

# Continental Training Program 2021-2025

## Training Curriculum of Critical Knowledge and Skills

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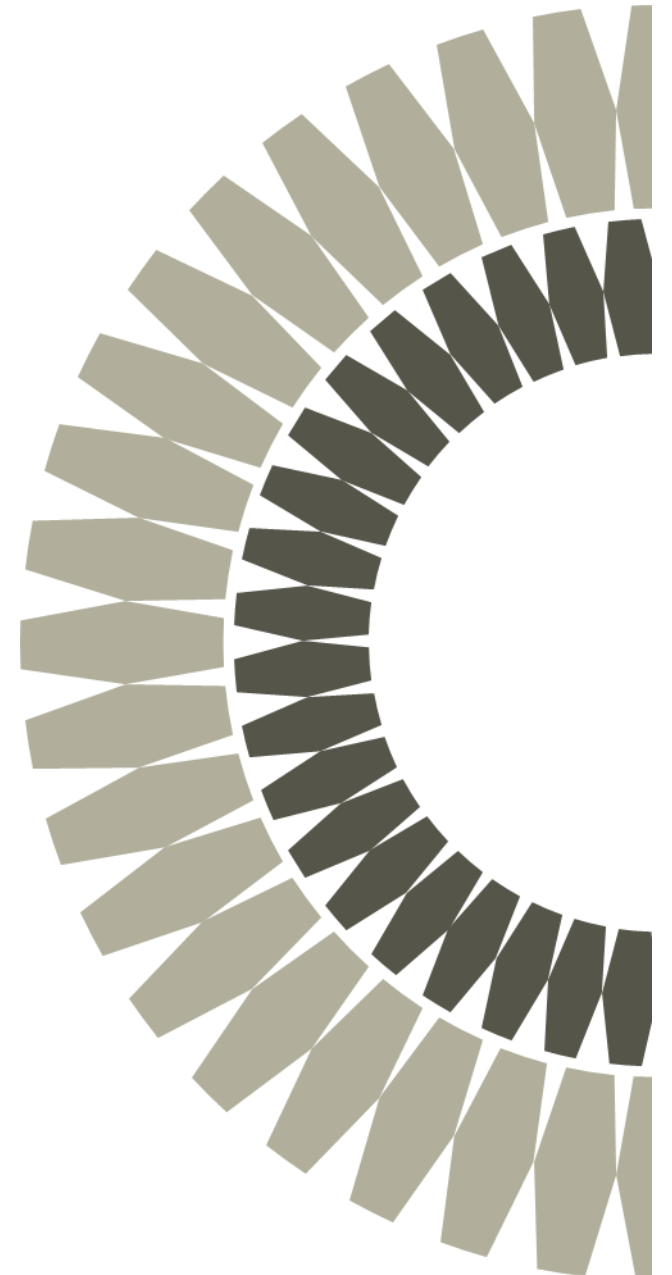
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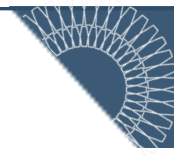
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ASSOCIATION OF SUPERVISORS OF BANKS OF THE AMERICAS





## I. Key Concepts and Definitions

Concept	Definition or Characteristics
<b>Knowledge and Skills Catalog</b>	<ul style="list-style-type: none"> <li>Set of families of knowledge and skills with their respective thematic blocks and content. The contents of each thematic block are taken as the basis for defining the contents of the training activities.</li> </ul>
<b>Family of Knowledge and Skills</b>	<ul style="list-style-type: none"> <li>Grouping of a series of thematic blocks with common characteristics in which a supervisor must be trained (for example: statistical methods, bank management or leadership). The families of knowledge and skills can be grouped by large dimensions (for example: technical knowledge, general knowledge, skills, among others).</li> </ul>
<b>Thematic Block</b>	<ul style="list-style-type: none"> <li>Topics in which each family of knowledge is subdivided.</li> </ul>
<b>Training Program</b>	<ul style="list-style-type: none"> <li>Set of training activities that will be delivered with a specific purpose (for example: learning a specific family of knowledge and skills, development for a specific position or for a particular project), based on training / development needs and guidelines included in the management and learning policy.</li> </ul>
<b>Training Activity</b>	<ul style="list-style-type: none"> <li>Event designed to train supervisors in the contents that have been defined for it; instrumented through courses, workshops, webinars or other face-to-face, network or mixed modalities.</li> </ul>
<b>Job Descriptions/Profiles</b>	<ul style="list-style-type: none"> <li>The supervisory body's organizational, functional or job description manual defines each position in the organization, including the objectives of the position, the specialization, its main functions, the minimum knowledge, and minimum skill levels for each position.</li> </ul>
<b>Level of Professional Development</b>	<ul style="list-style-type: none"> <li>It refers to the level in which an inspector is currently at within his/her career plan; considering his/her academic training, experience, knowledge and skills, among other attributes. A knowledge family can be addressed at different levels of professional development, so that inspectors acquire knowledge in a gradual and planned manner, also establishing a series of requirements to be able to be trained at a higher level.</li> </ul>
<b>Specialization</b>	<ul style="list-style-type: none"> <li>Specific area or subject in which an inspector or group of inspectors specializes in order to conduct the functions in their position (for example: credit risk or prevention of money laundering).</li> </ul>

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## 1. Transversal Knowledge

— To understand the external and internal context in which the supervisory body operates, its culture and values, as well as useful transversal knowledge to conduct supervisory tasks.

### 1.1 Financial system and financial safety net

- Financial system, definition, and objective
- Institutions that comprise the financial system and its operation
- Elements of the financial safety net
- Prudential regulation and supervision
- Lender of Last Resort
- Bank resolution regime
- Deposit insurance
- Bank capitalization fund

### 1.2 Legislation, regulation, and organization of the supervisory body

- Laws and decrees related to the supervisory body (creation of the body, nature and purpose, main functions and powers, internal organization, governing body, management and administration, among others)
- Regulations linked to the supervisory body
- Organizational structure of the supervisory body (Organization and functions Manual, as well as organizational chart)

### 1.3 Culture and values of the supervisory body

- Values of the organization
- Code of ethics or conduct (obligations, rules of conduct, incompatibilities, conflicts of interest, gift regime, among others)
- Organizational culture and strategy
- Institutional strategic plan

### 1.4 Specific computer applications used by the supervisory body

- Document management system
- Electronic records system
- Audit/inspection management system, control management and data analysis (TeamMate Software, among others)
- Database management system (ACL or IDEA Software, among others)

### 1.5 Information Technology/Computer Tools

- Handling of word processors, spreadsheets, multimedia presentation tools, databases
- Utilities: agendas, calculators, etc
- Email programs, voicemail, messenger programs
- Platforms for the management of learning and knowledge
- Office suite: package of multiple office tools

### 1.6 English

- Knowledge of the English language to fulfill the responsibilities of the position

### 1.7 Security

- Comprehensive security plan and program management
- Risk analysis, physical and electronic security, people protection, transportation of funds, protection of financial entities and protection of buildings
- Knowledge of elements necessary for the implementation and activation of an evacuation and emergency plan, including knowledge of regulations and procedures necessary in emergency

### 1.8 Environmental sensitivity and sustainability

- Sustainable development objectives
- SRE: Current context, milestones, key concepts, and strategic management
- Elements and scope of the economic, social, and environmental dimension
- Management of operational risk in the social, environmental, and governance fields
- Sustainability reports
- Natural capital and the value chain

## II. Thematic Blocks by Knowledge Family

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## 2. Financial Markets and Products

— Understand the nature of financial intermediation, through knowledge of micro and macro aspects of the banking economy, markets in which a financial institution operates, products and services it offers, as well as the main characteristics of the banking business, sources of generation of income and expenses, and new players entering.

