

# **IGTA CERTIFIED TREASURER.**

## **IGTA EDUCATION GUIDE.**

### **FINAL VERSION 2004.**

#### **1. INTRODUCTION.**

The IGTA education program has three aims: maintaining and raising educational standards for the treasury profession, facilitating the education of treasurers who aim at an international career and promoting the treasury profession in general. To reach these aims IGTA will not develop its own courses, because that could result in certain monopoly and competition problems that could hamper new initiatives. On the contrary, IGTA prefers to stimulate educational institutions and other education providers to develop their own programs. Therefore, the IGTA education program sets out to provide a form of approval for such programs.

The IGTA Certified Treasurer approval scheme is intended for qualifications aimed at the most senior managers in a large domestic or multi-national treasury where the managers become involved with the strategic development of the company through acquisitions, mergers, disposals and major capital projects. The qualification seeking IGTA approval should be pitched at the level of a professional financial qualification.

#### **2. APPROVAL PROCESS.**

The IGTA educational approval board fulfils the central role in the approval process for IGTA. This is an independent committee consisting of treasurers, directors of finance, academicians and other experts appointed by IGTA. The educational approval board determines the general guidelines for approval and decides on individual requests. The board can grant an approval for a period of 4 years at most, can stipulate special terms on any specific approval, can ask for further information and can refuse the request.

In this process the educational approval board checks, by using standard application forms, if the educational program fulfils in substance the general guidelines. The guidelines can be found in this guide. A request for approval will be only admitted if the request has been submitted by a local treasury organisation (being an IGTA member) for its own treasury education program or by an academic treasury program provider recognised by the local treasury organisation (this recognition may be delegated by the local treasury organisation).

For the time being approval is based only on subject breadth, in the sense that the all topics described in this syllabus must be covered in high level terms (but see the following section). An approved program may indicate that it meets the syllabus requirements of the IGTA Certified Treasurer level and may use the label “IGTA approved program”. However, no IGTA diplomas or qualifications will be issued by IGTA by the education provider on behalf of IGTA. In due time the approval process will be extended so that it includes quality checks, thereby allowing IGTA to move towards issuing its own Certified Treasurer diplomas.

### **3. GENERAL REQUIREMENTS.**

The IGTA certified treasurer diploma covers the whole treasury discipline (including corporate finance) in principle. The compulsory content of the program is divided into a number of modules. For each module an outline scope description is given. In the ideal situation each module covers relevant academic theories as well as practical skills. Each education provider is free to use its own papers and books or to use dedicated lecture notes. However, because of the intended academic level it is strongly recommended that the students should be exposed to the academic literature in some way. Each program is assumed to add local content to the program. The educational approval board will therefore have to be informed in particular how local legal, accounting and fiscal aspects have been covered within the program. Only a rough outline of the structure of the program has to be given. No details have to be given of the literature used, the number of contact hours and the method and standard of examination, as the IGTA approval process is based on breadth of syllabus only. An application form is given as an appendix.

The educational approval board will apply the following principles:

- For each of the 13 modules described below a minimum of 85 % coverage will need to be demonstrated by the syllabus of the qualification for which approval is sought, with the exception noted in the following bullet.
- The content of Modules 1 (Quantitative Methods), 10 (External Relations) and 11 (Legal Issues) will be deemed to be satisfied if coverage in the opinion of the educational approval board is at least 75% in each module.
- In applying these criteria the educational approval board will also seek to determine that no element of what it considers to be essential treasury knowledge is excluded from coverage within the qualification being considered for approval. If there is such an omission then IGTA approval will not be recommended.

### **4. CONTENTS.**

A complete list of topics is given below that has to be covered in the program in high level terms. The way all topics have been divided into modules is not obligatory. Each program provider may choose its own program organisation, on the condition that the application form for getting IGTA approval clarifies how all topics given in the module descriptions in this guide are covered.

#### **1. QUANTITATIVE METHODS.**

An understanding and the ability to apply mathematical and statistical techniques. Theory, using software and interpretation have to be considered. Financial calculus, differential and integral calculus, probability theory, statistics including regression analyses and simulation techniques are covered.

