CORE CONCEPT

Counterparty Credit Risk and XVA Course: CVA, DVA, FVA, Exposure Modelling and SA-CCR

31 May – 11 June 2027
Paris - Right Bank business hotel

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Ref: 2002_29537 **Date:** 31 May – 11 June 2027 **Location:** Paris - Right Bank business hotel **Fees:** 42300 SAR

Introduction:

Counterparty credit risk and XVA, covering CVA, DVA, FVA, exposure modelling and SA-CCR, is a 2-week course for bank treasury, market risk, finance and model validation staff, ending with an XVA Framework and Implementation Plan for a case bank. Banks misprice derivatives and face unexplained earnings swings when exposure profiles, credit spreads, funding costs and capital are calculated in separate silos. Nominees already value or monitor derivative trades, and teaching is by modelling build on exposure simulation, valuation adjustment and capital worksheets. CoreConcept Training Center delivers this counterparty credit risk and XVA course.

Course Objectives:

- Simulate expected exposure, EPE and PFE profiles for netting sets with and without collateral
- Calculate CVA and DVA from exposure profiles, CDS-implied default probabilities and loss given default, and report them under IFRS 13
- Quantify FVA, MVA and KVA for uncollateralised, partially collateralised and cleared trades and remove double counting with DVA
- Identify general and specific wrong-way risk and adjust exposure models for it
- Compute SA-CCR exposure at default and CVA risk capital under the BA-CVA and SA-CVA approaches
- Design XVA desk governance, charge allocation, limits and model validation in an XVA Framework and Implementation Plan

Target Audience:

- Treasury staff responsible for derivative funding, collateral liquidity and client trade pricing inputs
- Market and counterparty risk staff responsible for exposure measurement and PFE limit monitoring
- Product control and finance staff responsible for fair value adjustments and financial statement disclosures
- Model validation staff responsible for independent review of exposure and valuation adjustment models
- Regulatory capital staff responsible for counterparty and CVA risk capital calculations

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Course Outline:

Day 1: Counterparty Credit Risk Foundations and Exposure Concepts

- Counterparty Credit Risk Versus Lending Risk in Derivative Books
- Current Exposure, Mark-to-Market and Replacement Cost Definitions
- Expected Exposure, EPE and Effective EPE Profile Shapes
- Potential Future Exposure Quantiles and Peak Exposure Measures
- XVA Family Map From CVA Through KVA

Day 2: Valuation Adjustment Frameworks and IFRS 13 Fair Value Reporting

- Unilateral CVA Formula Using EE, PD and LGD
- Risk-Neutral Default Probabilities Bootstrapped From CDS Spread Curves
- DVA Mirror Logic and Bilateral Valuation Adjustment Netting
- IFRS 13 Fair Value Hierarchy and Nonperformance Risk Inclusion
- Exit Price Assumptions and Proxy Credit Spread Mapping Methods

Day 3: Exposure Simulation, Netting and Collateral Effects on CVA

- Monte Carlo Risk Factor Scenario Generation for Exposure Profiles
- Trade Revaluation Grids and Simulation Time Step Selection
- Netting Set Aggregation Under Close-Out Netting Agreements
- CSA Threshold, Independent Amount and Margin Period of Risk
- Collateralised Versus Uncollateralised CVA Comparison Worksheet Build

Day 4: XVA Data, Systems and Sensitivity Calculation

- Counterparty Master Data, Netting Set and CSA Mapping
- Market Data Inputs for Credit Curves and Volatility Surfaces
- CVA Sensitivities to Credit Spreads and Market Risk Factors
- Adjoint Algorithmic Differentiation Versus Finite Difference Greeks
- Incremental CVA for New Trades Within Existing Netting Sets

Day 5: Guided Case Study on Exposure and CVA for a Derivative Portfolio

- Case Portfolio of Swaps, FX Forwards and Cross-Currency Trades
- EE and PFE Profile Build for Three Counterparties
- CVA and DVA Calculation With and Without Collateral
- IFRS 13 Valuation Adjustment Disclosure Note Drafting Exercise
- Week-One Results Review Against Proxy Spread Assumptions

