

# Self-study online training courses Online curriculum





# **KYOS**

Content & context for professionals in the field of commodity & energy markets and trading

# **ONLINE CURRICULUM**





# **ONLINE CURRICULUM**

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# Online learning environment



# COURSES

# Animation style video lessons, including examination & certification

Concepts, processes & terminology explained in a nutshell





#### COURSE: COMMODITY MARKETS

#### MARKETS

This course explains what a market is and how it can be defined. The crash course includes videos about various ways to classify markets. Attention is given to wholesale and retail markets and the differentials between them. Likewise applies to spot and term contacts, or physical and financial markets. It is also explained what balancing markets concern and what the role of transmission system operators is in that field. Last, but not least, it is set out what granularity concerns, which is specifically applicable for electricity and gas contracts.

- 1. Commodity markets Introduction
- 2. Commodity markets Overview
- 3. Commodity markets Physical versus financial markets
- 4. Commodity markets Liberal versus regulated markets
- 5. Commodity markets Wholesale & retail markets
- 6. Commodity markets Spot & forward markets
- 7. Commodity markets Spot markets Intraday & day ahead markets
- 8. Commodity markets Term contracts
- 9. Commodity markets Granularity
- 10. Commodity markets Balancing markets
- 11. Commodity markets Market participants
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 25 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### COMMODITIES

#### COMMODITIES

This course sets out some of the basics regarding natural resources and classifies different groups of natural resources. Analogously, commodities are set out and classified. Last, but not least, attention is given to the supply chain and some related concepts, activities and terminology.

- 1. Natural Resources Definition
- 2. Natural Resources Categories Ubiquitous versus localized resources
- 3. Natural Resources Categories Biotic versus abiotic resources
- 4. Natural Resources Categories Renewables versus non-renewables
- 5. Natural Resources Categories Actual versus potential resources
- 6. Natural Resources Natural resource management
- 7. Commodities Definition
- 8. Commodities Asset classes
- 9. Commodities Classifications
- 10. Commodities Indirect investments
- 11. Commodities Commoditization
- 12. Commodities Capacity as tradable product
- 13. Commodities Complexity of commodity markets
- The supply chain The value chain
  The supply chain Up-, mid- and downstream
- 16. The supply chain Time horizon
- 17. The supply chain Trading activities
- A. Examination
- **B.** Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 40 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



# LNG

### PRODUCTS

This course concerns liquefied natural gas, its supply chain, the basics of pricing and risk management.

- 1. Introduction
- 2. Train

- Irain
  Quality
  Storage
  Transport
  Safety
  Contracting
  Incoterms
  Pricing
  Trading strategies
  Pick management 11. Risk management
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 20 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### **BIO-ENERGY**

### PRODUCTS

Biofuels include bio-liquids and biomass. Bio-liquids consist of bio-ethanol and biodiesel, whereas biomass includes wood pellets. Biofuels can be used to replace fossil fuels.

- 1. Introduction
- 2. Solid biomass Wood pellets

- Solid biomass Wood petters
  Solid biomass Chips
  Solid biomass Pricing
  Liquid biofuels Introduction
  Liquid biofuels Bio-ethanol
  Liquid biofuels Biodiesel
  Liquid biofuels Pricing
  Biometers

- 9. Biogas
- 10. Ethics
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 40 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



# **DERIVATIVES – INTRODUCTION**

### PRODUCTS

This course concerns a general introduction to derivatives contracts, including futures contracts, swap agreements and option contracts. The lessons give insight in what these financial instruments concern and how they can be applied.

- 1. Introduction
- 2. Term contracts

- Jerri contracts
  Swaps
  Options
  Combinations
  Settlement
- 7. Contract-for-difference
  8. Tool to speculate
- 9. Tools to hedge
- 10. Derivatives markets
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 20 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### **DERIVATIVES – POSITION MANAGEMENT**

#### PRODUCTS

This course provides insight in the opening of a futures position and closing it. It also sets out the terminology long and short. Furthermore, the lessons allow to master the concept of rolling a futures position, by describing the process and touching upon related aspects.