##### **1a. Calculus and analysis.**

- Functions including polynomial, exponential and logarithmic functions
- Differentiation and Integration

##### **1b. Probability and statistics.**

- Stochastic variables

- Discrete and Continuous stochastic variables
- Distribution Functions
- Selected Distributions including binomial, poisson and normal distributions
- Introduction to business statistics
- Estimation and statistical decision making
- Estimation of expected values and variances
- Confidence intervals
- Correlation
- Regression
- Moving averages
- Exponential smoothing
- Time series

### 1c. Operations research.

- Introduction to Matrix Algebra
- Solving systems of equations
- Linear programming
- Random simulation techniques.

## 2. ECONOMICS AND BANKING SYSTEM.

### 2a. Main economic theories.

A general overview of the main economic theories is given. Attention is given especially to the fundamental factors that influence the financial markets.

- The scope of economics, market efficiency and supply and demand
- The Keynesian theory, monetarism and supply side economics
- The concept of money
- Monetary policy objectives
- The international monetary system
- International liquidity
- Central banks, financial institutions and banking systems
- Overview of the main characteristics and developments in the main regional economies world-wide.

### 2b. Spot rates, forward rates and volatility.

An understanding and the ability to explain the financial system and the mechanisms of the financial markets. Interest rate and currency markets, forward rates, market linkages, volatility, market forecasts are covered.

- Spot rates and forward interest rates
- Interest rates yield curve and zero coupon curve
- Forward exchange rates
- Factors influencing interest and exchange rates
- Volatility

## 3. FINANCIAL MARKETS AND PRODUCTS.

- Overview money market and instruments.
- Repos, commercial papers, treasury bills, floating rate instruments

- Overview foreign exchange market and instruments
- Overview capital market products
- Bonds, hybrids and corporate debt securities
- The global equity market
- Overview of the main characteristics and developments in the main regional markets worldwide.

#### 4. FINANCIAL INFORMATION AND ANALYSIS.

An understanding of financial analysis and especially the ability to analyse financial information to get insight into the (future) company performance. Financial analysis, working capital management, financial statement analysis, ratio analysis, credit analysis are covered.

- Overview financial analysis
- Analysis of annual reports
- Accounting ratios
- Financial ratio analysis
- Cashflow statements
- Credit control
- Credit ratings
- Stock Exchange indicators (Major exchanges only)
- Overview of the fundamental cost concepts and the principles of budgeting, planning and control
- Overview the principles of management accounting for business control.

#### 5. CORPORATE FINANCE AND FUNDING.

A full understanding of the main principles of corporate finance and the ability to apply these principles in business practice. Valuation techniques, risk and return, investment appraisal and capital budgeting, dividend policy, mergers and acquisitions, export finance and leasing are covered.

##### 5a. Financial structure and analysis.

- Overview financial structure NPV versus IRR
- Valuation techniques
- Risk and return
- Efficient market hypothesis
- Modern portfolio theory
- Cost of capital
- Capital structure
- Investment appraisal and (international) capital budgeting
- Principles of debt management
- Managing the debt mix.

##### 5b. Shareholder value.

- Equity versus debt
- Dividend policy
- EVA.

##### 5c. Special finance.

- Asset finance
- Leasing

- Export finance
- Letters of credit
- Project finance
- Mergers, acquisitions and divestments.

#### 5d. Other topics.

- Documentation issues.

### 6. DERIVATIVES.

An overview of derivative instruments including understanding of the main pricing models. Building block approach, pricing, OTC instruments and exchange traded instruments, forwards, swaps, options, second generation instruments are covered.

#### 6.1. Interest rate derivatives.

1. Forward interest rate contracts
2. Short term interest rate futures
3. Interest rate swaps
4. Market value and pricing
5. Duration.

#### 6.2. Currency derivatives.

- Forward currency contracts
- Currency futures
- Currency swaps
- Market value and pricing.

#### 6.3. Options and hybrid derivatives.

- Overview of interest rate options
- Swaptions
- Overview of currency options
- Market value and pricing
- Intrinsic Value and Time Value
- Second generation products and hybrid constructions.

#### 6.4. Commodity derivatives.

- Overview.

