Training Portfolio

First Class Training

from

ACF Consultants Ltd



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Training Portfolio

Blended Learning Programs by ACF Consultants Ltd

Introduction

This document provides examples of the scope, breadth, and depth of ACF's Training Portfolio. It is not an exhaustive list, and ACF are constantly expanding the areas in which we offer specialised training for the financial marketplace.

About ACF

ACF Consultants Ltd is a full-service professional training company with a wide range of highly developed relevant skills and competencies. We can provide a totally integrated and innovative training service, and offer a potent combination of **eLearning**, **sophisticated simulation** and **expert tutor-led training** over most areas of the financial markets.

Our global experience, extensive network of highly skilled trainers, and expertise in the use of cutting-edge technology to enhance and enrich learning, give us a unique ability to deliver highly innovative and effective training at all levels, from entry-level and continuing professional development to executive coaching and client education.

We would ensure your learning initiative would be structured to create the skills necessary to meet your current business needs and future strategy.

ACF can also help to **manage your training initiative** from inception to implementation and evaluation. By consulting with you at every stage we can be sure to craft a modular curriculum in a unified framework which is focused on maximising the potential of your people.

Delegate Profile

ACF training programs are aimed at individuals working throughout the bank and include those working as:

- Traders
- Originators
- Structurers
- Sales
- IT Development & Application
- Back Office Support
- Graduate recruits

- Relationship Managers
- Senior Relationship Managers
- Area / Regional Directors
- Risk Managers
- Credit Analysts
- Executives

ACF is also experienced at dealing with subject matter at various levels, and can present topics at:

• Vanilla Level – to provide foundation concepts to entry-level and other introductory audiences. Delegates attending a vanilla-level seminar will learn the important concepts and see how they apply in a practical context.



- Practitioner Level focused on the needs of practitioners and their corporate and commercial clients. Delegates attending a practitioner-level program will be able to update and extend their existing knowledge, and will explore how best to maximise relationships with clients by integrating, packaging, and leveraging a wider range of financial products.
- Masterclass Level extending delegates knowledge and skills further, by bringing
 delegates up-to-date with the latest products, market practices and conditions, and by
 demonstrating how to structure approaches especially to more demanding clients –
 which will add value to the client and also provide profitable opportunities for you.

Delivery Method

We suggest that a *blended learning* approach combining eLearning, dynamic tutor-led sessions, simulation, case studies, and workshops, will provide the most effective way to deliver training at all levels within the organisation.

Tailoring the Programs

The suggestions for course objectives and content given here are simply to provide an idea of ACF's capabilities and approach. In the event that you chose to use ACF to deliver training, we would work closely with HR and line managers to define specific delegate profiles, finalise content, and organise schedules and timing, to accurately align training to your specific training needs,

ACF have extensive experience in training needs analysis. We would not simply run generic training courses, but would design and deliver seminars that were genuinely tailored for your needs.

Evaluation and Assessment

We provide comprehensive assessment and evaluation as part of our training services. In addition to paper based examinations and exercises, ACF conduct regular online tests and quizzes, to ensure that delegates are progressing satisfactorily, and to identify where any additional or remedial work may be necessary.

We can create rigorous but engaging and entertaining quizzes to make the assessment process painless and fun. Examples of these quizzes can be found on our websites www.acumennet.com, www.acimennet.com, www.acimennet.com, www.acimennet.com, www.acimennet.co

Simulations and interactive case studies contribute to a rich and rigorous assessment process which is also non-threatening. All results are recorded in our LMS and reports can be generated automatically for each individual.



Program Administration

ACF can provide a full administration service for the core training technical programs. This service includes:

- Pre-program assessment
- Creating suggested personalised learning plans
- Online registration for each training module
- Pre-course questionnaires
- The option of access to supporting online learning
- Post-course follow up
- Progress-tracking
- Reporting
- A dedicated private client area on our secure servers for managing the program
- Sourcing training locations if required

Program Documentation

A full and comprehensive set of course notes, case studies, workshop materials, and other documentation, is provided for every seminar.

Delivery Location

ACF are London-based but operate globally, and can deliver training at locations throughout the world.

Open Enrolment Programs

ACF provide a number of open-enrolment programs, details of which can be found at:

www.acf-financialtraining.com

Our other websites at www.acf.co.uk, www.acumennet.com and www.comanex.com provide further information about ACF's range of products and services.



Total Commitment to Quality

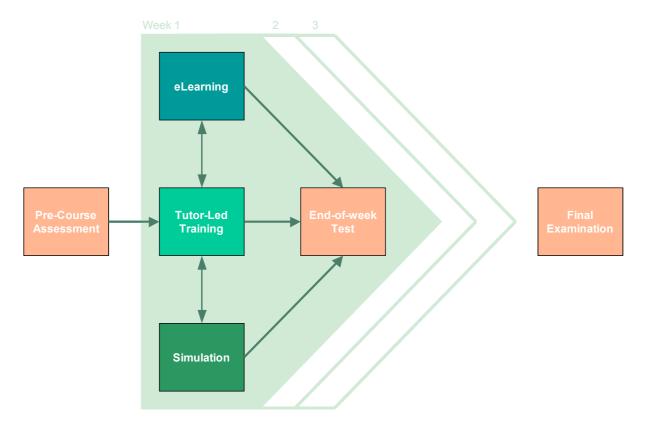
ACF Consultants is dedicated to providing the very best in training for your people. As a full-service training company we are committed to creating the most effective and cost efficient solution to your training needs.

Quality and innovation, using the most advanced techniques technology can offer, have made us global leaders in delivering dynamic and motivating training for the financial markets. We have the expertise and experience to originate our written materials, eLearning and simulations in-house. This enables us consistently to deliver the highest quality to our clients.

Blended learning was the philosophy on which the company was founded. Our training methodology, integrating theory with practice using our own powerful training tools, creates a memorable, multi-faceted learning experience. The result pays immediate dividends in the retention of newly-learned concepts and their practical application in the financial marketplace.



Blended Learning



Blended learning is at the heart of our training philosophy. A dynamic blend of highly interactive **eLearning**, top quality **tutor-led training** and realistic and exciting **simulations** create the most effective and motivating training methodology available anywhere.

Firm foundations can be laid with highly interactive eLearning and dynamic tutor-led training. Hands-on workshops and simulation will then be used throughout the program to allow delegates to put theory into immediate and realistic practice, illustrating clearly how the concepts work in practice.

