

Objective of the Course – ACI Treasury Certification

Objective of the Course: The ACI Dealing Certificate is a foundation programme that allows candidates to acquire a working knowledge of the structure and operation of the major foreign exchange and money markets as well as their core products (cash, forwards and derivatives), and the basic skills required for competent participation, including the ability to apply the fundamental mathematics used in these markets.

❖ **Targetted Audience :**

- Chief Executive Officers (CEO)
- Chief Financial Officers (CFO)
- Corporate Treasurers
- Corporate Controllers
- Accounting Heads
- Treasury Teams
- Bankers
- Front Desk Traders
- Business Analysts
- Front End Developers
- Proprietary Traders
- Chartered Accountants (CA)
- Cost Accountants
- Master in Business Administration (MBA)

Course Content – ACI Treasury Certification

❖ **Session I: ACI Treasury Certification - Interest Rate Calculations**

Objective of Session I: To understand the principles of the time value of money. To be able to calculate short-term interest rates and yields, including forward-forward rates, and to use these interest rates and yields to calculate payments and evaluate alternative short-term funding and investment opportunities. Candidates should know what information is plotted in a yield curve, the terminology describing the overall shape of and basic movements in a curve, and the classic theories which seek to explain changes in the shape of a curve. They should also know how to plot a forward curve and understand the relationship between a yield curve and forward curves.

- Computation of Present Value, Future Value
- Compounding & Discounting Factors
- Currency Pairs
 - Direct Pairs
 - Indirect Pairs
 - School of Thoughts in Exchange Pairs
 - Basis Points, Ticks, Pips
 - Big Figure
- Day Count Conventions
 - US Dollar (USD)
 - Euro
 - Great Britain Pound (GBP)
 - Swiss Franc (CHF)
 - Japanese Yen (JPY)
- Currencies Spot Contracts
 - Spot Contract
 - Overnight (ON)

ACI Treasury Certification

- Cash Spot (CS)
- Tom Spot (TS)
- Tom Next (TN)
- Spot Next (SN)
- Spot Week (SW)

- Types of Forwards Contracts
 - Short Term Forwards Contracts (STFX)
 - Rolling Forwards Contracts (RFX)
 - Long Term Forwards Contracts (LTFX)

- Forwards Contracts
 - Booking of Forwards Contracts
 - Cancellation of Forwards Contracts
 - Rollover of Forwards Contracts
 - Broken Date Forwards
 - Time Options Forwards

- Window Forwards Contracts
 - Booking of Window Forwards Contracts
 - Cancellation of Window Forwards Contracts
 - Rollover of Window Forwards Contracts
 - Broken Date Window Forwards
 - Time Options Window Forwards

- Participatory Forwards Contracts
 - Booking of Participatory Forwards Contracts
 - Cancellation of Participatory Forwards Contracts
 - Rollover of Participatory Forwards Contracts
 - Broken Date Participatory Forwards
 - Time Options Participatory Forwards

- Global Interest Rate Benchmarks
 - Euribor
 - LIBOR
 - \$ LIBOR
 - CHF LIBOR
 - GBP LIBOR
 - EUR LIBOR
 - JPY LIBOR
 - EONIA
 - MIBOR
 - MIFOR
 - STIR
 - JIBOR
 - HIBOR
 - US Federal Funds Rate (FFR)

- Interest Rate Parity (IRP)
- Interest Rate Parity (IRP) – Computation of Forwards Premiums
- Booking of Forwards Contracts – Forwards Curves
- Booking of Forwards Contracts – Swaps Curves

- Interest Rate Theories

ACI Treasury Certification

- Pure Expectations Theory
- Liquidity Preference Theory
- Market Segmentation Theory
- EUR , CHF, GBP – STIR Futures
- EUR , CHF , GBP – LTIR Futures

LIBOR – London Interbank Offered Rate

EONIA – Euro Overnight Index Average

MIBOR – Mumbai Interbank Offered Rate

MIFOR – Mumbai Interbank Forward Offered Rate

JIBOR – Japanese Interbank Offered Rate

HIBOR – Hongkong Interbank Offered Rate

❖ Session II : ACI Treasury Certification – Cash Money Markets

Objective of Session II : To understand the function of the money market, the differences and similarities between the major types of cash money market instrument and how they satisfy the requirements of different types of borrower and lender. To know how each type of instrument is quoted, the quotation, value date, maturity and payment conventions that apply and how to perform standard calculations using quoted prices. Given the greater inherent complexity of repo, a good working knowledge is required of its nature and mechanics.

