



## ICE EDUCATION

# INTERNATIONAL OIL TRADER ACADEMY WINTER SCHOOL

## ICE FUTURES EUROPE, LONDON

ICE Education and IBH have combined their expertise to provide an innovative and practical programme covering all aspects of the physical crude oil, products and traded derivatives market through our market leading Oil Trader Academy — now in its ninth successful year.

With the global oil markets being subject to extreme volatility and change due to a series of geopolitical events, this is the ideal time and opportunity to understand the drivers of oil price movements and tools at your disposal to protect against and trade around your organisations market position.

As an outcome from the course you will:

- Review crude oil supply, demand and products
- Understand crude oil refining, evaluation and selection
- Explore physical and derivative oil markets, shipping and contracts
- Appreciate pricing formation, trading and price risk management
- Learn about futures, swaps, options and over-the-counter markets
- Become familiar with trading techniques and terminology
- Participate in trading and hedging simulation exercises and improve negotiation skills

## WHO IS THE PROGRAMME FOR

This programme will appeal to: oil and product traders, refiners, economists, analysts portfolio managers, risk managers, operations managers, brokers and other related front, middle and back office staff.

## CORE STRUCTURE

### MODULE 1

#### PHYSICAL CRUDE & PRODUCTS TRADING

27 January, 2020 — 31 January, 2020

### MODULE 2

#### TRADING SIM, PAPER TRADING & PRICE RISK MANAGEMENT

3 — 7 February, 2019

MODULE	PRE 31 OCTOBER 2019 RATE	STANDARD RATE
MODULE 1	£3,500 + VAT	£3,995 + VAT
MODULE 2	£3,500 + VAT	£3,995 + VAT
FULL COURSE — ALL PARTS	£6,500 + VAT	£6,995 + VAT

**MULTI BOOKING DISCOUNTS: 10% FOR 2ND DELEGATE AND 15% FOR 3RD DELEGATE\*\***

\*\* FOR SAME COMPANY BOOKINGS WHEN BOOKED AT THE SAME TIME

## **TRAINER BIOGRAPHIES**

### **CHRIS HEILPERN**

Chris Heilpern traded oil and energy in Europe, Africa, the Middle East and Asia during a career that spanned eighteen years. He has worked for an oil major, a top trading company, and investment banks. He has extensive experience in supply and trading for refining systems as well as the challenges of running proprietary physical trading books in Europe, Africa, and Asia. His experience was rounded out with several years of trading derivatives for investment banks in the Asia-Pacific region. Since leaving trading in 2008 Chris has taught finance and trading at top French business schools, presented corporate training in commodities and energy in France and abroad, and consulted with top European companies on trading and contract arbitration. He is bilingual in French and English and resides in the South of France.

### **JOHN FRY**

John Fry has worked in the energy markets since 1986 when he joined Man International as a broker on the oil desk. He specialised in futures and options and qualified as a trader in the IPE option pit. He executed the first principal OTC oil deals for Man and became head of the energy desk in London. John moved over to the OTC energy market in 1997 and worked for Koch Petroleum Group helping to develop their energy derivatives business.

### **STEVE TERRY**

Steve Terry has worked in the oil industry for more than thirty years. From 2005 to 2014 he was Head of Research for Vitol and before that was Senior Vice President at KBC Process Technologies. He began his career at the oil industry consultancy Petroleum Economics Limited, where he was eventually Managing Director before its purchase by KBC. He is now running his own training and consultancy company, Montauroux Services Limited.

### **PAUL TERRY**

Paul has spent 20 years of his career working in oil trading. He was regarded as an industry expert in the area of trading operations for crude oils in the North Sea and Middle East before progressing to a senior leadership position within BP's international trading division. As Head of Supply Paul was directly responsible for the trading teams which were optimising the purchase and risk management of 75 million m3 p.a. of petroleum products. More recently Paul was the Executive Chairman of Smart Global Trading.