Passive learning will be kept to a minimum, and the emphasis will be on delegates achieving a true understanding of the key concepts, and how they are applied in the real world.



How Blended Learning will work for you

- We will consult extensively with you to ensure that the program is tailored to you're your specific needs and objectives.
- ❖ A pre-program questionnaire will be provided to establish the existing knowledge level of the participants. You can choose to have the questionnaire in a paper-based or online format. The program content and delivery will be fine-tuned in response to the questionnaire results to ensure that we deliver what you require.
- You will have the option of access to the appropriate modules in Acumen, our highly interactive eLearning system, for an agreed period before and during the program. Acumen will facilitate efficient pre-course preparation and offer convenient revision during the program.
- Classroom training will be delivered by our excellent tutors, who have a combination of practical experience, a sound academic background, and exceptional communication skills.
- We can integrate contributions from your own in-house experts to provide further insight and demonstrate your specific angle.
- Learning will be consolidated and applied using one of the sophisticated **simulations** from our extensive portfolio. The simulations will be woven into the program to ensure the rapid reinforcement and maximum retention of newly learned theory. Where appropriate, customized simulation scenarios will be created after close consultation.
- ❖ An quiz or examination can be provided at the end of each program.
- We will provide ongoing support following the program to offer updates, extra tuition and additional advanced programs where necessary. ACF can also conduct a return on investment analysis where requested.



Essential Elements

Three elements can blend to produce an extremely motivating and totally integrated program that is both more effective, and faster, than traditional classroom and case study methods.

Acumen ...Fast Effective Training for the Global Financial Markets

Acumen, our web based eLearning system, is unrivalled for transmitting key concepts and laying solid foundations. Acumen will assess students, identify strengths and weaknesses, and suggest an individual learning path. Students can learn at their own pace and monitor their progress with tests and quizzes.

Our content is creative and interactive. Acumen keeps users constantly engaged and motivated while explaining complex concepts with clarity and precision. With Acumen users can proceed to more advanced and challenging topics, and achieve more than with any other system.

Acumen is linked to a powerful learning and content and management system which efficiently manages individual learning portfolios. Comprehensive administrative, tracking, assessment and reporting capabilities help you to plan, analyse and evaluate the learning process.

Acumen has the power to make a real and dramatic impact on the development of your people. Value-for-money licence agreements are available to give access to the whole Acumen library on a global basis. More information is available from www.acumennet.com.

Tutor-Led Training

... Talented Professionals, Creative Training

Our tutor-led training is of the highest quality. We invest heavily in research and development. Our professional written materials complement trainers with first-rate communications skills, an excellent academic background and sound market knowledge. Our expert instructors are skilled in the art of transferring knowledge. We make use of a variety of creative training techniques to maintain energy and focus. We are committed to achieving exceptional results

Simulation ... "Practice is the best of all instructors" (Publius Syrus)

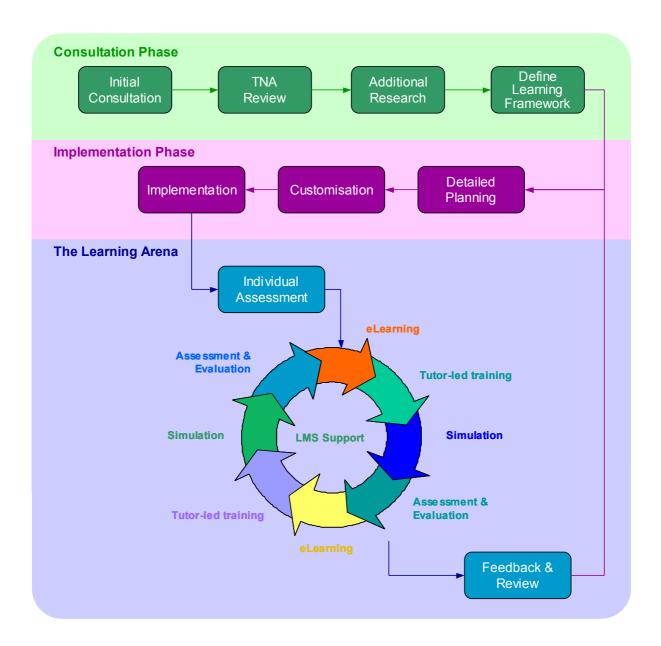
Simulation is the most compelling way to learn by encouraging active participation. We are the global leaders in creating simulations covering all aspects of the financial markets. Sophisticated, motivating and highly effective, our portfolio of simulations, covering all aspects of the financial markets, allows the seamless blending of theory and practice to create a truly engaging learning environment.



The Process – Creating the Learning Arena

The acquisition of new knowledge should be a continuous process which develops its own momentum. The knowledge arena should be a dynamic environment, geared to disseminating relevant information, encouraging interaction and teamwork and generating new ideas.

Working with you we can create a learning environment which will be dynamic, motivating and which will be tailored to meet your learning and business objectives.





Seminars Offered by ACF

We list below, in alphabetic order by section, some of the seminar titles offered by ACF. In each case we can tailor the content, level, and delivery to suit your specific needs.

Asset and Portfolio Management

- Investment Techniques
- Principles of Asset Pricing
- Managing a Portfolio
- Asset Allocation
- Modern Portfolio Theory
- The Capital Asset Pricing Model
- Arbitrage Pricing Theory
- Evaluating Portfolio Performance
- International Portfolio Management
- Fixed Income Portfolio Management
- Equity Portfolio Management
- Dynamic Derivative Strategies
- Relative Value Investing
- · Bank Asset and Liability Management

Capital Markets

- Introduction to the Capital Markets
- A to Z of the Capital Markets
- Using Treasury Products
- Active Treasury Management
- Technical Analysis

Compliance and Regulation

- Basel II
- Preventing Money Laundering
- Controlling and Detecting Fraud
- Derivatives for Operations and Compliance An Intuitive Approach
- Avoiding Fraud
- Understanding the Star Trader

Corporate Finance

- Introduction to Corporate Finance
- Interpreting Company Accounts
- Financial Statement Analysis
- Corporate Valuation
- Financial Modelling for Corporate Finance
- Mergers and Acquisitions
- Debt Financing
- Asset Financing
- Project Financing
- LBO and MBOs
- Excel for Corporate Finance