### 7. RISK MANAGEMENT.

An overview of risk management techniques to be applied in the corporate treasury environment. Market risks and other risks as operational risk and legal risk, interest rate risk, currency risk, quantification of risk and exposure and policy issues are covered.

#### 7.1. Summary: main different risk categories.

Overview: market risk, operational risk, credit risk, reputational risk, etc.

#### 7.2. Quantification of market risks.

- Introduction to exposure and risk.
- Regression techniques
- Duration techniques
- Analyses of tenures of loan portfolio,
- Simulation techniques.
- Value-at-risk techniques

### 7.3. Interest rate risks.

- Managing the loan portfolio.
- Hedging techniques.

### 7.4. Forex risks.

- Transaction risks
- Translation risk
- Economic risks
- Country and political risks
- Hedging techniques.

### 7.5. Operational risks.

### 7.6. Use of derivatives.

- Strategies
- Case studies including historical derivative failures.

## 8. CASH MANAGEMENT.

An overview of cash management techniques to be applied in the corporate treasury environment. Working capital management, cash dynamics and forecasting, managing the liquidity position, day-to-day cash control, payment systems (including local aspects), account structures, netting and cash pooling, electronic banking and internet applications are covered.

### 8.1. Liquidity management.

- Overview liquidity forecasting
- Cash dynamics and forecasting
- Impact of payment and collection instruments on cash flow
- Optimising interest rate results
- Hedging interest rate risks.

### 8.2. Working capital management.

- Cash operating cycle of a company.

### 8.3. Money transfers and payment systems.

- Net settlement systems
- Large value payment systems
- Real time gross settlement systems
- Overview Euro settlement systems

- Target
- SWIFT
- CHIPS
- Overview check clearing systems
- Bankers drafts Lockboxes
- Fedwire Check deposits
- Direct debit system
- Credit card systems
- Documentary collections
- Letters of credit.

#### 8.4. Bank account structure.

- Banks and bank accounts
- Interest and bank charges
- Correspondent banking

#### 8.5. Cash pooling.

- Overview pooling techniques
- Pooling for credit limit purposes
- Interest on pooling arrangements and allocation
- Zero balancing /notional pooling
- Cash concentration/sweeps
- Typical regulatory rules for pooling.

#### 8.6. Netting, re-invoicing and factoring.

- Netting systems
- Third party transactions
- Leading and lagging
- Re-invoicing and factoring

#### 8.7. IT and electronic banking

- Overview electronic bank systems
- Balance and transaction reporting
- Automatic reconciliation
- Electronic funds transfer and transaction initiation
- Overview security issues
- Basis principles of DES, RSA and encryption issues
- Digital signatures and smart cards
- Security on bank information reporting systems
- Financial EDI
- Decision systems.

### 9. TREASURY ORGANISATION AND CONTROL.

An overview of organisational aspects, including control aspects, is given for different organisations. Central and decentralised treasury, segregation of duties, profit centre or cost centre, treasury control, performance measurement are covered.

### 9.1. Organisational issues

- Business policy and organisation structure
- The relation between treasurer and chief financial officer
- The relation between treasurer and controller
- Treasury organisation
- Regional treasury operations
- Locating a treasury management centre
- In-house banking

### 9.2. Control issues

- Treasury policy document
- Overview treasury control
- Information and reporting systems
- Dealing room risks
- Accounting and control
- Front office and back office
- Treasury performance.

## 10. EXTERNAL RELATIONS

An overview of external relations is given from a treasury point of view and from a more strategic point of view at the company level. Bank relations, investor relations, ratings issues, corporate governance developments, regulatory issues, and legal and ethical aspects are covered.

- Difference between managing bank relations and investor relations
- Overview of bank relationships
- Request for information
- Request for proposal
- Review of investor relations
- Ratings issues
- Agency theory
- Influence of shareholders and other corporate stakeholders.
- Corporate governance issues
- Regulatory issues
- Handling financial crises
- Ethics.

## 11. LEGAL ISSUES

The main law systems in the world are based on either the Anglo-American system or the continental European system. From that point of view an overview of the basic principles of both systems is given, without going into local details. An overview of relevant issues for the treasurer and the finance director is given, from ISDA rules for derivatives and the legal aspects of cash pooling to the

regulatory structure relating to companies and securities. Each individual program has to add local issues (to be described in a separate note).