This course covers the following videos:

- 1. Introduction
- 2. Opening transaction Long & short position
- Closing transaction Eliminate position
  Long versus short

- Rolling a futures position Introduction
  Rolling a futures position Investor or speculator
- 7. Rolling a futures position Hedger
- 8. Rolling a futures position The concept
- 9. Rolling a futures position Practical aspects
- 10. Rolling a futures position Roll vield
- 11. Rolling a futures position Forward curve structure
- 12. Rolling a futures position Rolling a short position
- 13. Rolling a futures position Rolling a long position
- 14. Notional value
- 15. Open interest

#### A. Examination

**B.** Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 25 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



## **OPTIONS - INTRODUCTION**

### PRODUCTS

This course provides all fundamentals of options, including the working of these instruments, both from the position of the holder and writer, option valuation, factors of influence and settlement of contracts, as well as the financial performance of positions.

- 1. Single-sided right
- 2. Tool to speculate or hedge
- 3. Position management
- 4. A premium to compensate risk
- Options trading Brokers & exchanges
  Open interest
- 7. Contract specifications Introduction
- 8. Contract specifications Strike
- 9. Contract specifications Maturity
- 10. Contract specifications Underlying value
- 11. Contract specifications Contract size
- 12. Contract specifications Settlement type
- 13. Contract specifications Style
- 14. Contract specifications Currency
- 15. Contract specifications Additional notes
- 16. Position management Right vs obligation
- 17. Position management Opening & closing
- 18. Position management Settlement
- 19. Position management Netting
- 20. Intrinsic value Introduction
- 21. Intrinsic value Pay-off
- 22. Intrinsic value Option positions
- 23. Premium Introduction
- A. Examination
- **B.** Certification

- 24. Premium Pricing or options
- 25. Premium Price driving factors Introduction
- 26. Premium Price driving factors Volatility
- 27. Premium Price driving factors Price u.v.
- 28. Premium Price driving factors Cost of carry
- 29. Premium Price driving factors Strike price
- 30. Premium Price driving factors Maturity
- 31. Premium Price driving factors Option style
- 32. Valuation Intrinsic value & time value
- 33. Moneyness Introduction
- 34. Moneyness At-the-money
- 35. Moneyness In-the-money
- 36. Moneyness Out-of-the-money
- 37. Moneyness Application
- 38. Premium erosion
- 39. Positions Investing & speculation
- 40. Positions Leverage
- 41. Positions Financial performance Long call
- 42. Positions Financial performance Short call
- 43. Positions Financial performance Long put
- 44. Positions Financial performance Short put
- 45. Positions Financial performance Zero-sum

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 75 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |
|   |            |              |                            |



#### COURSE: COMMODITY PRICING

#### PRICING

This course contains animation-style videos with narration which set out the pricing of commodities. It is explained how pricing takes place and what factors influence commodity prices. In specific, attention is given to fundamental price driving elements, such as the availability and utilization of physical capacity, FX rates, weather and seasonality.

This course covers the following videos:

- 1. A price
- 2. Scarcity
- 3. Rational economics versus behavioral economics
- 4. Economics Law of supply and demand
- 5. Economics Demand and utility
- 6. Economics Supply and cost
- 7. Economics Equilibrium
- 8. Economics Marginal utility versus marginal cost
- 9. Economics Fixed versus floating costs
- 10. Price driving factors Introduction
- 11. Price driving factors Demography & economy
- 12. Price driving factors Reserves & production
- 13. Price driving factors Technology & economic viability
- 14. Price driving factors Consumption & processing
- 15. Price driving factors Storage & storage capacity
- 16. Price driving factors Transport & transport capacity
- 17. Price driving factors Social factors & politics
- 18. Price driving factors Quality
- 19. Price driving factors FX rates
- 20. Price driving factors Inflation
- 21. Price driving factors Correlation & diversification
- 22. Price driving factors Substitution
- 23. Price driving factors Environmental issues
- 24. Price driving factors Seasonality
- 25. Price driving factors Weather
- 26. Price driving factors Mean-reversion Introduction
- 27. Price driving factors Mean-reversion Merit order
- 28. Price driving factors Mean-reversion Merit order Electricity
- 29. Price driving factors Mean-reversion Merit order Electricity Complications
- A. Examination