Credit

- Credit Analysis Techniques
- Credit Risk of Corporates
- Credit Risk of Banks
- Credit Risk of Derivatives
- Credit Risk in Securitization

Credit Derivatives

- Introduction to Credit Derivatives
- Credit Default Swaps Applications and Pricing
- Managing the Risk of Credit Derivatives
- Credit Derivatives in Emerging Markets

Derivative Products

- Introduction to Derivatives
- Introduction to Futures Markets
- Introduction to Options
- Demystifying Derivatives
- Applications of Derivatives for Portfolio Management
- Using Derivatives for Customer Solutions
- Currency Derivatives
- Interest Rate Derivatives
- Energy Derivatives Applications, Pricing and Hedging
- · Mastering Options from Basics to Advanced
- Pricing, Trading and Hedging Options
- Options Dynamic Trading Techniques
- Understanding Derivatives for Operations
- Exotic Options Applications and Pricing
- Pricing Derivative Products
- Derivatives for Corporates
- Advanced Swaps
- Derivatives for the Back-Office
- Educate Your Client
- Financial Engineering with Derivatives
- Accounting for Derivatives

Energy and Commodities

- Commodity Futures and Options
- Energy Derivatives
- Trading Commodities
- Hedging Commodity Risk



Equities – The Cash Market

- Introduction to the Equity Markets
- Trading Equities
- Managing an Equity Book
- Servicing Customers and Hedging Risk
- Equity Finance and Prime Brokerage

Equities – Derivative Products

- Equity Options
- Equity Swaps
- Convertibles
- Equity Repos
- Structuring Equity Derivative Solutions

Equity Valuation

- Analysing Equities
- Financial Modelling
- Equity Valuation Techniques

Financial Analysis and Accounting

- Financial Statement Fundamentals
- Financial Statement Analysis
- Financial Statement Modelling for Company Valuation
- Accounting for M&A
- Financial Analysis for Banks and Financial Institutions

Financial Mathematics

- Mathematics for Finance
- Bond Mathematics
- Equity Mathematics
- Quantitative Analysis
- Pricing Derivatives



Fixed Income Products

- The Money Markets
- Bond Basics
- Bond Mathematics
- Fixed Income Analytics
- The Traded Bond market
- Eurobonds
- Using Bonds for Investment
- Managing a Bond Portfolio
- Government Bonds
- Corporate Bonds
- High-Yield Bonds
- Emerging Market Bonds
- Convertible Bonds
- Relative Value
- Bond Arbitrage
- Credit Risk of Corporate Bonds
- The Repo Market
- Cross-Selling Fixed Income products
- Fixed Income Derivatives
- Option Embedded Bonds Applications and Pricing

Foreign Exchange Markets and Products

- Introduction to the FX market
- Trading FX Spot
- The Foreign Exchange Forward Market
- FX Swaps
- FX Options Trading, Hedging, and Pricing
- Structuring FX Solutions for Customer Risk
- Managing FX Exposure

Induction/Graduate Programs

- Assessment for the Financial Markets
- Introduction to the City
- Introduction to Capital Markets
- Introduction to Derivatives
- Introduction to FX and Money Markets
- Analysts Training Program
- Associates Training Program
- Graduate Training Program
- Capital Markets and Derivatives MBA Program

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- Capital Markets Training Program
- MBA Induction Program
- ACI Diploma
- Mathematics for Finance
- Trading Floor Development Program



Interest Rate Derivatives

- Modelling the Yield Curve
- Interest Rate Swaps
- Swaps Pricing, Valuation and Applications
- Advanced Swaps
- Interest rate Futures and FRAs
- Interest Rate Options
- Caps Floors and Collars
- Exotic Interest Rate Products
- Option Embedded Bonds
- Corporate Solutions

Risk Management

- Managing Market Risk
- Value at Risk Concepts
- Market VaR
- Credit Risk and Credit VAR
- Operational Risk
- Credit Risk of Derivatives
- Managing Bank and Country Risk
- Managing Currency Risk
- Managing Interest Rate Risk
- Managing Options Risk for Exotics
- Enterprise-Wide Risk Management techniques
- Energy Risk Management



Sample Seminar Content

We provide over the next pages some examples of seminar content. These are just to provide an idea of ACF's scope and capabilities. We would work closely to tailor level, content, and timing, and to align each seminar with the learning needs of those attending.

Introductory

Overview of Financial Markets and Instruments

- Purpose and functioning of the markets
- The fixed-income markets
- The equities market
- The money markets
- The foreign exchange market
- OTC and exchange-traded derivatives markets
- Major participants in the markets
- Investors, borrowers, and intermediaries
- Financing needs: start-up, working capital, mezzanine, project, and acquisition finance
- Role of investment banks
- Institutional investors
- Mutual and hedge funds
- Pension funds and insurance companies
- Primary and secondary markets
- Regulation and control

Time Value of Money Refresher

- Using a financial calculator and RPN
- Time value of money principles
- Present and future values
- Interest and discount factors
- Simple vs. compound interest
- Discounting and compounding

- Annuities
- Discounted cash flows
- Net present value
- Internal rate of return
- I TVM Workshop

Understanding the Yield Curve

- Definition of the vield curve
- The normal yield curve
- Liquidity and expectations hypotheses
- Up- and downward sloping yield curves
- Yield curve strategies and plays
- Forward rates
- Analysing the present yield curve

Money Markets and Instruments

- Discount vs. coupon securities
- Eurocurrency deposits
- Bills
- Commercial paper
- Bankers' acceptances
- Certificates of deposit
- Repos

- Pricing money market instruments
- Discount vs. yield quotations
- 360 and 365-day bases
- Money-market and bond-equivalent yields
- Language Comparing short-term investments



Bond Markets and Instruments

- US Treasuries
- Bunds, OATs and BTPs
- JGBs, UK Gilts
- Eurobonds
- MTNs and Euronotes
- Corporate bonds

- FRNs vs. fixed income
- The treasury yield curve
- Primary vs. secondary market
- Bond rating
- High-yield bonds

Bond Maths Overview

- Pricing coupon securities
- Price and yield relationship
- Current yield vs. yield-to-maturity
- Day-count conventions
- Accrued income

- Clean and dirty prices
- Re-investment of coupons
- Price sensitivity, duration, and convexity
- Pricing a bond issue