- Money Market
- Instruments in Money Markets
 - Certificate of Deposits (CD)
 - Commercial Papers
 - Repo
 - Central Bank Repo
 - Reverse Repo
 - Triparty Repo
 - Sticky Repo
 - Intercorporate Deposits (ICD)
 - Interbank Deposits
 - Bankers Acceptance
- Onshore Fixed Income Markets
- Offshore Fixed Income Markets / Global Treasury Centres (GTC)
 - Singapore
 - New York
 - Australia
 - London
 - Luxembourg
 - Frankfurt
 - Tokyo
- Offshore Fixed Income Markets / Regional Treasury Centres (RTC)
 - China
 - Hong Kong
 - Dubai
 - Philippines
 - Bahrain
- Converts Analytics
 - Security Settled Converts
 - Cash Settled Converts
 - Rainbow Converts
 - Screw Settled Contracts
 - Reset, Refic Converts

ACI Treasury Certification

- Hedging of Converts
 - Hedging of Private Converts – Onshore Treasury Markets
 - Hedging of Private Converts – Offshore Treasury Markets
 - Hedging of Non Private Converts – Onshore Treasury Markets
 - Hedging of Private Converts – Offshore Treasury Markets
 - Tokyo Cut – Sydney Cut, Luxembourg Cut, Frankfurt Cut, NY Cut
- Valuation of Credit Default Swaps (CDS)
 - Valuation of Credit Default Swaps (CDS) – Single Trigger
 - Valuation of Credit Default Swaps (CDS) – Multi Trigger
 - Valuation of Credit Default Swaps (CDS) – Single Name
 - Valuation of Credit Default Swaps (CDS) – Multi Name
 - Valuation of Credit Default Swaps (CDS) – Single Basket
 - Valuation of Credit Default Swaps (CDS) – Multi Basket

❖ Session III : ACI Treasury Certification – Forwards, FRA , Money Markets Futures , Swaps

Objective of Session III : To understand the mechanics of and how to use money market interest rate derivatives to hedge interest rate risk. Session would also be covering all types of Derivatives to hedge your Money Market Trades.

- Forwards – Forwards Contracts
- Forward Rate Agreements (FRA)
 - USD FRA
 - EUR FRA
 - GBP FRA
 - CHF FRA
 - JPY FRA
 - INR FRA
 - AUD FRA
 - NZD FRA
 - CAD FRA
 - SGD FRA
- Forward Rate Agreements (FRA)
 - 1X4 FRA
 - 2X5 FRA
 - 3X6 FRA
 - 4X7 FRA
 - 4X8 FRA
 - 4X16 FRA
 - 12X24 FRA
- Hedging of Interest Rate Exposures using FRA
- Settlement of Forward Rate Agreements (FRA)
- Euro Dollar CD Futures
 - Introduction to Euro Dollar CD Futures
 - Hedging using Euro Dollar CD Futures
 - Conversion of Float Liability to Fix Liability using Euro Dollar CD Futures
 - Conversion of Fix Liability to Float Liability using Euro Dollar CD Futures

❖ Session IV : ACI Treasury Certification – Foreign Exchange

Objective of Session IV: To understand basic spot FX dealing terminology and the role of specialist types of intermediary. To recognise the principal risks in spot and forward FX transactions. To calculate and apply forward FX rates, and understand how forward rates are quoted. To understand the relationship between

ACI Treasury Certification

forward rates and interest rates. To understand time options. To be able to describe the mechanics of outright forwards, FX swaps and forward-forward FX swaps, explain the use of outright forwards in taking currency risk and explain the use of FX swaps in rolling spot positions, hedging outright forwards, creating synthetic foreign currency assets and liabilities, and in covered interest arbitrage. To display a good working knowledge and understanding of the rationale for NDFs. To be able to recognise and use quotes for precious metals, and demonstrate a basic understanding of the structure and operation of the international market in precious metals.