Day 6: Funding, Margin, Capital and Collateral Valuation Adjustments

- FVA Split Into Funding Cost and Funding Benefit Adjustments
- FCA and FBA Overlap With DVA Double Counting Checks
- MVA for Initial Margin Funding on Cleared Trades
- KVA Cost of Capital Projection Over Trade Lifetime
- CollVA and CSA Collateral Currency Optionality Valuation

Day 7: Wrong-Way Risk, SA-CCR and CVA Risk Capital

- General and Specific Wrong-Way Risk Identification Criteria
- Correlated Default and Exposure Modelling for Wrong-Way Risk
- SA-CCR Exposure at Default From Replacement Cost and PFE
- SA-CCR Hedging Sets, Asset Class Add-Ons and Multiplier
- BA-CVA Versus SA-CVA Capital Approaches and Eligible Hedges

Day 8: XVA Desk Stakeholders, Charge Allocation and Communication

- XVA Desk Mandate and Interfaces With Trading and Treasury
- Transfer Pricing of CVA Charges to Business Lines
- Client Quote Build With an All-In XVA Charge
- CVA Hedging Strategy Using Single-Name and Index CDS
- Explaining XVA Earnings Volatility to Finance and Senior Management

Day 9: XVA Measurement, Limits, Model Validation and Benchmarking

- XVA P&L Explain by Credit, Market and Funding Drivers
- PFE Limit Framework and Counterparty Limit Utilisation Reporting
- Exposure Model Backtesting Against Realised Mark-to-Market Paths
- Independent Model Validation Checklist for XVA Calculation Engines
- XVA Peer Benchmarking and Model Change Governance Log

Day 10: Modelling Build Capstone for the XVA Framework and Implementation Plan

- Case Bank Netting Set and Collateral Data Pack Assembly
- Exposure Simulation and CVA, DVA and FVA Calculation Run
- SA-CCR and CVA Capital Calculation for the Case Book
- XVA Desk Governance, Limits and Charge Allocation Design
- XVA Framework and Implementation Plan Completion and Presentation

Skills You Will Gain:

- Exposure Profile Simulation
- Credit Curve Calibration
- Netting and Collateral Modelling
- Funding Adjustment Analysis
- Wrong-Way Risk Assessment
- Counterparty Capital Calculation
- XVA Sensitivity Analysis
- Valuation Model Validation

Why Attend This Course:

- Deliver an XVA Framework and Implementation Plan to the head of market risk, the treasurer and the financial controller for approval
- Decide whether a new trade, CSA amendment or CDS hedge lowers total CVA, FVA and capital for a counterparty
- Avoid mispriced client trades, unexplained fair value swings and capital surprises caused by unmodelled collateral or wrong-way exposure
- Brief trading, treasury and finance colleagues on how exposure profiles drive each valuation adjustment and capital figure

Conclusion:

Back at work, the participant hands the XVA Framework and Implementation Plan to the head of market risk, the treasurer and the financial controller, who use it to set exposure methods, charge allocation rules and PFE limits for the derivative book. Product control applies its IFRS 13 adjustment approach at month end, and model validation uses its checklist for the next model review. After the first quarter-end close, the bank should compare XVA P&L explain, limit breaches and capital figures against the plan and recalibrate proxies or collateral assumptions where results diverged.

Frequently Asked Questions FAQ:

What should participants know before a counterparty credit risk and XVA course?

Participants should already value, book or monitor derivative trades and understand discounting, credit spreads and basic collateral terms. Bringing an anonymised netting set, CSA summary or exposure report from their own unit makes the modelling build more useful.

How does a counterparty credit risk and XVA course differ from an interest rate derivatives course?

It concentrates on the adjustments to derivative value for default, funding, margin and capital, and on the exposure simulation behind them. Interest rate derivatives courses focus on curve building, swap pricing and hedging, touching valuation adjustments only briefly.

Why does wrong-way risk matter in counterparty credit risk and XVA?

Wrong-way risk means exposure grows as the counterparty's credit quality worsens, so CVA calculated with independent exposure and default assumptions understates expected loss. Modelling the dependence reveals trades and collateral that look safe but concentrate loss in stress.

What do participants take back from the counterparty credit risk and XVA course?

Participants take back an XVA Framework and Implementation Plan for a case bank: exposure simulation results, CVA, DVA and FVA calculations, SA-CCR and CVA capital figures, desk governance and charge allocation rules, limits and a model validation checklist.