Equity Markets and Instruments

- Review of international equity markets
- Type of equity product
- Issuing procedures: IPO, rights, scrip, convertibles
- Pricing and valuation techniques
- Accounting concepts
- Measuring fundamentals

- Earnings-based methods
- P/E ratios
- Appraising a company
- Stock indices
- Equity simulation
- Convertibles

Portfolio Management

- Risk and return
- Performance measures
- Sharpe and Treynor ratios
- Jensen's alpha
- Information ratio
- Performance benchmarks

- Defining customer objectives
- Risk tolerance and risk appetite
- Index tracking vs. stock picking
- Asset allocation techniques
- The CAPM
- Portfolio management simulation

Derivatives Overview

- Futures contracts
- Interest rate futures
- Bond and stock index futures
- Using futures to hedge a bond portfolio
- Interest rate swaps
- Currency swaps
- Equity swaps
- Swap applications

- Option contracts
- Option terminology
- Stock options
- Interest rate options
- Exotics
- Credit derivatives
- Credit default swaps
- Using CDS to manage credit risk



Financial Markets

The FX Spot Market

- Functions and purposes of the FX market
- Market mechanics
- Spot quotations
- Direct and indirect prices
- Cross-rates

- A FX Cross-rates Workshop
- Trading strategies
- Influences on the market
- The Euro
- A FX spot simulation

The FX Spot Market

- Outright forwards and swaps
- Impact of interest rates
- Relation between spot and forward markets
- Quoting forward rates
- Quoting swap points
- Forward discounts and premiums
- EX swap points and interest rate parity
- Short dates: O/N, T/N, and S/N trades
- Risk from FX swap transactions
- Example Simulation
- Non-deliverable forwards (NDFs)
- Using swaps to create synthetic assets and liabilities
- Restructuring customer transactions
- Restructuring a forward deal

The Yield Curve

- Definition of the yield curve
- The normal yield curve
- Liquidity and expectations hypotheses
- Up- and downward sloping yield curves
- Forward rates
- Analysing the present yield curve

Fixed Income Markets

- Bond definitions and terminology
- Fixed-rate vs. floating rate
- Government bond markets
- The US Treasury market
- The European and Japanese government bond markets
- The treasury yield curve
- Corporate bonds

- Eurobonds and Euronotes
- Bond rating and corporate bond spreads
- Emerging and high-yield bonds
- Commercial paper
- Primary market and issuance procedures
- Secondary markets and trading conventions

Bond Maths and Bond Pricing

- Pricing fixed-income securities
- The treasury yield curve
- The concept of yield-to-maturity
- Day-count conventions
- Accrued income
- Clean and dirty prices

- Pricing bonds on coupon dates
- Pricing bonds in-between coupon dates
- Re-investment of coupons and reinvestment risk
- Bond pricing workshop



Duration and Convexity

- The double-natured concept of duration
- Duration as a measure of price sensitivity
- Duration as weighted cash-flow times
- Pictorial representation of duration
- Duration and modified duration
- Duration and maturity, coupon, and yields
- Using duration in practice

- Duration, dollar duration, and PVBP (or DV01)
- Calculating hedge ratios
- Convexity
- Convexity myths and reality
- Applying convexity for large yield shifts
- Practical application of convexity
- Portfolio duration and convexity
- Hedging a bond portfolio

Credit Risk of Corporates

- Bond rating agencies and methodology
- The meaning of credit ratings
- Downgrade and upgrade experience
- Comparing the agencies: S&P, Moody's, Fitch, Duff and Phelps
- · Credit risk and credit spreads
- Investment grade vs. high-yield credit spreads
- Defaults and bond ratings
- Credit default swaps

Equity Markets

- Review of international equity markets
- Type of equity product
- Issuing procedures: IPO, rights, scrip, convertibles
- Pricing and valuation techniques
- Earnings-based methods
- Using P/E ratios
- Dividend and DCF techniques
- Appraising a company
- Equities simulation

Introduction to Derivatives

- What is a derivative?
- Derivatives as contracts for difference
- Example of a CFD the FRA
- Exchange-traded vs. OTC derivatives

Financial Futures

- Definitions and terminology
- Standardisation of contracts
- Trading features of futures exchanges
- The clearing and margining systems
- Physical delivery vs. cash settlement
- Overview of STIR, bond, stock-index, and currency contracts
- STIR contracts and forward rates
- Basis and convergence

Interest Rate and Currency Swaps

- Definitions, terminology, and trading practices
- Volume statistics
- Users of and uses for swaps
- Interest rate swaps: "plain-vanilla" and non-standard swaps
- Currency swaps: fixed-fixed, fixedfloating, floating-floating
- Fixing financing costs and investment returns
- Asset-linked and liability-linked swaps
- Swap applications
- Using STIR futures to hedge swaps
- Basics of swap pricing and valuation
- Swap spreads and swap credit risk
- La Valuing a swap



Options

- Why options are different
- Options terminology
- Calls and puts; buying and selling
- American vs. European style
- In-, at-, and out-of-the-money
- Intrinsic and time value
- Components of time value
- · Value and profit profiles
- Basic option combinations

- Spreads, straddles, strangles
- Doption strategy workshop
- Significance of volatility
- Measures of price sensitivity delta, theta, vega, gamma
- Option trading strategies: moneyness; near / far dates; spreads / outrights / straddles
- Doption trading simulation

Hedging using Options

- Bull and bear strategies
- Basic option hedging strategies using protective puts and calls
- Price enhancement
- Price protection
- Income generation
- 90/10 strategies
- Horizontal, vertical, diagonal, and ratio spreads
- Reduced-cost and zero-premium structures
- Caps, floors, collars, corridors, and participations
- Hedging an equities portfolio
- Straddles and strangles
- Butterflies
- Conversions and reversals
- Creating synthetics

Delta Hedging of Options

- Exactly how delta-hedging works
- Why be delta-neutral?
- Buying high and selling low to achieve delta-neutrality
- The link between delta and gamma
- The cost of being negative gamma vs. the benefit of being positive theta
- The link between gamma and theta
- The trade-off between implied volatility and experienced volatility
- The link between theta and vega
- "Easy" and "difficult" options to hedge
- Gamma hedging
- Delta-hedging an options book

Caps, Floors, and Collars

- Comparison of interest rate with other options
- Interest rate guarantees (IRGs)
- Caplets and floorlets
- Constructing caps, floors, and collars
- Pricing caps and floors