#### B. Certification

| Level:     | Basic                   | No prerequisites                          |
|------------|-------------------------|---|
| Intensity: | 55 minutes              | Including examination                     |
| Language:  | Voice & text            | English                                   |
| Including: | Examination             | Certification upon passing                |
|            | Intensity:<br>Language: | Intensity:55 minutesLanguage:Voice & text |



#### COURSE. COMMODITY INDICES & PRICE-INDEXATION

#### PRICING

This course contains animation-style videos with narration which set out both the topic 'commodity indices' and the concept of 'price-indexation'. It is explained what an index concerns, what the differences are between single-commodity indices and multi-commodity indices, as well as how they are calculated and how they can be applied. In addition, the roles of administrators and contributors is set out. Furthermore, attention is given to price-indexation. It is set out how parties make use of an index as reference price in case of supply contracts and derivatives.

- 1. Commodity indices Introduction
- 2. Commodity indices Multi-commodity indices
- 3. Commodity indices Single commodity indices
- 4. Commodity indices Price reporting agencies
- 5. Commodity indices Pricing panel
- 6. Commodity indices Application
- 7. Commodity indices Regulation
- 8. Price-indexation Introduction
- 9. Price-indexation Maintaining benchmarks
- 10. Price-indexation Cross-commodity
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 30 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### PRICE VOLATILITY

### PRICING

This course is about the concept price volatility, the calculation of volatility numbers, the application of it and its interpretation. Including probability distribution curves and skewness.

- 1. Introduction
- 2. Quantification & interpretation
- 3. Types of volatility
- Galculation
  Probability distribution curves
  Skewness
- 7. Application
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 25 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### LIQUIDITY

#### PRICING

Liquidity is often applied terminology in the field of trading. Market participants require liquidity in order to perform their tasks. However, in the traded markets, there are two types of liquidity, namely market liquidity and funding liquidity. Both concepts are set out during this crash course and relevant aspects are covered.

- 1. Introduction
- 2. Funding liquidity Introduction
- Funding liquidity Funding trading activities
  Funding liquidity Cost of capital
- 5. Market liquidity Introduction
- 6. Market liquidity Bid-ask spread
- 7. Market liquidity Market depth
- 8. Market liquidity Market volume & deal size
- 9. Market liquidity Market participants
- 10. Market liquidity Market resilience
- 11. Market liquidity Price volatility
- 12. Market liquidity Conversion to cash
- 13. Market liquidity Order types
- 14. Market liquidity Liquidity per product
- 15. Market liquidity Churn rate
- 16. Market liquidity Market making
- A. Examination
- **B.** Certification

| Level:     | Basic                   | No prerequisites                                |
|------------|-------------------------|---|
| Intensity: | 30 minutes              | Including examination                           |
| Language:  | Voice & text            | English   |
| Including: | Examination             | Certification upon passing                      |
|            | Intensity:<br>Language: | Intensity: 30 minutes<br>Language: Voice & text |



### FORWARD CURVES

### PRICING

This course is about the concept price correlation, the calculation of the correlation coefficient, the application of it and its limitations. including regression, normality and linearity.

- 1. Price chart
- 2. Definition
- Contango & backwardation
  The storage model
  Arbitrage
  Convenience

- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 25 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### PRICE CORRELATION

### PRICING

This course is about the concept price correlation, the calculation of the correlation coefficient, the application of it and its limitations. including regression, normality and linearity.

- 1. Introduction
- 2. Positive or negative

- Positive of negative
  Correlation coefficient
  Types of correlation
  Application of correlation
  Calculation of the correlation coefficient
  Model risk
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 25 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



## COURSE: PPAs

#### CONTRACTING

Covering power purchase agreements, including contract specifications, pricing and volume risk management.

