhythm of preparation, training and practice
  . an alternated use of educational methods: e-learning, small group sizes, exercises in EXCEL™, case studies, simulations, MCQ
- Gain state-of-the-art practical skills
- Validation via tests and an official FIRST FINANCE certificate

DURATION

40 hours of training over a **3-month** period

. Individual work + tests: **19 hours**
. Seminars: **3 days x 7 hours = 21 hours**

SYNOPSIS

TYPE OF TRAINING	TOPICS	DURATION
PHASE 1: Financial Markets – Organisation and Key Players		
Quiz	Self-assessment	15 min
E-learning + quiz	Organisation and participants of financial markets	90 min
Pre-reading	Typology and mechanisms	20 min
Pre-reading	Front to back office functions	30 min
Summary Quiz		30 min
Exercise	Attribute the correct function to each participant	30 min
PHASE 2: Equity Products – Shares, Bonds and Money Market Products		
Quiz	Self-assessment	15 min
E-learning + quiz	Equity markets	45 min
E-learning + quiz	Money markets	45 min
Pre-reading	Role of the ECB	20 min
Pre-reading	Negotiable debt securities and T-bills	20 min
E-learning + quiz	Bond markets	60 min
Seminar	Mechanisms, Uses and Market Conventions for Cash Products: Shares, Bonds, Money Market Instruments	1 day
Summary Quiz		30 min
Exercise 1	From an order book, predict market transactions resulting from different types of orders	30 min
Exercise 2	Calculate a bond's accrued coupon, price and duration	40 min
PHASE 3: Interest Rate, Credit and Equity Derivatives		
Quiz	Self-assessment	15 min
E-learning + quiz	Interest rate derivatives	50 min
E-learning + quiz	Equity derivatives	30 min
Pre-reading	FRAs and short-term futures	20 min
Pre-reading	Interest rate swaps (IRS) and currency interest rate swaps (CIRS)	30 min
Pre-reading	Exotic caps and floors	30 min
Pre-reading	Credit Default Swaps (CDS) And Credit Linked Notes (CLN)	30 min
Seminar	Interest Rate, Credit and Equity Derivatives: Mechanisms, Uses and Market Conventions	1 day
Summary Quiz		30 min
Exercise 1	Calculate an FRA differential	20 min
Exercise 2	Make a bill book for the Euribor leg of an interest rate swap	30 min
Exercise 3	Calculate the guaranteed rate and the break-even spot rate of capped/floored strategies	30 min
PHASE 4: Forex Market, Fundamentals of Risk Management and Implications of the Basel II Reform		
Quiz	Self-assessment	15 min
E-learning + quiz	Forex market	50 min
Pre-reading	Spot FX transactions	20 min
Pre-reading	Forward FX transactions and FX swaps	30 min
Pre-reading	FX options	30 min
Pre-reading	Capital resources	20 min
Pre-reading	Market, counterparty and operational risks	45 min
Seminar	FX Market, Fundamentals of Risk Management and the Implications of the Basel II Reform	1 day
Summary Quiz		30 min
Exercise 1	Calculate a forex cross rate and a forward rate	30 min
Exercise 2	Classify different market and counterparty risks	20 min
PHASE 5: Certification by FIRST FINANCE		
FIRST FINANCE certificate bestowed to all successful delegates		
		TOTAL: 40h00

MASTERCLASS OBJECTIVES

- Learn the typology, organisation and functioning of financial markets, as well as the roles of all their participants
- Master the mechanisms and use of cash products and all types of derivatives
- Know all the major risks involved in market transactions and the implications of the Basel II Reform
- Master the jargon of financial markets

RECOMMENDED FOR:

- Trading room newcomers
- Multi-instrument salespeople, financial intermediaries
- Junior fund managers
- Back office, internal controls, audit
- IT staff and consultants in computer services and financial information firms
- Economists and legal staff
- Financial departments
- Corporate treasurers

COURSE OUTLINES

(No prior mathematical knowledge required)

Day 1

MECHANISMS, USES AND MARKET CONVENTIONS FOR CASH PRODUCTS: SHARES, BONDS AND MONEY MARKET INSTRUMENTS

Equity Market

- How organised stock exchanges work
- Key players: clearing houses/depositories

Indices

- Indices and cash equity instruments
- Equity futures
- Principles of equity structuring

Practical Workshop

. Analyse a fund manager's needs and offer risk management solutions

Money Market

- Reference rates: Libor, Eonia and Euribor
- Monetary policy and dynamics of short-term interest rates:
  . Base rates
  . Calls for tenders: procedures
  . Minimum capital requirements
- Money Market Instruments
  . Deposits
  . Debt securities: T-bills, commercial paper, certificates of deposit
  . Reverse transactions

Practical Workshop

. Compare sources of short-term financing

Bond Market

- Bond reference rates
- Most common debt securities and their uses: fixed-rate bonds, floating rate bonds, CMSs, etc.
- Bond issues
- Essentials of pricing
- Duration and sensitivity

Practical Workshop

. Calculate a bond's yield

Day 2

INTEREST RATE, CREDIT AND EQUITY DERIVATIVES: MECHANISMS, USES AND MARKET CONVENTIONS

- Principles of forward products
- Interest rate curve and forward rates
- Mechanisms and uses of non-option derivatives:
  . FRAs
  . Futures
  . Interest rate swaps (IRS), currency and interest rate swaps (CIRS)
  . Non-vanilla swaps: quanto swaps, CMSs
  . Credit default swaps, credit linked notes

Practical Workshop

. Calculate a forward rate

- Options: mechanisms
- Fundamentals of option pricing
- Volatility and volatility smile
- Option sensitivity: delta, gamma, vega, theta, etc.
- Option-based strategies
- Special features of caps/floors and swaptions
- Special features of share warrants
- Common types of exotic options

Practical Workshop

. Manage a floating rate debt using swaps and caps/floors

CREDIT DERIVATIVES

- Credit derivatives market: organisation and key players
- Mechanisms and uses
  . Credit default swaps (CDS)
  . Credit-linked notes (CLN)
- Legal and regulatory framework

Practical Workshop

. Use a CDS to hedge counterparty risk

Day 3

FOREX MARKET, FUNDAMENTALS OF RISK MANAGEMENT AND THE IMPLICATIONS OF THE BASEL II REFORM

Forex Market

- Spot FX transactions
- Forward FX transactions, forwardation/backwardation
- FX swaps
- FX options

Practical Workshop

. Calculate a forward FX rate
. Calculate the maximum loss, effective guaranteed rates and break-even spot rates of various FX option-based strategies

Fundamentals of Risk Management

- Value-at-Risk (VaR)
- Counterparty risk approach
- Market risk approach
- Operational risk approach

Practical Workshop

. Perform a simple calculation of a 1-day/99% VaR

Implications of the Basel II Reform

- Goals and consequences of the reform
- Tools and methods
  . Pillar 1: risks
  . Pillar 2: supervisory review
  . Pillar 3: market discipline and transparency
- Impacts of the reform