### 2.1 Applied economics and finance

- Microeconomics in banking
- Financial intermediaries (transaction costs and information asymmetries, coalitions to provide liquidity, coalitions to share information, delegated supervision)
- Coexistence of markets and intermediaries (reasons for the coexistence of markets and financial intermediaries, banking supervision and reputation, banking supervision and capitalization)
- Relationship between lenders and borrowers (asymmetric information, adverse selection, moral hazard, and costly verification, incomplete contracts, renegotiation, and heterogeneous debtors, as well as the role of guarantees)
- Credit rationing (concept and informational reasons for rationing)
- Banking regulation (justification for banking regulation, deposit insurance, resolution of insolvent banks, among others)
- Macroeconomic analysis linked to the banking sector

### 2.2 Financial markets

- Existing financial markets and instruments
- Characteristics; negotiation, contracting, and settlement rules; actors in different markets
- Types of markets: organized and unorganized markets, fixed and variable income, derivatives markets and currency markets, primary and secondary markets
- Public offerings
- Price formation in the different markets
- Integration with international markets

### 2.3 Financial products

- Typology of deposit, savings, and investment products; their operational, functional, and technical characteristics (current accounts and checks, savings banks, fixed terms, among others)
- Typology of credit products; their operational, functional, and technical characteristics (loans, credit cards, factoring, leasing, among others)
- Investments and repurchase agreements
- Guarantees (Mortgages, Pledges, Warrants, Bonds and Guarantees)
- Typology of services and payment instruments, their operational, functional and technical characteristics
- Other banking services

### 2.4 Financial intermediation

- Banking business
- Financial intermediation
- Banking book and trading book
- Margin for financial intermediation, margin for services and extraordinary margin
- Main income and financial expenses
- Active and passive rates
- Bank spread
- Fixed and variable rates

### 2.5 Fintechs and Bigtechs

- Technological revolution and digital transformation
- User experience
- Machine learning
- Blockchain
- Crypto assets
- Big data
- Cybersecurity
- Banking 4.0
- Digital payments
- Fintechs vs Bigtechs

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### 3. Quantitative Analysis

— Analyze data using financial, statistical, econometric and computer models and / or tools to identify the main strengths and weaknesses in terms of solvency, profitability, liquidity and level of risk exposure of a financial institution, its evolution over time and the comparison with peer entities and the market in general.

#### 3.1 Financial mathematics

- Simple and compound interest calculation. Simple and compound discount
- Calculation and valuation of income (Constant income: immediate, deferred, anticipated. Variable income. Fractional income)
- Temporal preference. Future value, present value, perpetuities, and fees
- Internal rate of return
- Value and methods of amortization for loans and debentures
- Techniques for valuation of financial assets: fixed income, variable income, and derivatives (bonds, equities, fixed and variable income, options, futures and swaps)

#### 3.2 Applied statistics

- Descriptive statistics
- Sample theory and statistical inference. Design and compilation of statistics
- Use of tools for statistical analysis
- Treatment and analysis of series
- Elimination of seasonal effects
- New data processing techniques (big data, data mining, business intelligence, etc.)

#### 3.3 Applied econometrics

- Traditional statistics (probability distributions, exploratory analysis, hypothesis testing)
- Classic models, such as linear regression, logistic regression, etc
- Experience in machine learning models using R or Python languages, applied to regression problems, classification problems (for example, random forest and boosting algorithms), clustering problems, time series and problems related to NLP (Natural Language Processing)
- Knowledge of Deep learning techniques (neural networks)

#### 3.4 Financial analysis

- Analysis of accounting statements of financial entities
- Trading book
- Banking book
- Intermediation margin, service margin, and extraordinary margin
- Leverage and capital structure
- Relationship between risk and return
- Evaluation of the liquidity, profitability, and solvency situation of a financial institution
- Asset quality analysis
- Analysis of liquidity and volatility ratios for liabilities
- Analysis of profitability ratios (profitability tree)
- Solvency analysis
- Analysis of ratios of an entity vs ratios of homogeneous groups (peer group)

#### 3.5 Data Analytics

- Extraction of information from structured data sources (text files, tables or Excel files) and unstructured data sources (images or unstructured text)
- Web scraping methods (obtaining data directly from a web)
- Management of traditional or structured databases (SQL) and unstructured (NoSQL) databases
- Technologies for data storage depending on the size, type of data, and purpose
- Reading and conversion of different formats (text files, Excel, Json, etc.), data grouping techniques to analyze different patterns, information conciliation between more than one data source, elimination of duplicate observations, detection of incorrect data, imputation of missing values, detection of outliers, and creation of new variables to analyze new relationships (feature engineering)

#### 3.6 Software packages for quantitative analysis and others

- SPSS (Statistical Package for the Social Sciences)
- R Project for Statistical Computing
- E-views
- SAS
- STATA
- MATLAB

## II. Thematic Blocks by Knowledge Family

## 4. International Standards of Regulation and Supervision

—Practice supervision based on existing international standards, allowing a better understanding of the approach and support of the regulatory and supervisory framework of the supervisory body, as well as the use of said standards as a reference and complementary input.

### 4.1 Basel I, II and III

- Basel I: regulatory capital, permanence requirement, loss-absorbing capacity, and bankruptcy protection
- Bailea II: Pillar I (quantitative capital requirements for credit, market, and operational risk), Pillar II (Supervision and qualitative review process, supervisor's approach), and Pillar III (Transparency and market disclosure requirements)
- Basel III: Capital conservation buffer, high-quality countercyclical capital buffer, leverage ratio, liquidity (LCR -Liquidity Coverage Ratio- and NSFR -Net Stable Funding Ratio-)

### 4.2 International supervisory standards

- Basic principles for effective banking supervision (Core principles) - evolution and current version
- Objectives, independence, powers, transparency, and cooperation
- Granting of licenses and structure
- Prudential regulation and requirements
- Continuous monitoring methods
- Consolidated supervision and cross-border supervision
- Financial Sector Assessment Program (FSAP): Methodology, purpose, and importance

### 4.3 Banking resolution standards

- Definition of bank resolution
- Bank resolution in the context of the financial safety net
- Alternative bank resolution schemes
- Asset and liability transfer method (good bank - bad bank)
- Bank resolution for systemic cases vs. non-systemic cases.
- Pillars of an effective bank resolution
- Principles of bank resolution
- Key attributes for an effective bank resolution regime
- Bank resolution experiences and lessons learned

### 4.4 Money laundering and terrorist financing prevention standards

- FATF and the 40 + 9 recommendations
- AML/CFT policies and coordination
- Money laundering and confiscation
- Financing of terrorism and financing of proliferation.
- Precautionary measures
- Transparency and final beneficiary of legal persons and other legal structures
- Powers and responsibilities of the competent authorities and other institutional measures
- International cooperation
- GAFISUD

### 4.5 Market conduct standards

- Guide for the dissemination of information on Pillar III
- Scope and implementation of the revised framework for Pillar III
- Guiding principles for disclosure by banks on Pillar III
- Presentation of disclosure requirements
- Format and frequency of disclosure of each requirement
- Risk management and RWA presentation
- Links between financial statements and regulatory exposures
- Risk information (credit, counterparty, securitization, market, operational, interest rate).
- Market conduct vis-à-vis the financial consumer:
  - Transparency in contracts.
  - Management of claims.
  - Empowerment of the consumer and market conduct.
  - Protection of the financial consumer.
  - Basic rights of the financial consumer.
  - Financial consumer service.