- Exchange Quotes
 - Standard Exchange Quotes
 - Non Standard Exchange Quotes
 - Crosses
 - Big Figures , Pips , Big figures
- Types of Hedging Programs
 - Cash Flow Hedging
 - Fair Value Hedging
 - Net Investment Hedging
 - Introduction to Embedded Derivatives
 - Hedging using Embedded Derivatives
- Types of Options Derivatives
 - Plain Vanilla Deliverable Options – Call Options , Put Options ##
 - Plain Vanilla Non Deliverable – Call Options Put Options
 - Options Payoffs – Range Forwards (Exporters) , Range Forwards (Importers)
 - Options Payoffs – Seagull (Exporters) , Seagull (Importers)
 - Window Options Contracts
 - Cancellable Window Options Contracts
 - Principle of Moneyness – Computation of Options Premiums (Window, W/o Window)
 - Introduction to Stock Options , Index Options
 - Rollover of Options Contracts – Call Options , Put Options

STOX – Short Term Options Contracts

MTOX – Medium Term Options Contracts

LTOX – Long Term Options Contracts

- Options Pricing – Black Scholes Model (BS)**
 - Introduction to Black Scholes Model
 - Factors affecting Options Pricing
 - Black Scholes Model vs Implied Vols
 - Black Scholes Model vs NIRP (Negative Interest Rate Policy)
- Interest Rates Derivatives (IRD)**
 - Principle Only Swaps (POS)
 - Coupon Only Swaps (COS)
 - Cross Currency Interest Rate Swaps (CCIRS)
 - \$ Swaps
 - Reverse \$ Swaps
 - Libor Swaps
 - Basis Swaps
 - Tokyo Cut – Sydney Cut, Luxembourg Cut, Frankfurt Cut, NY Cut
- Exotic - Interest Rate Derivatives (IRD)**
 - Introduction to MIFOR Swaps

ACI Treasury Certification

- IRS – MIFOR Principal Only Swaps (POS)
- IRS – MIFOR Coupon Only Swaps (COS)
- IRS – MIFOR Cross Currency Interest Rates Swaps (CCIRS)
- Total Return Swaps (TRS)
- Libor Fiat Swaps (W/o QSD)
- Introduction to Overnight Index Swaps (OIS) – IBOR Exposures

- Introduction to Interest Rate Risk Management**
 - Interest Rate Risk Management – Interest Rate Caps
 - Interest Rate Risk Management – Interest Rate Floors
 - Interest Rate Risk Management – Interest Rate Collars

- Credit Risk Management (CRM)**
 - Credit Default Swaps (CDS)
 - Credit Default Swaps – Single Name CDS
 - Credit Default Swaps – Multiple Name CDS
 - Credit Default Swaps – Single Trigger , Multi Trigger CDS

❖ Session V : ACI Treasury Certification – Assets & Liability Management (ALM)

Objective of Session V: To understand the fundamentals of Asset & Liability Management as a practice of managing and hedging risks that arise due to mismatches between the asset side and the liability side of the balance sheets of a bank. To explain how main risk factors like funding and liquidity risk, market risk (FX, Interest Rate, Equity, Commodity, etc.), credit risk, leverage risk, business risk and operational risk are Inter related and how they affect the balance sheet of a financial institution. To describe common risk management and hedging techniques which help control these effects and to understand how these techniques are used to set up a state-of-the-art ALM approach.

