



Bond Maths

Development for Finance Professionals™

A Blended-Learning Program from ACF Consultants



Welcome to ACF Academy's Open Enrollment Programs

ACF Consultants have a solid reputation for delivering innovative, top-quality training for some of the largest and most demanding financial institutions in the world. ACF Consultants are global leaders in the creation of cutting-edge financial simulations and interactive eLearning for the global financial markets.

We are the first premier financial training company to offer open seminars using our uniquely blended learning techniques.

Blended learning is a fundamental principle of the ACF approach to training. Our seminars offer a fully integrated, multi-faceted learning experience which ensures that knowledge is applied in practice and retained effectively. We limit the numbers attending each program to maximise the benefit for each delegate. Passive learning is kept to a minimum, and the emphasis is on delegates achieving a true understanding of the key concepts, and how they are applied in the real world.



Blended Learning

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

Firm foundations are laid with highly interactive eLearning and dynamic instructor-led training. Hands-on workshops and simulation are then used throughout the programs allowing delegates to put theory into immediate and realistic practice.



Instructor Led Training

Our instructor-led training is of the highest quality, and we invest heavily in research and development. Our professional written materials complement trainers with first-rate communications skills, an excellent academic background and sound markets knowledge.

Our expert instructors are skilled in the art of transferring knowledge, and we make use of a variety of creative training techniques to maintain energy and focus.

We are committed to achieving exceptional results.



Bond Maths

The principal objectives of this intensive one-day seminar are:

- For delegates to become **completely familiar** with the **concepts** of **bond maths**.
- For delegates to be completely **comfortable** in **applying these concepts in practice**.
- To explain the theory underlying the **pricing** and **valuation** of **fixed income** and related **products**.
- To consolidate delegates' understanding by providing **first-hand experience** of each area through interactive workshops, case studies, intensive simulations, and powerful computer analytics – using the HP17BII calculator, and ACF's **Global Trader** system.

In our experience, many of those working in the financial markets are ill-at-ease with the mathematics underlying the products they are handling, and unsure how to apply even basic concepts like discounting, compounding, and present-value methods. Even if people are working with these products regularly, they may be uncomfortable about the way in which prices are derived, how sensitive these prices are to market forces, and how they should properly deal with variations to standard products.

After attending this first-class seminar, delegates will have mastered the concepts, theory, and practices of bond mathematics, be confident in pricing and valuing a diverse range of fixed income and related financial products, and understand exactly what makes these products tick.

Course Outline

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



TVM workshop

Understanding the Yield Curve


- Definition of the yield curve
- The normal yield curve
- Liquidity and expectations hypotheses
- Up and downward sloping yield curves
- Yield curve strategies and plays



Riding and trading the yield curve




Market Mathematics: Money Market Instruments

- Discount vs. coupon securities
- Pricing discount instruments (e.g. bills, BAs, CP)
- Discount quotations
- Add-on yield quotations
- 360- and 365-day bases
- Pricing interest-bearing instruments
- Money-market and bond-equivalent yields
- Frequency of compounding
- Compound effective yield
- Holding-period return
-  Money-market workshop

Market Mathematics: Fixed Income Securities

- Pricing coupon securities
- Price and yield
- Gross and net redemption yields
- Day-count conventions
- Accrued income
- Clean and dirty prices
- Current yield vs. yield-to-maturity
- Re-investment of coupons
- Holding-period return
- Price sensitivity concepts
- Duration, volatility, and convexity
- Calculating duration and convexity
- Modified duration
- Using duration to measure bond price sensitivity
- Applying convexity for large yield shifts
- Using duration to manage investment returns within a given horizon
- Duration and convexity of a bond portfolio
- Characteristics of bullet and barbell portfolios
- Using duration to design portfolio hedges
-  Fixed income workshop

Market Mathematics: Corporate Bonds

- Corporate bonds
- Bond rating and rating agencies
- Corporate bond spreads
- High-yield bonds
- Sinking funds and other provisions
- Bonds with embedded options
- Floating rate notes (FRNs)
-  Corporate bonds workshop

NB All practical sessions are highlighted like this:

 means a Workshop or Simulation

 means a Case study



Registration Form

Fax to: +44 (20) 7491 3386 or +1 (212) 422 4640

Contact Information:

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Tel: +44 (20) 7518 9830 + 1 (212) 422-4320
Fax: +44 (20) 7491 3386 + 1 (212) 422-4640

If you are interested in any financial training seminars, please visit our website(s) at:

www.acfacademy.com
www.acfconsultants.com

Accreditation: ACF Consultants Ltd is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors.

State Boards of Accountancy have final authority on the acceptance of individual courses for CPE Credit.

Complaints regarding registered sponsors may be addressed to the National Registry of CPE Sponsors, 150 Fourth Avenue North, Suite 700, Nashville, TN 37219-2417. Website: www.nasba.org.

Fees: The fee for each seminar is per participant, inclusive of refreshments, lunches and seminar materials.

Course fees do not include applicable tax, transportation, or hotel accommodation, unless otherwise indicated.

Preferential rates may be available; please mention our seminar when booking with the hotel.

Payment must be received in full at least 30 days prior to the start of the seminar.

Special prices

(participants are only eligible for one of the following):

- 5% reduction when an individual registers 60 days or more prior to the commencement of a seminar
- 10% reduction when 2 or more individuals from an organization register for the same seminar
- 10% reduction when an individual registers for more than one seminar at a time

Cancellation Policy:

Cancellations may be made up to 30 days in advance of the seminar, after which date refunds cannot be given.

Notification must be received in writing by letter, fax, or email. In the event of a participant not being able to attend, a substitution may be made at no extra cost. We reserve the right to amend the prices, or cancel a seminar at any time.

Refund Policy: For further information on our refund and complaint policy, please contact us.

I WISH TO ATTEND THE FOLLOWING PROGRAM

- London Chicago
 New York Toronto

Dates: _____

Course Schedule - Classes run from 9am - 5pm. Lunch, and morning and afternoon refreshments are provided daily. Venue details will be provided on receipt of registration form.

HOW DID YOUR HEAR ABOUT THE PROGRAM?

- Colleague Client's Company Email Google
 ACF's Event ACF's Rep ACFacademy.com
 NASBA Advertising Financial Times

DELEGATE DETAILS

Name: _____
Title: _____
Department: _____
Company: _____
Address: _____
City: _____ State/County: _____ Zip/Postcode: _____
Country: _____
Telephone: _____ Fax: _____
E-mail: _____

ADDITIONAL DELEGATE DETAILS

Name: _____
Title: _____
Department: _____
Company: _____
Address: _____
City: _____ State/County: _____ Zip/Postcode: _____
Country: _____

PAYMENT DETAILS

Payment Method: VISA Master Card Invoice me at the address listed above

Card #: _____ Expiration: _____
CVC: _____

Cardholder Name: _____

Signature: _____
(signature required)