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## 4. International Standards of Regulation and Supervision

## II. Thematic Blocks by Knowledge Family

### 4.6 International auditing standards

- Conceptual framework of the International Standards on Auditing (ISA)
- International Auditing and Assurance Standards Board (IAASB)
- General principles governing auditing
- Nature and scope of the audit (vs. financial supervision)
- General objectives of the audit of the financial statements
- Audit documentation
- Fraud in the audit of financial statements
- Planning the audit of the financial statements
- Materiality in planning and conducting an audit
- Internal control and risk assessment
- Audit evidence
- External confirmations
- Specific items
- Analytical procedures
- Audit sampling
- Audit of accounting estimates
- Related parties
- Written manifestations
- Audits of the group's financial statements
- Internal audit
- Audit Opinion

### 4.7 International accounting standards

- International Financial Accounting Standards (IFRS)
- The role of IFRS in the International Financial Architecture (AFI) and its link with other codes and regulations
- Adoption of IFRS: experiences and lessons learned
- Main areas of impact for financial entities
- Entity's focus and primary nature of the consolidated financial statements
- Treatment of financial trusts. Mutual funds
- Recognition and measurement of financial assets
- Use of amortized cost and fair value as measurement bases
- Portfolio impairment: expected credit loss model
- Recognition and measurement of financial liabilities. Information in notes on financial assets, financial liabilities, and related risks
- Distinction between liabilities and equity
- Other relevant aspects (e.g. deferred taxes, business combination, changes in estimates and errors, etc.)



## 5. Risk Management and Solvency

—Distinguish and evaluate the business model, activities and / or significant business lines, quality of corporate governance and risk management, internal control and the adequacy of capital and liquidity of the supervised entity, in order to carry out the tasks of supervision related to the components of the risk matrix of the supervisory body.

### 5.1 Business model

- Nature of the banking business
- Information asymmetry and financial structure
- Banking industry and its relationship with the national economy
- Business models in the banking industry
- Analysis of the robustness of the business model of a banking entity: definition of strategy, choice of the value chain, mapping of the strategic processes of the supervised entity, evaluation of the competitive position, diversification and stability of the sources of generation of net income
- Structure and organization of banking entities
- Risk-based structure and business unit
- Global Systemically Important Banks (G-SIB)
- Related regulatory framework

### 5.2 Corporate governance - Conceptual aspects

- Corporate governance concepts and background
- Principles of corporate governance for financial entities
- Responsibilities of the Board of Directors (BOD)
- Qualifications and composition of the Board
- Board practices and structure
- Senior management
- Risk management function
- Risk identification, monitoring, and control
- Risk communication

- Compliance
- Internal audit
- Remuneration and incentive system
- Disclosure and transparency
- The role of the supervisor
- Related regulatory framework

### 5.3 Corporate governance - Assessment

- Key aspects for the supervision of corporate governance
- Assessment of the quality of corporate governance
- Case studies

### 5.4 Comprehensive risk management

- Background of risk management in the financial industry
- Framework and essential elements for proper risk management (strategies, policies, processes, organizational structure, information systems, methodologies/models, capital self-assessment -ICAAP- and transparency)
- Core Principles and risk management. Basel I, II, and III and Risk Management
- Risk culture
- Risk appetite, tolerance, and capacity
- Risk profile vs. risk appetite
- Risk Appetite Statement (RAS) and Risk Appetite Framework (RAF)
- Independence, responsibilities, attributions, and capacities of the Risk Unit and the Risk Committee

- New products and services
- Reporting and aggregation of risks
- Related regulatory framework
- Key aspects for comprehensive risk management supervision

### 5.5 Credit risk - Qualitative aspects

- Definition of credit risk and credit risk factors
- Principles and sound practices for credit risk management
- Elements of the credit risk management framework: strategies, policies, processes and procedures, organizational structure, risk measurement and evaluation methodologies, information and reporting systems
- Roles and responsibilities of the Board of Directors, Committees and Senior Management
- Roles and responsibilities of the defense lines: business and operational areas (1st line), risks, compliance and other control areas (2nd line), and internal audit (3rd line)
- Stages and procedures for evaluating credit risk quantification models involved in the credit cycle: approval, monitoring, and collection; of the different segments and/or business lines
- Counterparty risk
- Country risk
- Large exposures risk
- Related regulatory framework

## II. Thematic Blocks by Knowledge Family





## 5. Risk Management and Solvency

## II. Thematic Blocks by Knowledge Family

### 5.6 Credit risk - Measurement and assessment

–Analysis of the loan portfolio:

- ◇ Vintage analysis
- ◇ Transition matrices
- ◇ Roll Rates
- ◇ Waterfalls
- ◇ Other models

– Probability default (PD), loss given default (LGD) and exposure (EAD):

- ◇ Estimated probability of default (PD)
- ◇ Estimated loss given default (LGD)
- ◇ Estimation of credit conversion factors (CCF)
- ◇ Determination of expected losses

– Models and methodologies for quantification and analysis:

- ◇ Expert models
- ◇ Parametric models
- ◇ Conditional models
- ◇ Elaboration, calibration, and management of credit risk models
- ◇ IRB approach to credit risk management and portfolio classification category
- ◇ Methodology to estimate the concentration of credits

–Evaluation of the management of credit lines:

- ◇ Database design and information analysis strategies
- ◇ Design of individual limits and by portfolio: evaluation of advantages and disadvantages
- ◇ Regulatory strategies to mitigate credit concentration

### 5.7 Credit risk - Stress testing, IA role, and risk appetite

–Preparation of stress scenarios to quantify, control, and monitor credit risk

–Internal Audit work in credit risk management: quality of information and review of internal models

–Assessment of appetite and credit risk limits:

- ◇ Definition of risk appetite
- ◇ Design of indicators and limits for credit risk
- ◇ Relationship between risk capacity, risk appetite, and internal credit risk limits
- ◇ Methodology to estimate credit risk thresholds limits and risk appetite

### 5.8 Liquidity risk - Qualitative aspects

–Definition of funding liquidity risk and market liquidity. Liquidity risk factors

–Principles for proper management and supervision of liquidity risk

–Elements of the liquidity risk management framework: strategies, policies, processes and procedures, organizational structure, risk measurement and evaluation methodologies, information and reporting systems

–Roles and responsibilities of the Board of Directors, Committees, and Senior Management

–Roles and responsibilities of the defense lines: business and operational areas (1st line), risks, compliance and other control areas (2nd line) and internal audit (3rd line)

–Related regulatory framework

### 5.9 Liquidity risk - Measurement and assessment

–Methodologies to quantify and manage liquidity risk:

- ◇ Retiro en riesgo
- ◇ Retirement at risk
- ◇ Liquidity at risk
- ◇ Cash flow at risk
- ◇ Liquidity fund transfer prices
- ◇ Development and management of models to measure liquidity risk and early warning indicators to control and monitor liquidity risk

–Methodologies:

- ◇ Structural liquidity indicators due to volatility of funding sources
- ◇ Liquidity indicators for concentration risk in funding sources: Herfindahl Hirschman, Entropia, Hannah - Kay
- ◇ Expected liquidity models by time bands
- ◇ Value at Risk Models for Liquidity (VaR for liquidity)
- ◇ Basel III liquidity coverage ratio (LCR)

–Key aspects for the supervision of liquidity risk and for the assessment of liquidity risk management.



