

# An Introduction to Options, (1.5 Days)

Options are widely used to hedge risk and structure products. This workshop is an introduction to the subject. It explains how options work, what they can be used for and the risks they can present. The option risks that arise from the firm's business will also be identified and explained. Prior options experience is not required however a basic understanding of dealing terms is assumed.

The workshop will cover:

- An introduction to terminology
- How options work
- An intuitive approach to pricing
- What the "Greeks" are
- Delta hedging and the risks
- How options impact on the business

Training will be in a workshop format. This will include a mixture of presentation and case study material. The course is designed for up to ten staff. Below is a summary of the workshop content which has been placed in a logical sequence and addresses the key topics.

## Morning Day 1, 9.00am-12.00am

### **What an option is including basic terminology**

- Call/put, long/short
- ITM/OTM spot, forward
- Premium
- Strike
- Exercise
- Expiry
- Intrinsic & time value
- American & European style

### **Payoffs at maturity**

- Calls/puts long & short

**Workshop exercise:** evaluating pay-off profiles and identifying risk & return.

### **Combining options**

- Put call parity

**Workshop exercise:** simple dealing strategies e.g. straddles, butterflies, strangles, call & put spreads.

### **How options are priced**

- Why option pricing is important
- An intuitive approach based on the risk to the option seller
- Inputs that affect price, (strike, time, underlying, volatility)
- How the market prices options

**Workshop exercise:** participants will use a simple spreadsheet to price an option and understand what factors affect the price.

## Afternoon Day 1, 1.00pm-4.00pm

### **Volatility:**

- What it is
- Historic volatility
- Implied volatility
- Why it is important
- Skews & smiles

### **Interest rate options:**

### **Caps & Floors**

- What they are
- How they can be used
- The confirmation

### **Swaptions**

- What they are
- How they can be used
- The confirmation

### **The Greeks**

- An introduction to what they are and what they are used for
- Delta
- Gamma
- Theta
- Vega

**Workshop exercise:** Participants will update and develop their pricing spreadsheet to calculate the "Greeks".

## Morning Day 2, 9.00am-12.00am

### **Delta Hedging**

- What it is
- How it works
- The problems it introduces

**Workshop exercise:** Participants will have the opportunity to delta hedge a position and learn about the associated costs.

### **Options in the business**

### **-Pipeline hedging**

- What this risk is
- The problem with pricing it
- How you could manage this risk
- How this is currently managed

### **-Pre-payment risk**

- What this risk is
- The problem with pricing it
- How you could manage this risk

### **End of workshop & review**

