|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
| **Module 1** | **Building Blocks of Quantitative Finance** |
| **Tuesday 23 January** |  | YES |  | The Random Behaviour of Assets |  |
| **Thursday 25 January** |  |  |  | PDE’s and Transition DensityFunctions |  |
| **Tuesday 30 January** |  |  |  | Applied Stochastic Calculus 1 |  |
| **Thursday 01 February** |  | YES |  | Applied Stochastic Calculus 2 |  |
| **Tuesday 06 February** |  | YES |  | Binomial Model |  |
| **Thursday 08 February** |  |  |  | Discrete Martingales |  |
| **Tuesday 13 February** |  |  |  | Continuous Martingales |  |
| **Thursday 15 February** |  |  |  | Discrete Time Finance |  |
| **Module 2** |  |
| **Wednesday 21 February** |  |  |  | Portfolio Management |  |
| **Thursday 22 February** |  |  |  | Fundamentals of Optimization and Application to Portfolio Selection |  |
| **Monday 26 February** |  | YES |  | Risk Regulation and Basel III |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tuesday 27 February** |  | YES |  | Value at Risk and Expected Shortfall |  |
| **Tuesday 06 March** |  |  |  | Asset Returns: Key, Empirical Stylised Facts |  |
| **Wednesday 07 March** |  |  |  | Volatility Models: The ARCH Framework |  |
| **Tuesday 13 March** |  | YES |  | Liquidity Asset Liability Management |  |
| **Thursday 15 March** |  |  |  | Collateral and Margins |  |
| **Module 3** |  |
| **Monday 19 March** |  |  |  | Black-Scholes Model |  |
| **Wednesday 21 March** |  | YES |  | Intro to Numerical Methods |  |
| **Monday 26 March** |  | YES |  | Understanding Volatility |  |
| **Wednesday 28 March** |  |  |  | Martingale Theory - Applications to Option Pricing |  |
| **Thursday 29 March** |  |  |  | Martingales and PDEs: Which, When and Why |  |
| **Tuesday 03 April** |  |  |  | Exotic Options |  |
| **Thursday 05 April** |  |  |  | Further Numerical Methods |  |
| **Tuesday 10 April** |  |  |  | Derivatives Market Practice in the Time Before Quant Theory |  |