- 1. Introduction
- 2. Lifecycle of a power generation project
- 3. Project finance
- 4. Bankability
- 5. Roles of actors
- 6. Overview of PPA obligations
- 7. Timing requirements
- 8. Tariff structures
- 9. Invoicing & payment
- 10. Risk allocation & mitigation
- 11. Commercial operational data
- 12. Development or construction risk
- 13. Operational phase risks
- 14. Change in law risk
- 15. Change in tax
- 16. Force majeure
- 17. Fuel supply & price risk
- 18. Insurance
- 19. Dispute resolution
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 60 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



# REASONS TO TRANSACT

#### TRADING

This educational program covers the reasons to transact. It explains why market participants enter into deals. By means of video lessons is explained what motivates parties to buy or sell. Attention is given to various physical reasons to conclude deals, as well as various financial reasons to enter the market. Furthermore, the difference between hedging and speculation is set out and specific attention is given to particular concepts like asset-backed trading, proprietary trading and statistical arbitrage.

| 1.  | Reasons to transact – Introduction                 |
|-----|--|
| 2.  | Reasons to transact – Intermediary services        |
| 3.  | Reasons to transact – Commodity & capacity         |
| 4.  | Reasons to transact – Physical & financial reasons |
| 5.  | Reasons to transact – Sourcing & sales             |
| 6.  | Reasons to transact – The black box concept        |
| 7.  | Reasons to transact – Balancing                    |
| 8.  | Reasons to transact – Liquidation                  |
| 9.  | Reasons to transact – Hedging                      |
| 10. | Reasons to transact – Asset-backed trading         |
| 11. | Reasons to transact – Arbitrage                    |
| 12. | Reasons to transact – Speculation                  |
| 13. | Reasons to transact – Investing                    |
| 14. | Reasons to transact – Comparison                   |
| 15. | Reasons to transact – Proprietary trading          |
| 16. | Reasons to transact – Statistical arbitrage        |
|     |  |

- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 35 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



#### COURSE: CENTRAL ORDERBOOK

#### TRADING

This course contains animation-style videos with narration which set out the working of the central order book, which is operated by trading venues. It is explained how orders are being processed and how pricing takes place. Besides, attention is given to market liquidity and what the bid-ask spread concerns. It is set out the difference between order initiation and aggression, which orders have priority and which rules apply to order execution.

This course covers the following videos:

- 1. Price formation Introduction
- 2. Price formation One-way pricing
- 3. Price formation Two-way pricing
- 4. Price formation Price drivers
- 5. Central order book Introduction
- 6. Central order book Order book details
- 7. Central order book Rules of engagement
- 8. Central order book Opening rotation
- 9. Central order book During trading hours Order submission
- 10. Central order book During trading hours Order initiation
- 11. Central order book During trading hours Order aggression
- 12. Central order book During trading hours Order execution
- 13. Central order book Functioning
- 14. Central order book Filling the order book
- 15. Central order book RFQ
- 16. Central order book Voice brokering
- 17. Central order book Tick &tick size

A. Examination

B. Certification

| Level:     | Basic                   | No prerequisites                                |
|------------|-------------------------|---|
| Intensity: | 40 minutes              | Including examination                           |
| Language:  | Voice & text            | English   |
| Including: | Examination             | Certification upon passing                      |
|            | Intensity:<br>Language: | Intensity: 40 minutes<br>Language: Voice & text |



### **ORDER TYPES**

#### TRADING

Market participants apply various orders types when submitting instructions to transact. The features differ per order type and can be used to the advantage of market participants. This way, specific desires can be met, taking into account economical, operational or logistical aspects.

