

# ISO 20022 Lead auditor

## Course outline

### **Module 1: Introduction to ISO 20022**

Module 1: Introduction to ISO 20022 is an introductory course for ISO 20022 Lead Auditors. It provides an overview of the ISO 20022 standard, its purpose, and its benefits. It also covers the fundamentals of the standard, including its structure, components, and implementation. The course also covers the roles and responsibilities of the Lead Auditor, as well as the audit process and techniques.

#### ***Lessons***

- Overview of ISO 20022
- Benefits of ISO 20022
- ISO 20022 Standards and Specifications
- ISO 20022 Message Types
- ISO 20022 Message Standards
- ISO 20022 Message Formats
- ISO 20022 Message Validation
- ISO 20022 Message Processing
- ISO 20022 Message Security
- ISO 20022 Message Interoperability
- ISO 20022 Message Lifecycle
- ISO 20022 Message Governance
- ISO 20022 Message Compliance
- ISO 20022 Message Auditing
- ISO 20022 Message Quality Assurance

#### **After completing this module, students will be able to:**

- Understand the purpose and scope of ISO 20022
- Identify the key components of the ISO 20022 standard
- Analyze the impact of ISO 20022 on financial services
- Develop an audit plan to assess the compliance of an organization with ISO 20022 requirements.

### **Module 2: Overview of the ISO 20022 Standard**

Module 2 of the ISO 20022 Lead Auditor Course provides an overview of the ISO 20022 Standard, which is an international standard for financial messaging. It covers the purpose and scope of the standard, its structure and components, and the benefits of using it. It also provides an introduction to the ISO 20022 message types and their usage.

## **Lessons**

- Introduction to ISO 20022
- Overview of the ISO 20022 Standard
- Benefits of ISO 20022
- ISO 20022 Message Types
- ISO 20022 Message Standards
- ISO 20022 Message Formats
- ISO 20022 Message Validation
- ISO 20022 Message Security
- ISO 20022 Message Processing
- ISO 20022 Message Lifecycle
- ISO 20022 Message Governance
- ISO 20022 Message Compliance
- ISO 20022 Message Auditing
- ISO 20022 Message Quality Assurance
- ISO 20022 Message Risk Management

### **After completing this module, students will be able to:**

- Understand the purpose and scope of the ISO 20022 Standard.
- Identify the key components of the ISO 20022 Standard.
- Analyze the impact of the ISO 20022 Standard on financial services.
- Develop an audit plan to assess the compliance of an organization with the ISO 20022 Standard.

## **Module 3: Understanding the ISO 20022 Message Structure**

Module 3 of the ISO 20022 Lead Auditor Course provides an in-depth look at the ISO 20022 message structure. It covers the different types of messages, their components, and how to interpret them. It also covers the different types of validation rules and how to apply them. Finally, it provides an overview of the different types of message formats and how to use them.

## **Lessons**

- Overview of ISO 20022 Message Structure
- Message Types and Components
- Message Flow and Processing
- Message Validation and Error Handling
- Message Security and Encryption
- Message Versioning and Migration
- Message Standards and Specifications
- Message Testing and Quality Assurance
- Message Auditing and Compliance
- Message Troubleshooting and Support

### **After completing this module, students will be able to:**

- Understand the ISO 20022 message structure and its components.
- Identify the different types of ISO 20022 messages and their purpose.
- Analyze the message structure and identify potential risks.
- Develop an audit plan to assess the effectiveness of the message structure.

## **Module 4: ISO 20022 Message Validation**

Module 4 of the ISO 20022 Lead Auditor Course provides an in-depth look at the validation of ISO 20022 messages. It covers topics such as message structure, message validation rules, and message validation tools. It also provides guidance on how to audit and assess the quality of ISO 20022 messages.