### **STEFAN DIXON**

Stefan joined BP after graduating from Cambridge University. During his front-line trading career he traded product derivatives, and both paper and physical Crude Oil. Stefan then became Head of Fuel Oil Trading for Europe and the USA. In this Book Leader role Stefan grew the book significantly in both scope and profitability over 5 years. Stefan was also heavily involved in BP's trader selection, training and mentoring.

### **STEVE JONES**

Steve has over 20 years experience working in the oil and gas industry, within the back, mid and front office. As an Equity Crude and Gas trader at BP he helped build a complex portfolio of trading books based in Germany. Steve has extensive experience developing risk management reporting, trader exposure and profit and loss systems for various clients. He has been a key participant in the design and development of simulation based trader training programmes.

## MODULE 1: PHYSICAL CRUDE OIL & PRODUCTS TRADING

### DAY 1 — FUNDAMENTALS OF THE OIL INDUSTRY

#### DEMAND IN THE OIL INDUSTRY

- Demand drivers
- Changes and developments

#### SUPPLY IN THE OIL MARKET

- Natural resources
- Unconventional supply
- Shale revolution

#### OIL REFINING

- Necessary link in the industry
- Types of refineries
- Economic challenges

#### A WORD ON OPEC

### DAY 2 — OVERVIEW OF TRADING

#### CONTRACT TYPES

- Spot / Term / Forwards / Futures
- FOB vs CIF

#### TRADING CRUDE OIL

- Choices in the industry
- Who we are defines how we trade

#### RISK IN OIL TRADING

- Contracts to manage risk
- Clauses and their value

#### BENCHMARKS & PRICING

- Contango and backwardation
- The value of the differential
- The OSP and the risk in trading

### DAY 3 — SHIPPING

#### OVERVIEW OF THE SHIPPING INDUSTRY

- Vessel sizes and trading choices
- Vessel acceptability
- Costs and ownership

#### CHARTERPARTY TYPES

- Spot / Single Voyage
- Term charter

#### WORLDSCALE AND FREIGHT CALCULATIONS

### DAY 4 — CRUDE OIL PRICING AND MOVING OIL FROM A TO B

- The Brent complex
- Brent price relationships

#### MANAGING PRICE RISK IN CRUDE TRADING

- Understanding exposure
- Using futures
- Swaps (CFD's)
- Making a price in crude oil trading

### DAY 5 — PRODUCTS TRADING

- Differences between crude and products trading
- Refining as a source of products
- Quality issues in products markets

#### PRICE CREATION IN PRODUCT MARKETS

- Trading the arbitrage
- Locational value
- Understanding import and export parity

#### MAKING PRICES IN PRODUCTS MARKETS

- Crack values

## MODULE 2: TRADING SIMULATION, PAPER TRADING & PRICE RISK MANAGEMENT

### DAY 1 — UNDERSTAND WHAT DRIVES THE BRENT FUTURES PRICE

#### TRADING BEST PRACTICE

- Trading best practice and discipline
- Useful trading rules

#### PHYSICAL PRODUCTS, FREIGHT AND FOB/CIF

- What are Refined Products and their main uses
- How are Products priced and traded
- Understand Worldscale and Freight rates
- How to trade Products cargoes on a FOB and CIF basis

#### PHYSICAL PRODUCTS TRADING SIMULATION\*

- Manage a portfolio of physical Products longs and shorts
- Negotiate and enter deals, book ships, manage cargo movements

#### PHYSICAL CRUDE TRADING

- How Crude Oil is produced and exported
- What determines the value of different Crude Oils
- How Crude Oil is priced and traded, benchmark pricing

#### PHYSICAL CRUDE CARGOES TRADING SIMULATION\*

- Buy and Sell cargoes of North Sea and West African Crude Oil
- Understand how refinery yields affect Crude differentials
- Appreciate the importance of liquidity in physical Crude markets

### DAY 2 — INTRODUCTION TO REFINING

- Basic Crude distillation and complex refining
- Refinery Optimisation activities
- Calculate Refinery margins and Crude pecking orders