- Concept of ALM
 - Factors affecting Assets
 - Factors affecting Liabilities
 - Currency Risk
 - Liquidity Risk
 - Credit Risk
- Assets & Liabilities (ALM) Management Systems
- Assets & Liabilities (ALM) Organization
 - Structure & Responsibilities
 - ALM Committee
 - ALM Risk Parameters
 - ALM Risk Identification
 - ALM Risk Management
 - ALM Risk Management
 - ALM Risk Tolerance Limits
- Gap Management
 - GAP Analysis – Prudential Limits
 - Risk Sensitive Assets (RSA)
 - Risk Sensitive Liabilities (RSL)
 - GAP = RSA – RSL
 - GAP Ratio – RSA/RSL
 - GAP > 0, GAP Ratio > 1 , +ve GAP
 - GAP <0, GAP Ratio < 1 , -ve GAP
 - GAP = 0, GAP Ratio = 1 , Matched GAP
 - Maturity & Position (MAP)

ACI Treasury Certification

- Maturity & Position (MAP) > 1
- Maturity & Position (MAP) < 1
- Maturity & Position (MAP) = 0

- Derivatives to Hedge GAP Risk
 - \$ Swaps
 - Reverse \$ Swaps
 - Overnight Index Swaps (OIS)
 - Benchmark Swaps
 - G Sec Swaps
 - LIBOR Swaps
 - USD Libor Swaps – Fix , Floating
 - GBP Libor Swaps – Fix , Floating
 - EUR Libor Swaps – Fix , Floating
 - CHF Libor Swaps – Fix , Floating
 - JPY Libor Swaps – Fix , Floating

- Duration Management
- Convexity Management
- Duration & Convexity Management

- Credit Derivatives
 - Total Return Swaps (TRS) with CDS
 - Total Return Swaps (TRS) w/o CDS
 - Assets Swaps
 - Basis Swaps
 - Equity Linked Notes (ELN)
 - Credit Linked Notes (CLN)
 - Overnight Index Swaps (OIS)

- Basel III
 - Liquidity Coverage Ratio (LCR)
 - Net Stable Funding Ratio (NSFR)
 - Leverage Ratio
 - Total Loss Absorbing Capital (T-LAC)
 - Liquidity Tests

❖ Session VI : ACI Treasury Certification – Principles of Risk

Objective of Session VI: To understand why risk is inherent in banks business models and why effective risk management is a key driver for banks success. Candidates will be able to describe major risk groups: credit, market, liquidity, operational, legal, regulatory, and reputation risk. They will understand the significance of risk groups for different banking businesses and units. Candidates will also get an overview about methods and procedures needed to manage these risk types and extend their understanding to different risk/return profiles of shareholders, regulators and debt providers.

- Credit Derivatives
 - Total Return Swaps (TRS) with CDS
 - Total Return Swaps (TRS) w/o CDS
 - Assets Swaps
 - Basis Swaps
 - Equity Linked Notes (ELN)
 - Credit Linked Notes (CLN)
 - Overnight Index Swaps (OIS)

ACI Treasury Certification

- Value At Risk (VAR)
- Conditional Value At Risk (CVAR)
- Expected Shortfall
- Variance – Covariance Method
- Probability of Default (PD)
- Exposure At Default (EAD)
- Loss Given Default (LGD)

- Risk Management - Basel III
 - Standardised Approach
 - Internal Ratings Approach
 - Liquidity Risk
 - Off Balance Sheet Risk
 - Collateral Valuation
 - Managing Stress Scenarios
 - Liquidity Coverage Ratio (LCR)
 - Net Stable Funding Ratio (NSFR)

❖ Session VII : ACI Treasury Certification – Options

Objective of the Session VII : To understand the fundamentals of options. To recognise the principal classes and types, and understand the terminology, how they are quoted in the market, how their value changes with the price of the underlying asset and the other principal factors determining the premium, how the risk on an option is measured and how they are delta hedged. To recognise basic option strategies and understand their purpose.

