MT-456 Financial Engineering

Introduction to financial engineering, cash flow engineering and forward contracts, engineering simple interest rate derivatives, introduction to swap engineering, repo market strategies in financial engineering, dynamic replication methods and synthetic, mechanics of options, engineering convexity positions, options engineering with applications, pricing tools in financial engineering, some applications of fundamental theorems, fixed-income engineering, tools for volatility engineering, volatility swaps, volatility as an asset class, credit markets, essentials of structured product engineering, credit indices and their tranches, default correlation pricing and trading, principal protection techniques, caps/floors and swaptions with an application, engineering of equity instruments, pricing.

Recommended Books:

1. ‘Principles of Financial Engineering”, Salih N. Neftci, Academic Press, 2004.

2. “Financial Engineering”, Lawrence Galitz, Irwin, 1995.