### ***Lessons***

- Overview of ISO 20022 Message Validation
- Understanding the ISO 20022 Message Validation Process
- Identifying and Resolving Message Validation Errors
- Analyzing Message Validation Reports
- Best Practices for Message Validation
- Implementing Message Validation Controls
- Auditing Message Validation Processes
- Assessing Message Validation Compliance
- Troubleshooting Message Validation Issues
- Case Studies in Message Validation

### **After completing this module, students will be able to:**

- Understand the ISO 20022 message validation process and its importance in the ISO 20022 message standard.
- Identify and analyze the different types of ISO 20022 messages and their components.
- Develop an understanding of the ISO 20022 message validation process and its application in the ISO 20022 message standard.
- Develop the ability to audit and validate ISO 20022 messages for compliance with the ISO 20022 message standard.

## **Module 5: ISO 20022 Message Mapping**

Module 5 of the ISO 20022 Lead Auditor Course provides an in-depth look at ISO 20022 message mapping. It covers the fundamentals of message mapping, including the different types of messages, the structure of messages, and the mapping of messages to different systems. It also provides guidance on how to audit message mapping processes and how to identify and address any issues.

### ***Lessons***

- Overview of ISO 20022 Message Mapping
- Understanding the ISO 20022 Message Mapping Process
- Analyzing the ISO 20022 Message Mapping Requirements

- Identifying and Resolving Message Mapping Issues
- Implementing ISO 20022 Message Mapping
- Testing and Validating ISO 20022 Message Mapping
- Auditing ISO 20022 Message Mapping
- Best Practices for ISO 20022 Message Mapping
- Troubleshooting ISO 20022 Message Mapping
- Regulatory Requirements for ISO 20022 Message Mapping

**After completing this module, students will be able to:**

- Understand the ISO 20022 message mapping process and its importance in the ISO 20022 Lead Auditor course.
- Identify the components of an ISO 20022 message and how they are used in the mapping process.
- Analyze the ISO 20022 message structure and its components to identify potential errors.
- Develop strategies to ensure the accuracy of ISO 20022 message mapping.

## **Module 6: ISO 20022 Message Security**

Module 6 of the ISO 20022 Lead Auditor Course provides an overview of the security measures and protocols used to protect ISO 20022 messages. It covers topics such as message authentication, encryption, digital signatures, and message integrity. It also provides guidance on how to audit the security of ISO 20022 messages.

### ***Lessons***

- Overview of ISO 20022 Message Security
- Security Requirements for ISO 20022 Messages
- Message Security Protocols
- Message Security Standards
- Message Security Testing
- Message Security Auditing
- Message Security Risk Management
- Message Security Incident Response
- Message Security Best Practices
- Message Security Compliance Requirements

**After completing this module, students will be able to:**

- Understand the principles of ISO 20022 message security and its importance in the financial services industry.
- Identify the key components of ISO 20022 message security and their roles in the overall security architecture.
- Analyze the security requirements of ISO 20022 messages and assess the security controls in place to protect them.
- Develop an audit plan to evaluate the effectiveness of ISO 20022 message security controls.

## Module 7: ISO 20022 Message Processing

Module 7 of the ISO 20022 Lead Auditor Course provides an in-depth look at ISO 20022 message processing. It covers topics such as message structure, message validation, message routing, and message processing. It also provides an overview of the various message types and their associated processing rules. The module also covers the various message processing tools and techniques available to ensure successful message processing.

### **Lessons**

- Overview of ISO 20022 Message Processing
- Understanding the ISO 20022 Message Processing Model
- Analyzing the ISO 20022 Message Processing Model
- Identifying the Key Components of ISO 20022 Message Processing
- Understanding the ISO 20022 Message Processing Standards
- Analyzing the ISO 20022 Message Processing Standards
- Evaluating the ISO 20022 Message Processing Standards
- Implementing the ISO 20022 Message Processing Standards
- Auditing the ISO 20022 Message Processing Standards
- Troubleshooting ISO 20022 Message Processing Issues

### **After completing this module, students will be able to:**

- Understand the ISO 20022 message processing model and its components.
- Identify the different types of ISO 20022 messages and their purpose.
- Analyze the message structure and content of ISO 20022 messages.
- Develop an audit plan to assess the effectiveness of ISO 20022 message processing.