## 5. Risk Management and Solvency

## II. Thematic Blocks by Knowledge Family

### 5.10 Liquidity risk - Stress testing, IA role, contingency plan, and risk appetite

–Definition of stress scenarios to quantify, control, and monitor liquidity risk

–Internal Audit work in liquidity risk management: quality of information and review of internal models

–Contingency Funding Plan:

- ◇ Identification of risks and triggers
- ◇ Contingency measures for each alert level
- ◇ Roles and responsibilities
- ◇ Monitoring
- ◇ Calibration of the plan

–Assessment of the appetite, tolerance, and limits to liquidity risk:

- ◇ Definition of risk appetite
- ◇ Design of indicators and limits for liquidity risk
- ◇ Connection among liquidity risk capacity, risk appetite, and internal risk limits
- ◇ Methodology to estimate the liquidity risk thresholds for limits and risk appetite

–Relationship between credit, liquidity, and market risks

–Determination (fundamentals and methodology) of transfer prices

–Management of liquidity risk in financial groups and conglomerates, local, and regional

### 5.11 Market risk - Qualitative aspects

–Definition of market risk and sources of market risk (bonds, stocks, foreign currencies, and commodities)

–Principles and sound practices for managing market risks

–Principles for managing and supervising interest rate risk in the banking book

–Elements of the market risk management framework: strategies, policies, processes and procedures, organizational structure, risk measurement and evaluation methodologies, information and reporting systems

–Roles and responsibilities of the Board of Directors, Committees, and Senior Management

–Roles and responsibilities of the defense lines: business and operational areas (1st line), risks, compliance and other control areas (2nd line) and internal audit (3rd line)

–Related regulatory framework

### 5.12 Market risk - Measurement and assessment

–Methodologies and models to measure market risks, and early warning indicators for their control and monitoring:

- ◇ Value at Risk (VaR) and Earnings at Risk (EaR) models for market risk.
- ◇ Value at Risk (VaR) models for exchange rate risk. Foreign currency positions: overall net position, overall gross position, and shortcut position.
- ◇ Value at Risk (VaR) models for interest rate risk.
- ◇ Elaboration of methodologies to supervise the interest rate risk in the banking book.

–Methodologies:

- ◇ Models to calculate the sensitivity of the financial margin
- ◇ Models to calculate the sensitivity of the equity value
- ◇ Duration and modified duration models
- ◇ Development of methodologies to optimize portfolios (Markowitz portfolio theory)
- ◇ Key aspects for market risk supervision and for the assessment of market risk management

### 5.13 Market risk - Stress testing, IA role, and risk appetite

–Definition of stress scenarios to quantify, control, and monitor market risk

–Internal Audit work in market risk management: quality of information and review of internal models

–Assessment of appetite and limits for market risk:

- ◇ Definition of risk appetite
- ◇ Design of indicators and limits for market risk, interest rate, and exchange rate
- ◇ Relationship between risk capacity, risk appetite, and internal limits of market risk, interest rate, and exchange rate
- ◇ Methodology to estimate thresholds limits and risk appetite for market, interest rate, and exchange rate risks

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## 5. Risk Management and Solvency

## II. Thematic Blocks by Knowledge Family

### 5.14 Operational risk - Qualitative aspects

- Definition of operational risk and risk factors (processes, people, systems, and external events)
- Principles for an adequate management of operational risk
- Elements of the operational risk management framework: policies, processes and procedures, organizational structure, risk measurement and evaluation methodologies, information and reporting systems.
- Roles and responsibilities of the Board of Directors, Committees, and Senior Management
- Roles and responsibilities of the defense lines: business and operational areas (1st line), Risk Unit, Compliance and other control areas (2nd line), and internal audit (3rd line)
- Related regulatory framework

### 5.15 Operational risk - Measurement and assessment

- Conceptual and methodological framework for operational risk management
- Loss event categories due to operational risk
- Business lines (level 1, 2, and 3)
- Important aspects for the construction of self-assessment matrices for operational risk
- Incident databases:
  - ◊ Collection of incidents
  - ◊ Registration and maintenance of the incident database
  - ◊ Management of incidents

Key indicators (KRI) for operational risk management:

- Design by KRI

- ◊ Administration of KRI
  - ◊ Monitoring of risk profile and risk appetite
  - ◊ KRI report
- Models or methodologies to quantify operational risk.
- ◊ -Basic indicator method
  - ◊ Standard method
  - ◊ Advanced Models (AMA)

### 5.16 Operational risk - Business continuity management

- Best practices for business continuity DRII (Disaster Recovery Institute)
- Governance framework for business continuity, roles, and responsibilities
- Methodology for the construction of the business continuity plan:
  - ◊ Project planning
  - ◊ Risk analysis
  - ◊ Business impact analysis (BIA)
  - ◊ Analysis and selection of strategies
  - ◊ Design of continuity plans
  - ◊ Testing and maintenance, as well as audit of the business continuity plan
- Related regulatory framework.

### 5.17 Operational risk - AI role and risk appetite

- Internal Audit work in operational risk management: quality of information and review of internal methodologies and models.

- Assessment of appetite and limits for operational risk:

- ◊ Design of indicators and limits for operational risk
- ◊ Relationship between risk capacity, risk appetite, and internal limits for operational risk
- ◊ Methodology to estimate the operational risk thresholds limits and risk appetite

### 5.18 Operational risk - Information security management (IS):

- Information Security Management Framework
- Responsibilities in Information Security Management
- Policies for Information Security Management
- Risks associated with Information Security
- Interaction of Information Security with operational risk
- Classification of information assets
- Types of covered assets (software, infrastructure, providers, social networks, mobile devices, electronic channels, human resources, cloud computing, etc.)
- Dimensions of the information to be classified, criteria, and tools to be used
- Threats catalog for each type of analyzed asset
- Benchmark mitigants guide for each threat
- Consistency of IT risks with the BIA, the Contingency Plan, and Business Continuity Management
- Related regulatory framework

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## 5. Risk Management and Solvency