- 1. Introduction
- 2. On-screen & off-screen
- Algorithms
  Market order
- Limit order
  Complex orders
- Time-specific order
  Good-for-day order
- 9. Good-till-date order
- 10. Good-till-cancelled order
- 11. Immediate-or-cancel order
- 12. Fill-or-kill order
- 13. All-or-nothing order
- 14. Pre-&post-trade auction
- 15. Market-or-limit-on-open-or-close order
- 16. Smart orders Day ahead implicit electricity auction
- 17. Conditional orders
- 18. Stop order
- 19. Stop-limit order
- 20. Trailing-stop order
- 21. Market-if-touched order
- 22. One-cancels-the-other order
- 23. Iceberg order
- 24. Discretionary order
- 25. Prioritisation
- 26. Choice market

| Level:     | Basic                   | No prerequisites                                |
|------------|-------------------------|---|
| Intensity: | 40 minutes              | Including examination                           |
| Language:  | Voice & text            | English   |
| Including: | Examination             | Certification upon passing                      |
|            | Intensity:<br>Language: | Intensity: 40 minutes<br>Language: Voice & text |



#### COURSE: RISK & OPPORTUNITY

Risk and opportunity belong to each other. On a coin one would be the flip side of the other. In this course it is explained what these concepts concern and how they can be measured. Price behavior is covered, as well as probability distributions and their characteristics.

- 1. Risk versus uncertainty
- 2. Risk versus maximum loss
- 3. Price behavior Price dynamics & Forecasting
- 4. Price behavior Market analysis
- 5. Price behavior Price behavior
- 6. Price behavior Random walk
- 7. Price behavior Statistics Stochastic variables
- 8. Price behavior Statistics Stochastic processes
- 9. Price behavior Mean reversion
- 10. Price behavior Moving averages
- 11. Probability distribution Histogram versus distribution
- 12. Probability distribution Cumulative
- 13. Probability distribution Uniform
- 14. Probability distribution Discrete
- 15. Probability distribution Continuous
- 16. Probability distribution Normal
- 17. Probability distribution Relevant characteristics
- 18. Probability distribution Log-normal
- 19. Probability distribution Mean versus median
- 20. Price behavior Statistics General
- 21. Price behavior Statistics Variance
- 22. Price behavior Statistics Covariance
- 23. Price behavior Statistics Variance versus covariance
- 24. Price behavior Statistics Covariance versus correlation
- 25. Risk analysis
- 26. Risk-return ratio
- 27. Risk Definition
- 28. The subjectivity of management decisions
- 29. Risk quantification
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 60 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



# **VALUE AT RISK**

This course provides insight in the concept of risk and explains how it differs from uncertainty. The lessons cover in-depth the quantification of risk by means of various methodologies, both on the level of an individual position and a complex portfolio. Next to value at risk, stress tests are given attention.

This course covers the following videos:

- 1. Dynamic & flexible
- 2. The meaning of the value at risk
- 3. 3 value at risk methods Introduction
  4. The parametric approach

- Linearity versus non-linearity
  Relevant parameters Introduction
- 7. Relevant parameters Confidence level
- 8. Relevant parameters Time horizon
- 9. Relevant parameters Typical settings
- 10. Historical simulation Introduction
- 11. Historical simulation Pros & cons
- 12. Monte Carlo simulation Introduction
- 13. Monte Carlo simulation Models
- 14. Monte Carlo simulation Different probability distributions
- 15. Monte Carlo simulation Step-by-step application
- 16. Monte Carlo simulation Practical application in Excel
- 17. Stress testing Introduction
- 18. Stress testing Ways to perform stress tests
- 19. Stress testing Worst case performance & worst losing streak
- 20. Stress testing Expected shortfall Introduction
- 21. Stress testing Expected shortfall Example
- 22. Stress testing Disadvantages
- 23. 3 value at risk methods Advantages & disadvantages Comparison
- 24. 3 value at risk methods Advantages & disadvantages Listings
- 25. Calculations Individual position 1
- 26. Calculations Individual position 2
- 27. Calculations Portfolio 2 positions
- 28. Calculations Correlation coefficients Impact on VaR
- 29. Calculations Correlation coefficients Limitations
- 30. Calculations Portfolio 3 positions
- 31. Calculations VaR versus P&L
- 32. Calculations FX exposures
- 33. Cash flow at risk
- A. Examination