#### 11.1 Business law.

- Overview Anglo-American law
- Overview European law
- Overview contract law
- Overview company law
- Reconstruction, amalgamation and take over
- Liquidation, administration and receivership.

#### 11.2 Compliance

- US and EU Banking regulation
- Rules of main stock exchanges and other financial institutions
- US and EU Regulation concerning take overs
- Codes of conduct of professional bodies and societies.

#### 11.3 Legal aspects of special products

- Guarantees
- Letters of comfort
- Letters of credit
- Indemnities
- Credit facilities
- Derivatives (including ISDA arrangement)
- Cashpooling
- Netting.

#### 11.4. EU regulation

- Institutions of the EU
- The European banking regime
- Capital adequacy directives
- Own Funds Directive
- Solvency Ratio Directive
- Money laundering
- The Basle statement of principles
- Guidance notes for banks and building societies
- UK anti-competition legislation.

### 12. CORPORATE TAXATION.

An overview of different taxation systems is given concerning corporation tax, international finance, derivatives, etc. All topics have to be discussed from the perspective of a corporate with operations in the United States, the United Kingdom, the European Union and the main other regions in the world. Each individual program has to add local issues (to be described in a separate note).

- The principal global tax systems
- Principles of business taxation
- Corporation tax
- Loss reliefs
- Capital allowances
- Groups and consortia
- Principles of capital gains tax
- Capital gains tax – reliefs
- Taxation and the treasury function
- Transfer Pricing; Sales tax (VAT) – general principles
- Location of treasury or finance centre.

### 13. ACCOUNTING PRACTICE.

An overview of the main accounting principles relevant for the treasurer is given from an Anglo-American and European Union perspective without going into local details. Each individual program has to add local issues separately (to be described in a separate note).

- The framework of company accounting
- Form and content of financial statements
- Auditing
- Transfer costs
- International standards
- Influence of accounting standards on the the use of derivatives
- Disclosure issues.

Theo van der Nat, Baarn, The Netherlands 25 March 2004

**APPENDIX: APPLICATION FORM.**

**1. PROGRAM TITLE**

Name:
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**2. LOCAL TREASURY ASSOCIATION / EDUCATION INSTITUTE.**

If the local IGTA member co-operates with a local education institute that acknowledges education programs on behalf of that member, the form may be submitted and signed by the institute. In such cases the local treasury association has to confirm in a separate letter that it has acknowledged the institute. If the local IGTA member does not co-operate with a local education institute the form has to be submitted and signed by the local IGTA member.

Name:
Contact person:
Address:
Tel.
Fax.
Email

**3. OTHER PROVIDERS.**

This section should be completed only if the IGTA member does not provide the program. In that case this form must be signed by the provider and the association or local education institute.

Name:
Contact person:
Address:
Tel.
Fax.
Email

**4. STRUCTURE OF THE PROGRAM.**

Although the approval process is based on the breadth of the program syllabus, the educational approval board would also appreciate some background information for the purpose of clarification.

Educational entry requirements:
Experience entry requirements:
Mode of Study (ie distance learning, classroom study, e-learning, combination of modes):
Contact hours (if appropriate):
Period of Study (for distance learning/e-learning programs, length of time allowed or prescribed. For classroom study, length of program and weekly workload including study hours):
Mode of examination (ie written examinations, multiple choice examinations, coursework):
Title of qualification:
Awarding Body:

**5. PROGRAM CONTENT.**

To enable the board to evaluate the breadth of the program the following documentation must be submitted.

- (a) Official program information available for students.
- (b) General outline of the program in sufficient detail and in such terms as to facilitate (c) below.
- (c) Cross-reference of the program submitted for approval with the IGTA syllabus as described in the IGTA Education Guide, item 4, Contents. Indicate for each topic of the IGTA syllabus how it is covered in the program submitted for approval.
- (d) Short note covering specific local contents of the program ( eg accounting, fiscal, legal and other aspects).

**6. SIGNATURE(S).**

(See item 2, above)

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**DATE.....**