- The term structure of volatilities
- Quotation and dealing conventions
- Laps and floors pricing
- Cap / floor parity
- Constructing zero-cost collars
- Non-standard caps and floors

Swaptions and Other Interest Rate Derivatives

- Swaptions
- Receivers / payers parity
- Bond options

- Cancellable and extendible swaps
- Captions, floortions, and collartions
- Product comparisons



Hedging with Interest Rate Derivatives

- Option hedging structures
- Establishing client objectives
- Determining pain thresholds and views
- Tailoring the hedge to match the need
- Reducing the cost of client hedges
- Hedging for free?
- Designing innovative products and solutions
- Doptimising an interest rate risk hedging

Credit Derivatives

- Overview of credit derivatives
- Types of credit derivatives
- The credit derivatives market
- Credit default swaps

- Other credit derivatives
- Using a credit default swap to hedge credit risk

Structured Notes

- The risk-return trade-off
- Re-shaping of risk and return
- Investor risk and return preferences
- Yield enhancement
- Deposits with integral floors and collars
- Accrual, range, and corridor notes
- Reverse floaters

- Leveraged, capped, and floored floaters
- Using quantos to eliminate currency risk
- Guaranteed return equity-linked notes
- Dual-currency structures
- Commodity-linked notes
- Correlation structures
- Structured notes workshop

Exotic Options

- Introduction to exotic options
- A taxonomy of exotics
- Path-dependent options
- Options with step-like (singular) payouts
- Everyday exotics: barriers and digitals
- Other exotics: compound, average rate and average strike, lookback, ladder, ratchet, shout, chooser, contingent, forward-start, leveraged, first- and second-order correlation products



Risk Analysis

Credit Risk of Derivatives

- Why derivatives credit risk differs from loan credit risk
- Components of credit exposure: monetary risk and event probability
- Financial exposure from derivatives
- Drivers of exposure
- Average vs. peak exposures
- Potential vs. actual credit exposure
- Impact of market risk on credit exposure
- Laculating credit risk from distributions of probability and LGD
- Swap cash flows
- Principles of swap pricing and valuation

- Credit risk of swaps
- Credit risk profiles for pay fixed vs. receive fixed
- Credit risk profiles for IRS vs. CCS
- Credit risk of options
- Credit risk of exotic derivatives
- Pricing credit risk
- Overview of credit default swaps (CDS)
- Obtaining default probabilities and recovery rates from CDS
- How to price credit risk using CDS
- Language Calculating the cost of credit risk

Overview of Banking Risk

- Definition of risk and uncertainty
- Dimensions of risk
- Market risk: currency, interest rate, equity, commodity, basis, and volatility risks
- Credit and counterparty risk
- Liquidity risk
- Operating risk
- Fraud risk
- Settlement risk

- Legal risk
- Regulatory and political risk
- The risk / return trade-off
- The need for banks to take controlled risks
- The growth in risk and uncertainty
- Traditional risk assessment methods: BPV, PVBP, and delta-vector concepts

Overview of VaR

- Objective of Value At Risk (VaR)
- Establishing confidence intervals
- Principles of calculating VaR
- Methods of calculating VaR
- The variance / covariance approach
- The Monte-Carlo risk approach
- Using historical simulation
- Stress-testing and scenario analysis
- Advantages and disadvantages of the different approaches

VaR Implementation

- Principles
- Choice of confidence levels (5%?, 1%?, 0.0001%?)
- Choice of time horizon (1d?, 10d? 30 days?)
- Gathering risk data
- Moving windows vs. GARCH
- The J P Morgan RiskMetrics database
- Using option data to obtain volatilities
- Cashflow mapping

- Full valuation approach
- Historical simulation
- Choice of scenarios for stress-testing
- choice of Monte-Carlo scenarios
- Comparison of historical simulation, variance / covariance, Monte Carlo, and stress testing
- Verifying VaR
- Back-testing and model validation



Risk Management and VaR for a Portfolio of Instruments

- Combining and integrating risk exposures
- Portfolio risk and correlation concepts
- Components of portfolio risk the Greeks again
- Risk managing the entire portfolio
- Additive, non-additive, and offsetting risks
- Managing a portfolio of linear instruments
- Managing a portfolio of non-linear instruments
- Special problems caused by convex products
- Correlations between interest rates, currencies, and other financial risk dimensions

Regulatory Requirements – the BIS Schemes for Market Risk

- The role of capital
- Best practices recommendations from G-30
- The Basel Accord for Market Risk
- The standard model
- Criticisms of the standard model
- Using internal models
- Qualitative standards for internal models
- Calculating VaR using internal models
- The multiplier
- Stress testing

Management Issues

- Operational procedures
- Segregation of discretion and responsibilities
- Role of senior management
- What do the numbers really mean?
- Limits of VaR what VaR can and cannot achieve
- The problems of convexity and gamma
- Global risk management combining risk across all markets and locations
- Risk-adjusted and capital-adjusted profit and performance measures
- Efficient allocation of capital and risk resources
- Examples of best practices
- Situations to be avoided (and how)

Financial Disasters

- Losses attributed to derivatives
- Putting losses into perspective
- Case studies...
- Gibson Greetings
- Proctor and Gamble
- Barings

- Metalgesellschaft
- Orange County
- Daiwa Securities
- LTCM
- Common features
- Recommendations

Operational Risk

- Implications of OpRisk
- Sources of OpRisk
- OpRisk on the trading floor
- Front-, middle-, and back-office exposures
- Managing operation risk
- Responsibilities for OpRisk identification and control
- Measuring OpRisk

- OpRisk VaR
- Impact of OpRisk on other risks
- The Basel accord for operational risk
- Basic indicator approach
- Standardised approach
- Internal measurement approach
- Operational risk indicators
- Alpha, beta, and gamma factors
- Capital requirement for operational risk



Corporate Finance

Key Figures in the Accounting Reports

- Overview of corporate financial statements
- Analysis of the income statement
- Income and expenses reporting methods
- Links between cash flow, P&L, and balance sheet statements
- Analysis of current assets: stock valuation and receivables policy
- Examination of non-current assets: acquisition costs and intangibles