## II. Thematic Blocks by Knowledge Family

### 5.19 Information technology (IT) risk

- International standards
- Relationship between information assets and Business Processes
- IT governance and technology risk management
- Elements of the IT risk management framework: strategies, policies, processes and procedures, organizational structure, risk measurement and evaluation methodologies, information and reporting systems
- Roles and responsibilities of the Board of Directors, Committees, and Senior Management
- Roles and responsibilities of the defense lines: business and operational areas (1st line), risks, compliance and other control areas (2nd line), and internal audit (3rd line)
- Technological risk analysis:
  - ◊Selection of the methodology to be applied
- Technological risk management:
  - ◊Results report
  - ◊-Support for the variables used
  - ◊-Consolidations by process, asset, and threat
  - ◊-Action plans: selection and prioritization of responses to technological risks
  - ◊-Integration with operational risk
  - ◊-Common difficulties in managing technological risk.
  - ◊-Continuous improvement
  - ◊-Performance indicators of the technological risk management process
- Related regulatory framework

### 5.20 Money laundering and terrorist financing risk - Qualitative aspects

- Essential elements of solid a AML/CFT and PWMD risk management
  - Risk assessment, understanding, management and mitigation (Risk assessment and understanding. Adequate governance mechanisms. Three lines of defense. Transaction monitoring system)
  - Customer acceptance policy
  - Identification, verification, and preparation of the risk profile of clients and beneficial owners
  - Continuous monitoring
  - Information management (Record keeping. Information updating. Provision of information to supervisors)
  - Suspicious transaction reporting and asset blocking
  - PBC/TF at group level and in a cross-border context
  - Global process for customer risk management
  - Risk assessment and management
  - Policies and procedures PBC/FT on a consolidated scale
  - Information exchange within the group
  - Mixed financial groups
  - Role of supervisors
  - Related regulatory framework
- ### 5.21 Money laundering and terrorist financing risk - Evaluation
- Key aspects for the supervision of money laundering, financing of terrorism, and proliferation of weapons of mass destruction risk

- Risk factors: customers, products, channels, and geographic location
- Assessment of the quality of risk management of money laundering, financing of terrorism, and proliferation of weapons of mass destruction
- Case studies

### 5.22 Strategic risk

- Definitions: strategic risk. Business strategy versus strategic risk. Corporate strategy. Strategic planning and strategic risk
- International and Basel standards for strategic risk management
- Relationship between strategic risk and other risks
- Strategic risk factors
- Strategic risk approaches
- Cases studies of the materialization of strategic risk events
- Strategic risk management framework (policies, processes and procedures, organizational structure, information systems, risk identification, assessment and response methodology, solvency self-assessment, transparency)
- Strategic risk and risk appetite statement
- Strategic plan and alignment with strategic risk management
- Alignment of performance management with strategic risk
- Methodology to identify risk factors related to strategic objectives
- Related regulatory framework
- Key aspects for strategic risk supervision

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## 5. Risk Management and Solvency

## II. Thematic Blocks by Knowledge Family

### 5.23 Reputational risk

- Definition of reputational risk
- Relationship between reputational risk and other risks (risk of regulatory compliance, risk of conduct, and risk of money laundering and terrorist financing)
- Classification and typologies of reputational risk
- Materialization of reputational risk events
- Elements of the reputational risk management framework
- Basel and reputational risk management
- Capital for reputational risk and solvency self-assessment
- Transparency and disclosure of reputational risk information
- Elements of an adequate reputational risk management framework (strategies, policies, processes and procedures, organizational structure, information systems, tools, methodologies and models -indicators for reputational risk management, reputational risk matrix, etc.-)
- Transparency on reputational risk management towards stakeholders
- Framework for online reputational risk management
- Related regulatory framework
- Key aspects for the supervision of reputational risk and for the assessment of reputational risk management

### 5.24 Legal risk

- Definition of legal risk
- Legal risk factors
- Classification of legal risk. Parameters for its ranking
- Legal risk vs regulatory compliance risk
- Legal risk and its relationship with operational risk
- Basel and legal risk management
- Capital for legal risk
- Elements of an adequate legal risk management framework (policies, processes, organizational structure, information systems, methodologies and tools, transparency)
- Characterization of loss events due to legal risk
- Development of indicators to measure legal risk
- Legal risk appetite and legal risk profile of an entity - Qualitative statements and quantitative measures
- Related regulatory framework
- Key aspects for the supervision of legal risk and for the assessment of legal risk management

### 5.25 Model risk

- Definition
- Model risk sources and risk factors
- Model risk management framework (policies, processes, methodologies, among others)
- Best practices for the development and implementation of a model
- Responsibilities for oversight of models and integration

### –Validation framework:

- ◇ Evaluation of conceptual/methodological soundness
- ◇ Permanent monitoring of the models (verification of processes and comparative analysis)
- ◇ Analysis of results (backtesting of key internal parameters)
- ◇ Justification, development, and application by the owners and users of the models
- ◇ Examination and independent validation of the inputs, assumptions, modeling methodologies, and the results of the model

### –Related regulatory framework

- Key aspects for model risk supervision and for the assessment of model risk management

### 5.26 Internal Control

- Integrated internal control framework
- COSO I, COSO II ERM, and COSO III model
- Principles
- Control environment
- Risks evaluation
- Control activities
- Information and communication
- Monitoring activities
- Related regulatory framework
- Key aspects for the supervision of internal controls and for the assessment of the quality of internal controls

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## 5. Risk Management and Solvency

## II. Thematic Blocks by Knowledge Family

### 5.27 Capital and solvency - Conceptual aspects

- Equity capital, regulatory capital and economic capital
- Quality and level of capital
- Tier 1 ordinary capital, Tier 1 additional capital, and Tier 2 capital
- G-SIBs and Capital Buffers
- Capital with the ability to absorb losses at the point of non-viability
- Output floor
- Leverage ratio
- Complementary requirements of the second pillar
- Stress and capital tests
- Capital planning and management (within the framework of financial sustainability)
- Measurement and models to calculate economic capital
- RAROC and RORAC measures
- Internal capital adequacy assessment process (ICAAP)
- Capital adequacy assessment report (IAC)
- Related regulatory framework

### 5.28 Capital and solvency - Assessment

- Key aspects for the supervision of capital and solvency
- Valuation of solvency and capital adequacy
- Case studies

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## 6. Comprehensive Regulation and Supervision

Implement the supervision framework so that the results of said work reflect the level of supervisory risk of the entity and the trend of said level, based on sensitivity analysis / scenarios; and with this, the supervision strategy, the respective corrective measures or any other required supervisory action can be determined.

