



Computational Finance I

C++ in Financial Engineering with a Focus on Monte Carlo Methods

Christoph Becker, Dr. Bernd Engelmann and Prof. Dr. Uwe Wystup
(MathFinance, Quanteam and HfB - Business School of Finance and Management)

5 Day Seminar

Monday to Friday 21-25 November 2005, daily 9:00 - 17:00

Venue

HfB – Business School of Finance & Management
Sonnemannstraße 9-11, 60314 Frankfurt, Room 7

Contents

- Short introduction of C (Transfer of your Basic / Fortran / Pascal - programming knowledge to C)
- Detailed introduction of object oriented programming with C++
- Basic Monte Carlo principles
- Enhanced Monte Carlo techniques for the computation of Greeks
- Variance reduction with control variates
- Using C++ in practice: Compilers, debuggers, creating libraries (DLLs), linking with Excel, class framework for a real life option pricer, aspects of numerical stability, optimization.
- Standard template library (STL)
- Many supervised exercises and group projects with real applications



Who should take this course?

Students of the Master Program in Quantitative Finance, Financial Engineers, Risk Controllers, Financial Consultants

Prerequisites

Working knowledge in a programming language such as Pascal, Basic, FORTRAN etc.

You need to bring

Your own notebook with a C++ compiler installed. In the course we will only support Borland C++ Builder and Microsoft Visual Studio. A free trial version of the Borland compiler is available from the net.

Fee

2000 EUR

1200 EUR for HfB-Students and HfB-alumni

Free for students enrolled in the Master of Quantitative Finance Program at HfB

Registration

Please contact Mrs. Claudia Klemens (klemens@hfb.de).



Telefax

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Registration Form:

C++ in Financial Engineering with a Focus on Monte Carlo Methods
Nov 21-25 2005

(Last name, first name)

(Street)

(Post code / City)

(Phone)

(Fax)

(Email)

Attendance Fee (please tick)

- Euro 1200,--
HfB-Student or HfB-alumni, matriculation number: _____

- Euro 2000,--
external participant

(Place, date)

(Signature)