- Breakdown of liabilities: current and long-term liabilities
- Understanding non-cash items depreciation and accruals
- Accounting for capital leases
- Appraisal of stockholder's equity
- Allocation of retained earnings
- The significance of book value
- Identifying problem areas
- Focusing on pertinent information
- Interpreting financial statements

Financial Statement Analysis

- The income statement
- The balance sheet
- Assumptions underlying conventional accounting methods
- Asset valuation issues
- Ratio analysis
- Profitability ratios
- Efficiency ratios

- Activity ratios
- Liquidity ratios
- Gearing ratios
- The DuPont model
- Ratio analysis of company performance
- Combining ratios the Z-Score and Zeta approaches

Popular Valuation Methodologies

- Financial statements and basic valuation models
- Dividend-based, earnings-based, and residual income models
- Advanced investment ratio analysis
- Industry analysis and relatives
- Company profiles
- Trend analysis
- Analysts reports

Advanced Issues in Financial Statement Analysis

- Forecasting accounting numbers
- Financial statements and creativity
- Measurement problems with accounting data
- Accounting regulations and standards
- Factors giving rise to accounting differences across countries
- Linking market and book values

Calculating WACC

- Introduction to the weighted average cost of capital
- Importance of the cost of capital
- Calculating the components of WACC
- The CAPM and APT methodologies
- The equity risk premium
- The meaning and measurement of beta
- Factors influencing the cost of equity capital structure; risk, company beta
- Factors influencing the cost of debt debt structure; leverage, credit ratings; taxation
- Estimating the weighted average cost of capital
- Where WACC is used
- Advanced issues in the cost of capital
- Estimating the weighted average cost of capital for a company



Basic Company Valuation Techniques

- General valuation principles
- Valuation multipliers: P/E ratios, EBIT, EBITDA and sales multiples
- DCF, NPV and IRR methods
- Basic valuation models
- Dividend Discount Models (DDMs)
- Earnings- and cash-based approaches
- Asset-based approaches

Advanced Company Valuation Techniques

- Shortcomings of basic valuation models
- Calculating Enterprise Value
- Understanding Free Cash Flow (FCF)
- FCFE and FCFF
- Using WACC
- Estimating terminal or horizon value
- Exit multiples and growth models
- Determining Enterprise Value and Equity Value
- Residual Income models
- Ohlson Model
- Market-value / book-value comparisons
- Economic Value Added (EVA)
- Language Company Valuation workshop

Financing Needs

- Financing start-ups
- Working capital financing
- Mezzanine finance

- Project finance
- Acquisition finance

Financial Structuring

- Financing criteria and the form of financing
- Debt financing instruments
 - The debt financing process
 - Debt of differing maturities
 - Bank debt
 - Fixed-rate bonds vs. FRNs
 - Commercial paper
 - MTNs
 - Structured notes
- Equity financing alternatives
 - The equity financing process
 - Equity issues
 - IPOs and rights issues
 - Convertibles

- Financing and financial derivatives
- Financing and the concept of gearing
 - Optimal financing mix
 - Gearing and firm value
 - Gearing determinants in theory and practice
 - Modelling financial structure
- International corporate governance and financing
- Earnings and value dilution
- The process towards raising international capital
 - Towards a minimum cost of capital
 - Dealing with exchange rates
- Matching the financing to the firm

Planning a Merger

- Motivations for mergers: exploiting synergies, enhancing value, reducing competition
- Interested parties: employees, shareholders, customers, management, the general public, analysts, media, the government
- Factors determining good strategic fit
- Identifying and researching suitable targets

- Horizontal vs. vertical integration
- Forming conglomerates
- Antitrust legislation
- Assessing companies using ratios
- Profitability ratios
- Efficiency ratios
- Activity ratios
- Liquidity ratios
- Gearing ratios
- Valuing companies



Company Valuation for Mergers

- Estimating synergies
- Operational synergies
- Financing synergies

- Tax synergies
- Merger accounting
- Valuing acquisitions post-merger

Implementing or Defending a Merger

- The role of investment banks
- Acquiring shares and building strategic holdings
- Detecting unusual share trading activities
- Negotiation skills
- Planning the approach
- Bidding tactics
- Defending a bid

- Revising bids
- Potential defensive tactics
- Handling contested bids
- Handling competitive bids
- Due diligence: tax, accounting, legal, and environmental
- Letter of intent
- Closing the deal

Arranging Finance for Mergers

- Internal financing
- Debt financing

- Equity financing
- Structuring the financing package

Managing Integration

- Integration approaches: preserving identities, consolidation, symbiosis
- Restructuring
- Divestments

- Motivating staff
- Improving performance
- Realizing synergies

Securitisation and SPVs

- Rationale for securitisation
- Scope of asset securitisation
- Managing balance sheet structure
- Funding diversification
- Securitisation for strengthening BIS capital ratios
- Regulatory arbitrage
- Reducing credit risk through securitisation
- Credit enhancement
- Special Purpose Vehicles (SPVs), management and servicing

Securitisation Structures

- Assets suitable for securitisation
- Mortgage vs. non-mortgage ABS's
- MBS's and CMO's
- CMO structures: sequentials, PACs and support classes, IOs and POs
- Consumer assets: autos, credit cards, etc.
- Commercial assets: debtors, leases, etc.
- Pay down structures
- Pass-through and pay-through ABS structures
- Collateralised debts: CDOs, CBOs, CLOs
- Synthetic securitisation
- Securitisation

Pricing and Other Issues

- Role of rating agencies
- Pricing of ABS's
- Pricing issues

- Accounting
- Taxation
- Future trends



Corporate Treasury

Using Financial Statements to Assess Risk

- The Annual Report main components
- Looking at the Chairman's statement
- Mapping the scope of the business
- Assessing geographical coverage of raw materials, operations, and sales
- Sources of finance short-term and long-term
- Identifying likely FX exposures
- Transaction and translation exposures
- Direct (overt) FX exposures
- Quantifying sales FX exposure
- Impact of global trends

- "Removing the blinkers" identifying hidden exposures
- Importance of reporting currency
- Accounting issues: national variations
- Dissecting the income statement
- Dissecting the balance sheet
- Analysing the "Notes to the Accounts"
- A checklist of points to look out for
- Avoiding a checklist mentality thinking broadly / asking questions
- Quantifying funding FX exposure