### 6.1 Regulatory and supervisory techniques

- Policies and procedures for on-site, off-site, and consolidated supervision
- Methodology for continuously determining and evaluating the nature, impact and scope of: the risks to which banks and banking groups are exposed to, including the risks posed by the entities that belong to the group; and the risks that banks and banking groups pose to the security and solvency of the banking system
- Information analysis to regularly assess the safety and solvency of banks, analyze significant risks, and identify the necessary corrective measures and supervisory actions (prudential reports, statistics, data on the entities linked to the bank, as well as information in the public domain)
- Supervisory techniques and tools (analysis of accounts and financial statements; analysis of the business model; horizontal reviews carried out by peer institutions; examinations of the results of stress tests carried out by the bank; and analysis of corporate governance, including the risk management and internal control systems)
- Communication of findings to the bank and demand for the adoption of corrective measures
- Coordination and combination with other relevant authorities
- Communication to the bank of on-site and off-site analysis results through reports or meetings with management

### 6.2 Licensing and authorizations

- Criteria for granting licenses and rejection of applications
- Permitted activities

- Authorization process (evaluation of the ownership structure and good governance of the bank and group to which it belongs, robustness of the business model, strategic and operational plan, internal controls, risk management, and expected evolution of the financial situation)
- Suitability and suitability of members of the management body and senior managers
- Opening of subsidiaries and branches of local banks and foreign banks
- Significant transfer of ownership of a banking entity
- Related regulatory framework

### 6.3 Off-site supervision

- Objective of off-site supervision
- Off-site supervision within the RBS framework
- Information reception and processing
- Analysis and monitoring (with a prospective approach)
- Early warning system
- Results of off-site supervision and impact on the risk matrix.
- Off-site supervision reports
- Preparation and/or updating of the risk profile and supervision strategy
- Work papers

### 6.4 On-site supervision

- Objective of on-site supervision
- On-site supervision within the RBS framework
- Planning the inspection visit

- Execution of the inspection
- General techniques for on-site supervision (information review, interviews with banking company personnel, data auditing, transactional tests, among others.)
- Evaluation, formulation of preliminary findings, and closing of the inspection
- Inspection results, prioritization and impact on the risk matrix
- On-site supervision reports
- Preparation and/or updating the risk profile and supervision strategy.

### 6.5 Risk-based supervision (RBS)

- Risk Based Supervision (RBS) vs. Traditional Supervision
- Supervisor's approach
- Risks present in supervision
- The RBS within the framework of the Basel Basic Principles for Effective Banking Supervision (BCP)
- Conceptual aspects of the RBS implemented by the supervisory body (general scheme, guiding principles, sources of information, and types of evaluations to carry out supervisory valuations)
- Supervisory risk matrix (by risks, by business line, by significant activity, by audit cycle, etc.)
- Risk matrix dimensions: inherent risk, quality risk management, and residual risk.
- Inspector's risk profile and Systemic importance
- Supervisory cycle and proportionality criterion (approach, components, use to organize and prioritize supervision resources)
- Risk profile of an entity and tailored supervision strategy

## II. Thematic Blocks by Knowledge Family

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## 6. Comprehensive Regulation and Supervision

## II. Thematic Blocks by Knowledge Family

### 6.6 Problem entities, corrective measures, and resolution

- Supervisory actions within the RBS framework
- Principles for the adoption of corrective measures (proportionality, escalation, early action, supervisory judgment, technical use of discretionary power, consistency, honest balances, internal governance of decisions)
- Techniques for identifying problem entities (on-site and off-site supervision with a prospective approach, resilience analysis, risk matrix, macroprudential tools, use of external information sources)
- Corrective measures escalation process (approach, technical, and legal aspects)
- Evaluation, approval, and monitoring of plans
- Breaches of plans
- Sanctions and resources
- Appointment of an advisor/administrator/overseer or judicial controller (grounds, powers, period, and reports)
- Taking administrative and operational control of the entity
- Appointment and term of the interim administrator
- Reorganization of the entity
- Approval of the reorganization
- Restructuring of the entity to safeguard credit and bank deposits
- Revocation of the authorization to operate, dissolution, and liquidation of financial entities

### 6.7 Consolidated supervision

- General aspects and objectives of consolidated supervision
- Consolidated supervision under RBS
- Relationship between home and host supervisors (information exchange and cooperation)
- Banking groups and financial conglomerates
- Consolidated on-site and off-site supervision
- Group or conglomerate inspection visit
- Cross-border inspection visit
- Holding meetings with other inspectors involved with the group or conglomerate
- Receipt and processing of information from the group or conglomerate
- Analysis and monitoring the risk profile of the group or conglomerate
- Consolidated supervision reports
- Cross-border inspection visit reports
- Results of the visit and impact on the risk matrix
- Preparation and/or updating of the risk profile and supervision strategy
- Work papers

### 6.8 Stress testing

- Definition of stress tests.
- Use and integration of stress testing in risk management.
- Methodologies and selection of scenarios.

- Minimum conditions for an effective application and supervision of stress tests
- Aggregate stress testing for the financial system (advantages and challenges of aggregate stress tests, corporate governance, level of aggregation, aggregation process, specification of scenarios and models, estimation of results)
- Related regulatory framework
- Scope of stress testing
- Role of corporate governance in a stress testing program
- Stress Testing Program Policies and Procedures
- Stress testing methodology
- Measurement and evaluation of results
- Review and correction of the stress testing program

### 6.9 Financial crisis management

- Definition of a crisis
- Factors behind a financial crisis
- Roles and responsibilities for managing financial crises
- Instruments used in crisis management
- Systemic banking crises
- Phases of systemic crisis management
- Principles for systemic crisis management
- Crisis management - how long to try?
- Financing to solve crises
- Coordination between national and international authorities
- Case studies

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## 6. Comprehensive Regulation and Supervision

## II. Thematic Blocks by Knowledge Family

### 6.10 Macroprudential regulation and supervision

- Definition and scope of macroprudential regulation and supervision.
- Fundamentals of macroprudential supervision.
- Institutional structure and framework for macroprudential supervision. Mandate, powers, and responsibilities. Role of the supervisory and regulatory bodies.
- Financial stability. Concept and indicators.
- Identification and monitoring of systemic risk.
- Indicators and stress tests.
- Macroprudential instruments: countercyclical tools, capital controls.
- Interrelation between micro and macroprudential policies.
- Interaction with other policies (monetary and exchange policy, fiscal, and tax policy).
- Identification of systemically important financial institutions (SIFIs). Criteria for identifying SIFIs and evaluation techniques for their identification.
- SIFIs treatment.
- Risks of implementing SupTech (cyber risks, data security risks, operational risks, information privacy risks, less focus on qualitative aspects, etc.).
- Related regulatory framework.
- Case studies

### 6.11 Regtech and suptech

- Evolution of financial, regulatory, and supervisory technology.
- RegTech and SupTech concepts.
- RegTech and SupTech benefits.
- Impact of RegTech and SupTech on the financial industry.
- Overview of key technologies for RegTech and SupTech (Artificial Intelligence, Big Data, Machine Learning, Cloud Computing, among others).
- Digital regulatory report.
- Main challenges facing regulatory and supervisory bodies.



## 7. Organizational and Leadership Skills

—Develop and / or strengthen the skills necessary for the supervisor to fulfill their mandates and properly implement the supervision framework, in accordance with their culture and values, considering their position, functions and specializations.

## II. Thematic Blocks by Knowledge Family

### 7.1 Communication

- Guidelines for oral and written communication
- Active listening
- Type of questions
- Effective communication skills
- New digital communication formats, guidelines, media

### 7.2 Teamwork

- Team vs group
- Composition, collaboration, and trust
- Communication and meetings
- Conflict management
- Team roles
- Team motivation
- Team in virtual environments

### 7.3 Planification and organization

- Strategic planning
- Formulation of objectives
- Tactics and strategies
- SWOT analysis
- Action plans
- Activity management
- Time organization and self-management

### 7.4 Quality of service

- Quality management
- Service chain
- Internal and external user-centered approach (benefits and risks)
- Quality-focused collaboration
- Quality of service in virtual environments
- Quality guidelines

### 7.5 Process management

- Fundamentals of process management
- Modeling of processes under a quality approach (Input-Activities-Output)
- Monitoring tools
- Process map/diagram
- Identification of key processes
- Continuous improvement
- Digital monitoring tools
- Innovation

### 7.6 Project management

- Planning methods and techniques.
- Activity time scheduling.
- Resource distribution and monitoring.
- Control and fulfillment of project milestones (term, cost/ profitability, quality).