- Types of Options Contracts
 - Deliverable Options Contracts
 - Plain Vanilla Options – Call Options , Put Options
 - Options Strategies – Range Forwards (Exporters)
 - Options Strategies – Range Forwards (Importers)
 - Options Strategies – Seagull (Exporters)
 - Options Strategies – Seagull (Importers)
 - Options Strategies – Call Spread (Bull, Bear)
 - Options Strategies – Put Spread (Bull, Bear)

- Types of Options Contracts
 - Non Deliverable Options Contracts
 - Non Deliverable Plain Vanilla Options – Call Options , Put Options
 - Options Strategies – Non Deliverable - Range Forwards (Exporters)
 - Options Strategies – Non Deliverable - Range Forwards (Importers)
 - Options Strategies – Non Deliverable - Seagull (Exporters)
 - Options Strategies – Non Deliverable - Seagull (Importers)
 - Options Strategies – Non Deliverable - Call Spread (Bull, Bear)
 - Options Strategies – Non Deliverable - Put Spread (Bull, Bear)

- Introduction to Bermudian Options
- Options Valuation
 - Options Intrinsic Value
 - Options Extrinsic Value
 - Options Fair Value

- Options Greeks
 - Delta
 - Gamma
 - Theta

ACI Treasury Certification

- Options Hedging
 - RHO
 - Vega
 - Delta Hedging
 - Delta Dynamic Hedging
 - Gamma Hedging
 - Gamma Dynamic Hedging
 - Straddle
 - Strangle
 - Butterfly Spread
 - Ratio Spread
 - Ratio Backspread

❖ Session VIII : ACI Treasury Certification – Model Code of Conduct

Objective of the Session VIII : The Model Code is a valuable guide to best conduct and international best practice for all market participants. It is a practical study of over-the-counter market practices and conventions, distilled from the core best practices in the foreign exchange, money market and related derivative markets and is an integral part of the ACI suite of examinations.

- General Risk Management Principles
- Back Valuation
- Pre – Trade Analytics
- Post – Trade Analytics
- Market Practices Covering
 - Foreign Exchange
 - Money Market
 - Derivatives
 - Customers
 - Voice Brokers
 - Electronic Broking Platforms
 - Prime Brokers
 - Operations

Selection of Derivatives Objects by Participant :-

Deliverable Derivatives Objects:

- Forwards Contracts – Plain Vanilla , Exotic
- Exporters Options Payoffs
 - Ratio Spreads
 - Ratio Back Spreads
 - Digital Spreads
 - Knock In Knock Out (KIKO)
 - Vertical Spreads
 - Calender Spreads
 - Diagonal Spreads
- Importers Options Payoffs
 - Ratio Spreads
 - Ratio Back Spreads
 - Digital Spreads

ACI Treasury Certification

- Knock In Knock Out (KIKO)
- Vertical Spreads
- Calendar Spreads
- Diagonal Spreads

Interest Rates Derivatives

- \$ Swaps
- Reverse \$ Swaps
- Libor Swaps
- Basis Swaps
- Amortization Swaps
- Accreting Swaps
- Total Return Swaps (TRS)
- Assets Swaps (AS)
- Quanto Swaps

- ❖ **Course Coverage :** Course to get covered using Webinars , Skype Conference Calls , Audio , Video Calls. Sessions are highly interactive and participants are most welcome to ask any questions during the Course.
- ❖ **Course Duration :** Course duration is 36 Hrs + 2 Hrs of Complimentary Skype Call which to be taken within 3 Months of completion of the Course. Pls note that 36 Hrs Course is not including any of the Derivatives Contracts as Participants needs to choose amongst Derivatives Contracts which are having respective charges.
- ❖ **Pricing :** Each Module Costing Rs 15,000/-. Participant can choose any or all 8 Modules.
- ❖ **Course Material**
 - Course Presentations – 100% interactive, Screenshots , Examples
 - International Bank Research Reports
 - Live Corporate Case Studies
 - Excel Solvers

Course is 100% Practical , Software Oriented in nature. We would be doing the Course using Course Presentation , International Bank Research Reports , Live Corporate Case Studies , Excel Solvers , Live Financial Terminals – Thomson Reuters , Bloomberg , MT4 (Meta Trader 4)