#### **B.** Certification

| $\div$ | Level:     | Basic        | No prerequisites           |
|--------|------------|--------------|----------------------------|
| *      | Intensity: | 90 minutes   | Including examination      |
| *      | Language:  | Voice & text | English                    |
| *      | Including: | Examination  | Certification upon passing |
|        |            |              |                            |



#### COURSE: RISK MANAGEMENT

This course covers how companies setup and operate a risk management function. It includes the basics of performing risk management, such as policies, methodologies and he organization and infrastructure. The course also covers the application of models and limit structures.

- 1. Enterprise-wise risk management
- 2. Central or local setup
- 3. Tasks
- 4. Responsibilities
- 5. Three pillars of effective risk management Policies
- 6. Three pillars of effective risk management Methodologies
- 7. Three pillars of effective risk management Organization & infrastructure
- 8. Trade & risk management systems Introduction
- 9. Trade & risk management systems Vendor selection
- 10. Implementation of dynamic risk management 10 steps
- 11. Criteria for a risk model Introduction
- 12. Criteria for a risk model Qualitative criteria
- 13. Criteria for a risk model Quantitative criteria
- 14. Criteria for a risk model Criticism & support
- 15. Risk model Modeling
- 16. Risk model Calibration
- 17. Risk model Choosing the ideal model
- 18. Model risk Assumptions
- 19. Model risk Fat tails
- 20. Model risk Skewness
- 21. Limit structures Introduction
- 22. Limit structures By trading venues
- 23. Limit structures By clearing organizations
- 24. Limit structures By firms with a trading function Introduction
- 25. Limit structures By firms with a trading function Position limit
- 26. Limit structures By firms with a trading function Risk limit
- 27. Limit structures By firms with a trading function Stop-loss limit
- 28. Limit structures By firms with a trading function Limits on Greek parameters
- 29. Limit structures By firms with a trading function Volume limit & Price limit at front office
- 30. Limit structures By firms with a trading function From business activity to limit
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 90 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### CLEARING

### **TRADE OPERATIONS**

Clearing is a crucial process in trade operations. Clearing is applied in case of exchange-trading, although OTC deals can also be cleared. How clearing works and what it concerns is set out in this course. The roles of various parties are described, amongst which are central counterparties and (general) clearing members.

- 1. Counterparty risk
- 2. Master agreement
- Credit risk management
  What is clearing?
  Clearing activities
  Novation

- 7. Central counterparty clearing
- 8. OTC-cleared
- 9. Central counterparty
- 10. Clearing members
- 11. Brokers
- 12. Default fund
- 13. Side-effects of central clearing Static effects
- Side-effects of central clearing Dynamic effects
  Side-effects of central clearing Second round effects
- A. Examination
- **B.** Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 35 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



# NETTING

### **TRADE OPERATIONS**

Netting is a sub-process clearing & settlement. Netting can be organized in case of OTC transactions as well with exchange-trading. Hence, it is either performed bilaterally or multilaterally. How this works and what its consequences are is set out in this course.

- 1. Introduction
- 2. Netting by novation

- Close-out netting
  Settlement netting
  Advantages of netting
  Bilateral versus multilateral netting
- A. Examination
- B. Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 20 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### MARGINING

#### **TRADE OPERATIONS**

Margining is a crucial process in trade operations. It is a sub-process of clearing. During the lifetime of a contract security has to be arranged for. How this works is set out in this course, including initial margin and variation margin, as well as cross-margining. This course covers the following videos:

- 1. Counterparty risk management
- 2. Initial margin
- 3. Variation margin
- 4. Margin call
- 5. Bilateral deals
- 6. Exchange-trading
- 7. Fee structure
  8. Novation
- 9. The process of margining
- 10. Direct & general clearing members
- 11. Initial margin to financially manage close-out
- 12. Settlement
- 13. Daily calculations
- 14. Leverage
- 15. Cost of capital
- 16. Replacement risk & credit risk
- 17. Mutual & non-mutual margin requirements
- 18. Money transfer & margin requirement
- 19. The margining process
- 20. Variation margin calculation
- 21. Initial margin calculation
- 22. Periodic reconsiderations
- 23. Cash management & price data
- 24. General clearing members
- 25. Direct market access
- 26. Cross-margin Introduction
- 27. Cross-margin Price correlation
- 28. Requirements for options Introduction
- 29. Requirements for options Calculations
- 30. Requirements for options Maintenance margin
- 31. Requirements for options Haircut
- A. Examination
- **B.** Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 50 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### SETTLEMENT

#### **TRADE OPERATIONS**

Settlement is a crucial process in trade operations. At maturity a contract has to be respected and agreements have to be effectuated. How this works is set out in this course. This course covers the following videos:

- 1. Introduction
- 2. Settlement types
- 3. Supply contracts vs. derivatives
- 4. Physical delivery vs. cash settlement
- 5 Settlement risks
- 6. Avoiding physical delivery
- Settlement date
  Dynamics in settlement dates
- 9. Cash settlement
- 10. Contracts with delivery moment Introduction
- 11. Contracts with delivery moment Last trading day & maturity
- 12. Contracts with delivery moment Seller's choice
- 13. Contracts with delivery moment Physical delivery
- 14. Contracts with delivery period Introduction
- 15. Contracts with delivery period Time-to-maturity
- 16. Invoicing & payment
- 17. Specific differences
- 18. First & last notice day
- 19. Closing or rolling
- 20. Exchange-traded futures vs. OTC-traded forwards
- 21. Alternative delivery procedure
- 22. EFP Introduction
- 23. EFP Applications
- 24. EFP Applications Swap futures for physicals
- 25. EFP Applications Open a futures position
- 26. EFP Applications Close a futures position
- 27. EFS Exchange of futures for swaps
- 28. Trading at settlement
- 29. TAS order initiation & matching
- 30. Trading at marker
- 31. Contracts with delivery period Settlement
- 32. Contracts with delivery period Lower margin requirement during delivery
- 33. Contracts with delivery period Cascading Introduction
- 34. Contracts with delivery period Cascading Volume neutrality
- 35. Contracts with delivery period Cascading Value neutrality
- 36. Contracts with delivery period Cascading The objective
- 37. Contracts with delivery period Cascading Impacting margin requirements
- A. Examination

#### **B.** Certification

| * | Level:     | Basic        | No prerequisites           |
|---|------------|--------------|----------------------------|
| * | Intensity: | 90 minutes   | Including examination      |
| * | Language:  | Voice & text | English                    |
| * | Including: | Examination  | Certification upon passing |



### BLOCKCHAIN

### **TRADE OPERATIONS**

This course touches in a nutshell on the technique of blockchain, its characteristics and its application.

- 1. Introduction
- 2. Digital distribution

- Digital distribution
  Cryptography
  Consensus
  Immutability
  Time stamps
  Resilience
  Security
  Two types of blockchain
  Dermissionlass blockchain
- 10. Permissionless blockchains
- 11. Permissioned blockchains
- 12. Data reporting
- A. Examination
- B. Certification

| Level:     | Basic                   | No prerequisites                                |
|------------|-------------------------|---|
| Intensity: | 20 minutes              | Including examination                           |
| Language:  | Voice & text            | English   |
| Including: | Examination             | Certification upon passing                      |
|            | Intensity:<br>Language: | Intensity: 20 minutes<br>Language: Voice & text |



MANAGEMENT

Become a professional in the field of commodity and energy markets, including all aspects of trading. These courses are an excellent way to get started in the industry! There are modules in the field of markets, products, pricing and trading. Each session is relatively short, between 20-90 minutes. Each course ends with an exam, for which you will be awarded a certification upon passing.

Study at your own pace, and select the modules of interest to you. In total you will have 25 courses to choose from! A license will give you access for 12 months to study online.



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