### 7.7 Influence and negotiation

- Negotiation strategies
- Types of negotiators
- Phases of a negotiation
- Communication in negotiations
- Alternative plans
- NLP
- Agreements
- Personal negotiation style
- Foundations of interpersonal influence
- Technical and moral suitability as a key factor in interpersonal influence

### 7.8 Adaptability and change management

- Methodologies and forces that support leading and promoting cultural change in a specific direction.
- Effective communication tools that allow messages to be transmitted internally.
- Resistance to change: nature and tools to neutralize it

### 7.9 Vision and strategic actions

- Ability to propose alternative views and solutions to changing contexts
- Analysis of the internal and external context
- Selection of critical information
- Critical situational analysis, strategies for solving problems with less impact

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## 7. Organizational and Leadership Skills

## II. Thematic Blocks by Knowledge Family

### 7.10 Crisis management

- Managing uncertainty
- Estimation of the scope, limits, and solutions
- Action protocols
- Spokesperson
- Emotions
- Strategies for managing stress and anxiety
- Control zone and out of zone
- Relaxation techniques

- Delegation of tasks
- Mentoring of collaborators and performance management
- Positive feedback
- Leadership in virtual environments
- Communication tools, pros and cons for leadership

### 7.11 Knowledge management

- Information management.
- Criteria.
- Data collection techniques, handling of various sources.
- Content validation.
- Archiving, support, and publishing tools.
- Communication and socialization of knowledge.

### 7.12 Leadership and human capital management

- Leadership tools
- Types of leadership
- Type of personal leadership
- Differences between boss and leader
- Motivation of collaborators

Knowledge family	Level of Professional Development																												
	Basic											Intermediate											Advanced						
Transversal knowledge	Financial system and financial safety net	Legislation, regulation, and organization of the supervisory body	Specific computer applications used by the supervisory body	Culture and values of the supervisory body	Office tools	English	Security	Environmental sensitivity and sustainability																					
Financial markets and products	Applied economics and finance	Financial markets	Financial products	Financial intermediation								Fintechs and Bigtechs																	
Quantitative analysis	Financial mathematics	Financial analysis	Software packages for quantitative analysis									Applied statistics	Applied econometrics												Data analytics				
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Risk management and solvency	Business model	Corporate governance - Conceptual aspects	Comprehensive risk management	Credit risk - Qualitative aspects	Liquidity risk - Qualitative aspects	Market risk - Qualitative aspects	Operational risk - Qualitative aspects	Information technology risk	Money laundering and terrorist financing risk - Qualitative aspects	Internal control	Capital and solvency - Conceptual aspects	Corporate governance - Assessment	Model risk	Strategic risk	Reputational risk	Legal risk	Credit risk - Measurement and assessment	Liquidity risk - Measurement and assessment	Market risk - Measurement and assessment	Operational risk - Measurement and assessment	Operational risk - Business continuity management	Operational risk - Information security management (IS)	Money laundering and terrorist financing risk - Assessment	Capital and solvency - Assessment	Credit risk - ST, role of IA, and RA	Liquidity risk - ST, role of IA, and RA	Market risk - ST, role of IA, and RA	Operational risk - Role of IA and RA	
Comprehensive regulation and supervision	Regulatory techniques	Licensing and authorizations	Off-site supervision	On-site supervision	Risk-based supervision (RBS)							Consolidated supervision	Stress testing	Macroprudential regulation and supervision											Financial crisis management	Problem entities, corrective measures, and resolution	Regtech and supotech		
Organizational and leadership skills	Communication	Teamwork	Planning and organization	Quality of service								Project management	Influence and negotiation	Adaptability and change management	Leadership and human capital management	Process management									Vision and strategic actions	Crisis management	Knowledge management		

Knowledge families	Number of thematic blocks
Transversal knowledge	8
Financial markets and products	5
Quantitative analysis	6

International regulatory and supervisory standards	7
Risk management and solvency	28
Comprehensive regulation and supervision	11
Organizational and leadership skills	12

Total Thematic Blocks: 77

“Generalist” Path

Knowledge family	Level of Professional Development																												
	Basic											Intermediate											Advanced						
Transversal knowledge	Financial system and financial safety net	Legislation, regulation, and organization of the supervisory body	Specific computer applications used by the supervisory body	Culture and values of the supervisory body	Office tools	English	Security	Environmental sensitivity and sustainability																					
Financial markets and products	Applied economics and finance	Financial markets	Financial products	Financial intermediation								Fintechs and Bigtechs																	
Quantitative analysis	Financial mathematics	Financial analysis	Software packages for quantitative analysis									Applied statistics	Applied econometrics													Data analytics			
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Comprehensive regulation and supervision	Regulatory techniques	Licensing and authorizations	Off-site supervision	On-site supervision	Risk-based supervision (RBS)							Consolidated supervision	Stress testing	Macroprudential regulation and supervision											Financial crisis management	Problem entities, corrective measures, and resolution	Regtech and suptech		
Organizational and leadership skills	Communication	Teamwork	Planning and organization	Quality of service								Project management	Influence and negotiation	Adaptability and change management	Leadership and human capital management	Process management									Vision and strategic actions	Crisis management	Knowledge management		

Knowledge families	Number of thematic blocks
Transversal knowledge	8
Financial markets and products	5
Quantitative analysis	2

International regulatory and supervisory standards	7
Risk management and solvency	17
Comprehensive regulation and supervision	11
Organizational and leadership skills	12

Total Thematic Blocks: 62

“Credit Risk” Path

Knowledge family	Level of Professional Development																												
	Basic											Intermediate											Advanced						
Transversal knowledge	Financial system and financial safety net	Legislation, regulation, and organization of the supervisory body	Specific computer applications used by the supervisory body	Culture and values of the supervisory body	Office tools	English	Security	Environmental sensitivity and sustainability																					
Financial markets and products	Applied economics and finance	Financial markets	Financial products	Financial intermediation								Fintechs and Bigtechs																	
Quantitative analysis	Financial mathematics	Financial analysis	Software packages for quantitative analysis									Applied statistics	Applied econometrics												Data analytics				
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Risk management and solvency	Business model	Corporate governance - Conceptual aspects	Comprehensive risk management	Credit risk - Qualitative aspects	Liquidity risk - Qualitative aspects	Market risk - Qualitative aspects	Operational risk - Qualitative aspects	Information technology risk	Money laundering and terrorist financing risk - Qualitative aspects	Internal control	Capital and solvency - Conceptual aspects	Corporate governance - Assessment	Model risk	Strategic risk	Reputational risk	Legal risk	Credit risk - Measurement and assessment	Liquidity risk - Measurement and assessment	Market risk - Measurement and assessment	Operational risk - Measurement and assessment	Operational risk - Business continuity management	Operational risk - Information security management (IS)	Money laundering and terrorist financing risk - Assessment	Capital and solvency - Assessment	Credit risk - ST, role of IA, and RA	Liquidity risk - ST, role of IA, and RA	Market risk - ST, role of IA, and RA	Operational risk - Role of IA and RA	
Comprehensive regulation and supervision	Regulatory techniques	Licensing and authorizations	Off-site supervision	On-site supervision	Risk-based supervision (RBS)							Consolidated supervision	Stress testing	Macroprudential regulation and supervision											Financial crisis management	Problem entities, corrective measures, and resolution	Regtech and suptech		
Organizational and leadership skills	Communication	Teamwork	Planning and organization	Quality of service								Project management	Influence and negotiation	Adaptability and change management	Leadership and human capital management	Process management									Vision and strategic actions	Crisis management	Knowledge management		