Review of FX Risk Management Products

- Vanilla options
- Combinations: risk-reversals, collars, participations, etc.
- Barrier options and structures: knock-in and knock-out collars, participations, and forwards
- Digital and structures: stepped and contingent premiums, enhanced-rate products
- Asian options

Managing FX Corporate Risk

- Identifying corporate currency risk the obvious and the not-so-obvious
- Objectives in managing corporate risk exposure
- Hedging customer FX risk
- Basic hedging with FX options
- Comparison of in-, at- and out-of-themoney options
- Hedging techniques using short option positions
- Zero-premium hedges
- Financial engineering techniques
- Achieving corporate risk management objectives

Hedging with Interest Rate Derivatives

- Option hedging structures
- Establishing client objectives
- Determining pain thresholds and views
- Tailoring the hedge to match the need
- Reducing the cost of client hedges
- Designing innovative products and solutions
- Structuring a client I/R hedge



Financial Maths / Modelling

Time Value of Money

- Using a financial calculator and RPN
- Time value of money
- Present and future values
- Interest and discount factors
- Simple vs. compound interest
- Discounting and compounding
- Annuities

- Discounted cash flows
- Net present value
- Internal rate of return
- Partial interest periods
- Discrete vs. continuous compounding
- Nominal vs. effective interest yields
- I TVM workshop

Market Mathematics

- Discount vs. coupon securities
- Pricing discount instruments
- 360- and 365-day bases
- Discount, add-on, and effective yields
- Pricing coupon securities
- Price and yield
- Money-market and bond-equivalent yields
- Day-count conventions: 30, 30E, actual, 360, 365, 365 (exact)

- Accrued income
- Clean and dirty prices
- Re-investment of coupons
- Duration, volatility, and convexity
- Modified duration
- Using duration to measure bond price sensitivity
- Money market and fixed income workshop

Excel in Finance

- Basics of Excel
- What goes in a cell
- Writing formulas
- Golden rules when building spreadsheets
- Formatting numbers, text, and cells
- Creating simple charts

- Using built-in functions
- Using the mouse
- Organising the toolbar
- Organising worksheets and the workbook
- Naming cells

Introduction to Financial Modelling

Objectives of financial modelling

Scope of financial models

Developing a Financial Model

- Conceptualising the model
- Identifying key model variables
- Programming the model
- Applying accounting rules and business logic
- Links between balance sheet, cash flow, and P&L statements
- Ensuring sound design, reliable structure, and consistency of approach
- Organising the workbook: Data, Assumptions, Results
- Allowing for flexible scenarios
- Producing reports



Important Excel functions for Modellers

- Financial: FV, PV, NPV & XNPV, IRR MIRR & XIRR, PMT, RATE, NPER
- Date / Time: DATE, DATEVALUE, TODAY, WEEKDAY, EOMONTH, YEARFRAC
- Maths and Statistical: MAX, MIN, SUM, AVERAGE, MEDIAN, RANK, COUNTIF

 Lookup, Logical, and Information: ADDRESS, INDIRECT, CHOOSE, INDEX, HLOOKUP, VOOKUP, LOOKUP, MATCH, COLUMN, ROW, IF, AND, OR, NOT, ISBLANK, ISNUMBER, ISERROR, ISNA, NA

Advanced Excel Techniques

- Using Range Names and Range Labels
- Custom and conditional formatting
- Protecting workbooks and worksheets
- Hiding cells and formulas
- Grouping rows and columns

- Arrays and array formulas
- Using Goal Seek and the Solver
- Recording and running macros
- Creating simple "controls"

Auditing and Problem Solving

- Checking the integrity of a financial spreadsheet
- Getting a financial spreadsheet to "balance"
- Auditing a spreadsheet
- Resolving circular references
- Moving from the past, through the present, and into the future: from facts to forecasts
- Dealing with part-year accounts and differing year-ends
- Documenting spreadsheets

■ Modelling a Company

- Analysing the company data
- Designing the model from the ground up
- Building and verifying the model
- Creating the initial position
- Modelling the operating environment
- Applying accounting rules
- Building the business logic

- Creating P&L, cashflow, and balance sheet statements
- Modelling operating margins, capital expenditure, and depreciation
- Verifying the model
- Running the model
- Generating and interpreting the results

Forecasting Techniques

- Forecasting methods
- Linear and non-linear forecasting
- Smoothing methods
- Seasonal adjustment

- Regression analysis
- Using Excel functions: FORECAST, SLOPE, INTERCEPT, PEARSON, STEYX, TREND, GROWTH, LINEST, LOGEST

Risk Analysis

- Risk and uncertainty
- Scenario analysis
- Using Excel Scenarios for different assumptions
- Sensitivity analysis
- Using Excel Data Tables to perform structured sensitivity analyses
- Monte Carlo simulation



Modelling a Merger

- Target and bidder financials (historical and projections)
- Modelling implications of primary financing structures
- Incorporating synergies and sensitivities
- EPS uplift and dilution
- Analysis of key output ratios

Interest Rate Modelling

- Modelling interest rates vs. modelling stock prices
- Mean reversion
- Modelling the entire yield curve
- One-factor and two-factor models
- Arbitrage and no-arbitrage models
- Vasicek model
- Cox-Ingersoll-Ross model
- Ho and Lee model
- Hull and White model
- Black, Derman, and Toy model

- Heath, Jarrow, and Morton model
- A comparison of risk-neutral processes
- Practical considerations in applying yield curve models
- Valuing financial instruments using yield curve models
- Impact of term-structure and yield-curve modelling on measuring interest rate risk
- Workshop: Working with different termstructure models



Additional Services

Our commitment to quality extends across the spectrum of training services, and includes:

- ◆ Training Needs Analysis a comprehensive TNA service to help you establish highly targeted learning initiatives.
- Skills gap analysis to identify where training can be applied most effectively.
- Program administration and organization including locating venues and sourcing appropriate technology.
- ◆ **Training consultancy** including creating bespoke eLearning, and structuring and designing a complete training curriculum from entry-level to advanced development.
- ◆ Open-enrolment seminars covering a range of topical subjects, and detailed on our companion website: www.acf-financialtraining.com.
- Client-education highly focused seminars designed to educate our client's own customers.
- Online Testing and Examination to measure knowledge gained and retained.



ACF's Simulation Portfolio

Global Trader - The world's most powerful trading simulation

Global Trader is the most powerful and versatile markets simulator available. Using the latest technology, Global Trader recreates an incredibly realistic trading environment. Covering all the traded financial markets, including commodities and derivatives, Global Trader offers users the closest experience to the real thing.