#### REFINING SIMULATION\*

- Manage a Refinery: Buy Crude and sell Products
- Calculate Refinery margins and adjust run rates accordingly
- Optimise your Refinery, switch Crudes as prices change

#### SPREADS AND BACKWARDATION/CONTANGO

- What are spreads and how are they calculated
- Why do traders use spreads
- Market structure – Contango/Backwardation

#### TIME SPREADS SIMULATION\*

- Trade upto 3 different spreads on European Gas Oil
- Understand how spreads react to fundamental news

#### STORAGE VALUATION AND OPTIMISATION

- Contango markets: What do “carry” and “full carry” mean
- Valuing Storage and hedging Storage trades
- Optimising Storage: Intrinsic and Extrinsic value

#### STORAGE VALUATION EXERCISE

- Value Storage offers and bid for capacity
- Design and execute hedging strategies for your storage

#### STORAGE OPTIMISATION SIMULATION\*

- Use futures to manage a portfolio of physical oil and tankage
- Move oil in and out of storage as you react to market structure
- React to the volatility of time spreads and maximise extrinsic value

#### TRADING FUTURES USING TECHNICALS\*

- Why use technical trading
- Common indicators used in technical trading; Trendlines; Moving Averages; Line/Candlesticks/Bar/Point & Figure; Retracements; Continuation and Reversal signs; Volume and Open Interest
- Examples of Technical Trades in current markets
- Technical Charting Simulation
- Trade technicals using Tradesignal's professional chart analysis software
- Spot trends and use indicators to identify trade entry/exit points

### DAY 3 — FLOATING PRICES AND HEDGING

- What is meant by a floating price
- Calculating the daily hedge, and forward pricing profiles
- Managing pricing risk on a portfolio of trades

#### HEDGING PHYSICAL CARGOES SIMULATION\*

- Respond to new trades and manage the basic daily hedge
- Adjust hedges as BL dates and quantities change

#### SWAPS AND HEDGING SPREAD EXPOSURE

- What is a swap, and how are they traded
- Using swaps to manage risk and create trading strategies
- Differential swaps and CFD's
- Managing spread exposure

\*Denotes simulation based practical

### **HEDGING WITH SWAPS SIMULATION\***

- Respond to new trades and manage a complex daily hedge
- Use swaps and futures contracts to manage risk

### **GEOGRAPHIES & ARBITRAGE SPREADS**

- Regional supply/demand and its effect on spreads
- Spread trading strategies

### **GAS OIL ARBITRAGE SPREADS SIMULATION**

- Trade the futures spread between Europe and U.S.
- Understand the impact of local supply/demand and physical arbitrage
- Hedging Physical Arbitrage Trades
- How to calculate and identify Arbitrage opportunities
- Relative volatilities: Futures, Cargoes and Freight
- Using futures to hedge Arbitrage movements

### **ARBITRAGE — WORKED EXAMPLE**

- Use of a spreadsheet to calculate and monitor Arbitrage values
- Placing an Arbitrage trade: Volatility, liquidity and order of trades
- Trans-Atlantic Crude Arbitrage Simulation
- Calculate Arbitrage opportunities across a portfolio of Crude Oils
- Place all the trades necessary to Arbitrage Crude Oil cargoes

## **DAY 4 — USING THE PAPER DERIVATIVE MARKETS**

- Derivative instruments and hedging
- Practical: Hedging exercises
- Basis risk
  - Basis trading
- Spread trading
  - Time
  - Crack
  - Arb
- CFD's & DFL's as part of the mix
- Using the EFP & EFS mechanisms

- Case Study practical:
  - Hedging as a producer
  - Hedging as a refiner
  - Hedging as a consumer
- Trigger pricing

## **DAY 5 — HOW CAN OPTIONS BECOME PART OF YOUR TRADING PORTFOLIO**

- Options 101
- Inputs to the premium and pricing
- Practical: Hedging exercises
- Time & Volatility
- The greeks
- Options trading strategies
- Practical: Trading with Options

## **FURTHER INFORMATION**

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