Knowledge families	Number of thematic blocks
Transversal knowledge	8
Financial markets and products	3
Quantitative analysis	5

International regulatory and supervisory standards	4
Risk management and solvency	9
Comprehensive regulation and supervision	9
Organizational and leadership skills	12

Total Thematic Blocks: 50

“Market, Liquidity and Interest Rate Risk” Path

Knowledge family	Level of Professional Development																												
	Basic											Intermediate											Advanced						
Transversal knowledge	Financial system and financial safety net	Legislation, regulation, and organization of the supervisory body	Specific computer applications used by the supervisory body	Culture and values of the supervisory body	Office tools	English	Security	Environmental sensitivity and sustainability																					
Financial markets and products	Applied economics and finance	Financial markets	Financial products	Financial intermediation								Fintechs and Bigtechs																	
Quantitative analysis	Financial mathematics	Financial analysis	Software packages for quantitative analysis									Applied statistics	Applied econometrics												Data analytics				
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Comprehensive regulation and supervision	Regulatory techniques	Licensing and authorizations	Off-site supervision	On-site supervision	Risk-based supervision (RBS)							Consolidated supervision	Stress testing	Macroprudential regulation and supervision											Financial crisis management	Problem entities, corrective measures, and resolution	Regtech and suptech		
Organizational and leadership skills	Communication	Teamwork	Planning and organization	Quality of service								Project management	Influence and negotiation	Adaptability and change management	Leadership and human capital management	Process management									Vision and strategic actions	Crisis management	Knowledge management		

Knowledge families	Number of thematic blocks
Transversal knowledge	8
Financial markets and products	3
Quantitative analysis	6

International regulatory and supervisory standards	4
Risk management and solvency	12
Comprehensive regulation and supervision	7
Organizational and leadership skills	7

Total Thematic Blocks: 47

"Operational Risk" Path

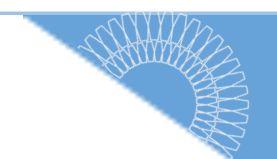
Knowledge family	Level of Professional Development																												
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Organizational and leadership skills	Communication	Teamwork	Planning and organization	Quality of service								Project management	Influence and negotiation	Adaptability and change management	Leadership and human capital management	Process management									Vision and strategic actions	Crisis management	Knowledge management		

Knowledge families	Number of thematic blocks
Transversal knowledge	8
Financial markets and products	3
Quantitative analysis	2

International regulatory and supervisory standards	4
Risk management and solvency	9
Comprehensive regulation and supervision	9
Organizational and leadership skills	12

Total Thematic Blocks: 47





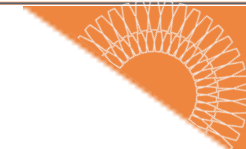
"Information Technology Risk" Path

Knowledge family	Level of Professional Development																											
	Basic											Intermediate											Advanced					
Transversal knowledge	Financial system and financial safety net	Legislation, regulation, and organization of the supervisory body	Specific computer applications used by the supervisory body	Culture and values of the supervisory body	Office tools	English	Security	Environmental sensitivity and sustainability																				
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Comprehensive regulation and supervision	Regulatory techniques	Licensing and authorizations	Off-site supervision	On-site supervision	Risk-based supervision (RBS)							Consolidated supervision	Stress testing	Macroprudential regulation and supervision											Financial crisis management	Problem entities, corrective measures, and resolution	Regtech and suptech	
Organizational and leadership skills	Communication	Teamwork	Planning and organization	Quality of service								Project management	Influence and negotiation	Adaptability and change management	Leadership and human capital management	Process management									Vision and strategic actions	Crisis management	Knowledge management	

Knowledge families	Number of thematic blocks
Transversal knowledge	8
Financial markets and products	4
Quantitative analysis	1

International regulatory and supervisory standards	3
Risk management and solvency	9
Comprehensive regulation and supervision	8
Organizational and leadership skills	12

Total Thematic Blocks: 45



“Money Laundering and Terrorist Financing Risk” Path

Knowledge family	Level of Professional Development																												
	Basic											Intermediate											Advanced						
Transversal knowledge	Financial system and financial safety net	Legislation, regulation, and organization of the supervisory body	Specific computer applications used by the supervisory body	Culture and values of the supervisory body	Office tools	English	Security	Environmental sensitivity and sustainability																					
Financial markets and products	Applied economics and finance	Financial markets	Financial products	Financial intermediation								Fintechs and Bigtechs																	
Quantitative analysis	Financial mathematics	Financial analysis	Software packages for quantitative analysis									Applied statistics	Applied econometrics													Data analytics			
International regulatory and supervisory standards	Basel I, II, and III	International supervisory standards	Money laundering and terrorist financing prevention standards	Market conduct standards	International auditing standards	International accounting standards						Banking resolution standards																	
Risk management and solvency	Business model	Corporate governance - Conceptual aspects	Comprehensive risk management	Credit risk - Qualitative aspects	Liquidity risk - Qualitative aspects	Market risk - Qualitative aspects	Operational risk - Qualitative aspects	Information technology risk	Money laundering and terrorist financing risk - Qualitative aspects	Internal control	Capital and solvency - Conceptual aspects	Corporate governance - Assessment	Model risk	Strategic risk	Reputational risk	Legal risk	Credit risk - Measurement and assessment	Liquidity risk - Measurement and assessment	Market risk - Measurement and assessment	Operational risk - Measurement and assessment	Operational risk - Business continuity management	Operational risk - Information security management (IS)	Money laundering and terrorist financing risk - Assessment	Capital and solvency - Assessment	Credit risk - ST, role of IA, and RA	Liquidity risk - ST, role of IA, and RA	Market risk - ST, role of IA, and RA	Operational risk - Role of IA and RA	
Comprehensive regulation and supervision	Regulatory techniques	Licensing and authorizations	Off-site supervision	On-site supervision	Risk-based supervision (RBS)							Consolidated supervision	Stress testing	Macroprudential regulation and supervision											Financial crisis management	Problem entities, corrective measures, and resolution	Regtech and suptech		
Organizational and leadership skills	Communication	Teamwork	Planning and organization	Quality of service								Project management	Influence and negotiation	Adaptability and change management	Leadership and human capital management	Process management									Vision and strategic actions	Crisis management	Knowledge management		

Knowledge families	Number of thematic blocks
Transversal knowledge	8
Financial markets and products	4
Quantitative analysis	3

International regulatory and supervisory standards	3
Risk management and solvency	7
Comprehensive regulation and supervision	6
Organizational and leadership skills	11

Total Thematic Blocks: 42