With industrial-strength pricing tools, analytics, risk management measures, and an amazing degree of flexibility, Global Trader is much more than a trading simulation. From simple trading to the construction of structured products, Global Trader allows delegates to put theory into practice in a safe but exciting setting.

Intuitive and easy to use, and with the depth and breadth to cover complex as well as simple concepts and deals, Global Trader is the very best tool for training anyone involved in the Global Financial Markets.

A multifaceted and highly engaging system, Global Trader forms an excellent and effective feature in many of our blended learning solutions for global markets training. From entry level to advanced professional development, Global Trader can significantly enhance the learning experience.

Global Investor – The asset management challenge

Global Investor is an extremely exciting, flexible and realistic simulation for learning the art of asset management. Global Investor gives delegates a unique and strategic insight into the key issues, and allows them to explore creative strategies for managing money while also managing risk.

The simulation provides delegates with a platform to practice the skills for making successful investment decisions and generating positive return in a Global Market.

Global Investor is:

- Versatile capable of handing almost all asset classes including cash, money market, fixed income instruments including high yield bonds, domestic and international equities, commodities and derivatives in any currency.
- Flexible able to simulate any operating environment, from stable economies, to the highly volatile emerging markets.
- Exciting teams compete to develop the best portfolio management strategy, while taking into account investor preferences.
- **Effective** delegates acquire a thorough appreciation of the investment process and the disciplines of portfolio construction.
- Dynamic delegates receive immediate feedback on their decisions in a realistic moving market.



Comanex – The most realistic and challenging company simulation available

Comanex is the most realistic, sophisticated and challenging company simulation available in the market.

Comanex allows you to create your own virtual company. By choosing your level, you can explore the challenges of launching and developing a start-up, managing and expanding a medium-sized company, or experience the many challenges involved in controlling a national or multi-national firm.

Comanex is invaluable for anyone involved in managing or advising companies and corporations. Its unique flexibility develops a wide range of skills, from managing cash flows and production schedules, to making complex financing and risk management decisions against a variety of economic environments.

Comanex is an exceptional way to put corporate finance theory into practice dynamically and immediately. For more information: www.comanex.com

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Global Banker is an extremely powerful and flexible simulation which provides delegates with a unique insight into almost every aspect of commercial banking. The experience combines a broad overview with in-depth analysis. Global Banker is the world's leading ALM simulation, allowing theory to be put into practice dynamically with immediate feedback.

Key decision areas include: setting overall strategy, ALM, lending, financing, treasury management using a variety of financial instruments, risk management, investment, managing capital and liquidity, securitisation, funds transfer pricing, operations and IT, compliance and implementing BIS requirements. The impact of risk across a wide spectrum is explored, together with alternatives for managing and controlling risk exposure.

Global Banker can simulate conditions and conventions specific to one particular country, or can demonstrate principles generally applicable throughout the world. The simulation is always tailored to mirror the business and culture of the participating institution. Global Banker is extremely flexible and the simulation can be configured to emphasize the particular goal or learning objective of each individual client

TraderMetrics – Discovering aptitude, developing potential

TraderMetrics is the most powerful assessment tool available for assessing and selecting people for the global financial markets.

Combining rigorous online tests with practical experience on a powerful simulator, TraderMetrics is capable of spotting the candidates most suited to the sales and trading environment. An online version enables your firm to filter candidates on a global basis.

TraderMetrics can also be used in formal assessment centres. Linked to the powerful Global Trader simulation, it will give you an opportunity to assess candidates in a highly realistic trading environment. We conduct detailed consultations with your people to determine the parameters for assessment. These are strictly applied, controlled and monitored. The results are presented, both numerically and graphically, in a comprehensive set of reports.



Synergy – The simulation for Mergers and Acquisitions

Synergy is a unique and innovative simulation for effectively training anyone involved in the business of Mergers and Acquisitions. **Synergy** is a brilliant vehicle for developing the skills of investment bankers, analysts, and corporate staff. Delegates gain direct experience of M&A activity through a realistic, exciting and incredibly motivating simulation. Sophisticated computer models control the economic and competitive environment and produce comprehensive financial reports, analysis and market information.

Synergy has the flexibility to be precisely tailored to meet individual client needs. The economic environment, the size and type of companies, the choice of industry sectors, the setting – either national or international, the strength of competition, and the number of background companies managed by the system – are all individually configurable.

With **Synergy** delegates are able to explore the entire M&A process including company analysis, valuation and modelling, targeting, due diligence, strategy, offensive and defensive tactics, financing, negotiation, implementation and integration.

BankNet – The Retail Banking Simulation

BankNet is a dynamic and realistic simulation of a retail bank which accurately reflects many of the challenges facing modern retail banking. Competition, consolidation, management skills, and the impact of new technology are all explored in the experience.

Working in teams, participants act as the management of a retail bank with a large branch network. The teams must decide on the strategic alignment for their "virtual" bank and develop creative strategies to steer it through major changes while increasing profitability and efficiency.

Decisions include: Overall strategy, managing change, building effective teams, restructuring the branch network, internet banking, promoting financial services, assessing and addressing competition, identifying opportunities and building a successful, motivated organization.



ACF Consultants Ltd

ACF Consultants Ltd have an established reputation for providing first-rate training and consultancy to banks and other financial institutions. ACF have extensive knowledge, experience and expertise in the areas of banking and finance, and are acknowledged leaders in the development and application of advanced computer-based training techniques.

As part of our quality control, we always obtain a detailed written evaluation from every delegate attending any of our seminars. As an indication of the kind of feedback we regularly receive, we reproduce here just a few of the comments made:

"the tutor was in every respect outstanding... superb professional knowledge... clear and quick grasp of participants' problems..."

"This was a phenomenal course. [It] reminded me of the best classes I took at MIT as an engineering major. It was extremely intellectually challenging."

"I have used market simulators before – none as good as Global Trader. It exceeded my expectations".

"The course met its objectives extremely well – the content was well planned and good pre-course documentation was received in advance. The ACF trainer had the rare quality of making difficult things easy to understand."

"overall one of the best courses I have ever been on"

"The teaching style was excellent. The ACF faculty presented complicated subjects in a well-balanced manner."



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