ADVANCED CERTIFICATE IN INTERNATIONAL PAYMENT SYSTEMS

For

B A Continuum India Pvt. Ltd.









Advanced Certificate in International Payment Systems

This program is designed to help professionals working in the technology and operations domains get a thorough understanding of the international payment systems and their operations. The different types of payment systems in key geographies; the major risks associated with payments; the messaging systems used in international payments and the regulatory aspects of payment processing are covered in detail in this program.

The proposed course coverage aligns fully with the requirements of the Certified International Payment Systems Professional (CIPSP) program.

This program will be delivered in the 'E-Learning + VILT' model.

1 - Introduction to Payment Systems

(this part covers the sections on 'Introduction'; 'why does a bank make payments?, Rel. Structures and Payment Types' of CIPSP)

- 1. Overview of Payment Systems
 - a. Business Scenarios
 - i. PayPal/ExxonMobil/DuPont
 - b. Need and Importance
 - i. Need for Payment systems
 - ii. Entities involved
 - iii. Cases of Payment Crisis
 - iv. Importance of Payment systems
 - c. Classification of Payment systems
 - i. Retail Electronic Credit/Retail Electronic Debit
 - ii. Wholesale LVPS
 - iii. Other ways of classifying payments: Book/Local/Domestic/Cross-border
 - d. Settlement types in Payments
 - i. Bilateral Netting
 - ii. Multilateral Netting
 - iii. Gross Settlement
 - e. Relationship structures
 - i. Bilateral clearing arrangements
 - ii. Network managed banking

2 - Retail & Wholesale Payment Systems

(this part covers the sections on 'Payment Systems' and 'Regional Payment Systems' of CIPSP)

- 1. Definition & characteristics:
 - a. Paper-based systems
 - i. Check-21/Future Payment systems
- 2. Understanding Retail payment systems
 - a. Electronic Fund Transfers
 - i. ACH/Intl. ACH
 - b. Card based Payment systems
 - i. Credit Cards
 - ii. Debit Cards
 - c. Mobile payment system
 - i. P2P systems
 - ii. E-Wallet
- 3. Understanding Wholesale Payment systems



- a. RTGS/Fedwire
- b. Other Wholesale payment systems
- c. Emerging payment systems
- 4. Payment systems in other key countries HK, China, UK and Canada

3 - Understanding the Disruptors and the Payment Disruption

(this part not only covers the section on 'Using Crypto currencies for making payments' of CIPSP)

- 1. Bitcoin & Blockchain
 - a. Understanding Bitcoin and Cryptocurrency
 - b. Working Aspects of Bitcoin
 - c. Working Aspects of Blockchain
 - d. Permissioning in Blockchain/Tokenization in Blockchain/Smart Contracts in Blockchain
 - e. Blockchain Traditional Ledgers
- 2. PSD2
 - a. XS2A
 - b. Strong Customer Authentication Rules
 - c. Fraud Reporting
 - d. Risk & Compliance
 - e. Complaints Procedure
 - f. The gateway to Open Banking
- 3. The Emerging FinTech Map
 - a. The Competitive Advantage of Traditional vs. Attacker firms
 - b. State-of-Art in the Vertical
 - c. Experiments / Projects underway
- 4. Payments Map
 - a. The traditional map
 - b. The redrawn map
 - c. A template to use to track the future

4 - Cross Border Payment Systems

(this part covers the sections on 'Overview of Foreign Exchange'; 'Payment Systems' and 'Regional Payment Systems' of CIPSP)

- 1. Basics of Foreign Exchange (for payments)
 - a. Cash, TOM, Spot, Forwards
 - b. Interbank transactions
 - c. Merchant transactions
 - d. Exchange rate determination and rate computation
- 2. Overview
 - a. Fundamentals of Cross Border payment systems
 - b. Mechanics of Cross Border Payment systems
 - c. Correspondent Banking
 - d. Nostro & Vostro Accounts
 - e. CHIPS
- 3. Continuous Linked Settlement (CLS)
 - a. KfW Case study
 - b. Constituents of CLS Bank
 - c. Lifecycle of CLS bank transaction
- 4. Other Global Payment Systems
 - a. SEPA
 - b. SWIFT GPI



5 - Risks in Payment Systems and their Mitigation

(this part covers the sections on 'Risks in Payment Systems' and 'Risk Mitigation Techniques' of CIPSP)

1. Risks in Payment Systems:

- a. Herstatt risk, Credit Risk,
- b. Liquidity Risk,
- c. Systemic Risk
- d. Operational Risk.

2. Risk mitigation techniques

- a. Carefully chosen members
- b. Novation, Central counterparty system
- c. Loss sharing arrangements,
- d. Collateral
- e. Other mitigation techniques

6 - SWIFT® & Payments

(this part covers the sections on 'Overview of SWIFT messaging' and 'Use of Codes' but in greater detail)

3. Introduction to SWIFT

- a. SWIFT as a messaging system
- b. SWIFT Framework
- c. Migration of MT to MX (ISO 200022)

4. MX Equivalent and usage of

- a. MT 103/MT 103+/MT 202/MT 202 cov/MT 204
- b. MT 900/MT 910
- c. Unaffected MTs
- d. MT 940/MT 950

5. Other Standards/Codes used in Payment Systems

a. IBAN, BBAN, BIC, BEI, UID, UPIC, ABA routing codes, IFSC

7 - Account Management

(this part covers the sections on 'Impact of Regulation' of CIPSP and other very important topics not covered in CIPSP)

1. Client On-boarding

- a. Core elements of KYC
- b. PATRIOT Act/BSA/FATCA/FATF Recommendations

2. Accounting & Reconciliation

3. Billing Overview

- a. Approaches to Client billing
- b. Bank Service Billing

4. Virtual Account Management

- a. Structure
- b. Virtual Account set-up
- c. Straight through reconciliation

Final Assessment