Financial Math Plan December 2018

Session 1	Probability spaces and random variables; Expectation and variance, moments. Conditional probability
Session 2	Discrete time stochastic process. Continuous time stochastic process. Ito' Lemma
Session 3	Binomial Trees and Black-Scholes model
Session 4	Financial instruments and their sensitivities
Session 5	Value-at-Risk (VaR)
Session 6	Fixed income and Interest Rates. Bonds and Swaps
Session 7	Curve bootstrapping. Term Structure models
Session 8	Credit Risk. Potential exposure
Session 9	Modelling Credit Risk. Credit rating and probability of default