## Module 8: ISO 20022 Message Quality Assurance

Module 8 of the ISO 20022 Lead Auditor Course provides an overview of the ISO 20022 Message Quality Assurance process. It covers topics such as message validation, message quality assurance, message testing, and message monitoring. It also provides guidance on how to audit and assess the quality of ISO 20022 messages.

### **Lessons**

- Overview of ISO 20022 Message Quality Assurance
- Understanding the ISO 20022 Message Quality Assurance Framework
- Analyzing the Quality of ISO 20022 Messages
- Identifying Quality Issues in ISO 20022 Messages
- Developing Quality Assurance Strategies for ISO 20022 Messages
- Implementing Quality Assurance Processes for ISO 20022 Messages
- Auditing ISO 20022 Message Quality Assurance
- Best Practices for ISO 20022 Message Quality Assurance
- Troubleshooting ISO 20022 Message Quality Assurance Issues
- Regulatory Requirements for ISO 20022 Message Quality Assurance

## **After completing this module, students will be able to:**

- Understand the principles of ISO 20022 message quality assurance
- Identify the key components of ISO 20022 message quality assurance
- Develop an effective ISO 20022 message quality assurance process
- Implement an ISO 20022 message quality assurance system to ensure compliance with ISO 20022 standards

## **Module 9: ISO 20022 Message Testing**

Module 9 of the ISO 20022 Lead Auditor Course provides an overview of ISO 20022 message testing. It covers topics such as message structure, message validation, message testing tools, and message testing best practices. It also provides guidance on how to interpret and analyze test results. This module is designed to help auditors understand the importance of message testing and how to effectively use it to ensure the accuracy and integrity of ISO 20022 messages.

### ***Lessons***

- Overview of ISO 20022 Message Testing
- Understanding the ISO 20022 Message Testing Process
- Identifying and Analyzing Message Testing Requirements
- Developing Test Cases for ISO 20022 Messages
- Executing and Documenting ISO 20022 Message Testing
- Troubleshooting ISO 20022 Message Testing Issues
- Best Practices for ISO 20022 Message Testing
- Regulatory Requirements for ISO 20022 Message Testing
- Risk Management and ISO 20022 Message Testing
- Auditing ISO 20022 Message Testing Processes

## **After completing this module, students will be able to:**

- Understand the ISO 20022 message structure and its components.
- Identify the different types of ISO 20022 messages and their purpose.
- Develop test plans and test cases for ISO 20022 messages.
- Execute tests and analyze the results to ensure message compliance.

## **Module 10: ISO 20022 Message Auditing**

Module 10 of the ISO 20022 Lead Auditor Course provides an in-depth look at the auditing of ISO 20022 messages. It covers topics such as message structure, message validation, message security, and message integrity. It also provides guidance on how to audit ISO 20022 messages and how to identify and address any issues that may arise.

### ***Lessons***

- Overview of ISO 20022 Message Auditing
- Understanding the ISO 20022 Message Standards

- Auditing the ISO 20022 Message Standards
- Analyzing the ISO 20022 Message Standards
- Evaluating the ISO 20022 Message Standards
- Auditing the ISO 20022 Message Infrastructure
- Auditing the ISO 20022 Message Security
- Auditing the ISO 20022 Message Compliance
- Auditing the ISO 20022 Message Quality
- Auditing the ISO 20022 Message Performance
- Auditing the ISO 20022 Message Documentation
- Auditing the ISO 20022 Message Governance
- Auditing the ISO 20022 Message Risk Management
- Auditing the ISO 20022 Message Change Management
- Auditing the ISO 20022 Message Reporting
- Auditing the ISO 20022 Message Processes
- Auditing the ISO 20022 Message Controls
- Auditing the ISO 20022 Message Integration
- Auditing the ISO 20022 Message Interoperability
- Auditing the ISO 20022 Message Lifecycle Management

**After completing this module, students will be able to:**

- Understand the principles and objectives of ISO 20022 message auditing.
- Identify the key components of an ISO 20022 message audit.
- Develop an audit plan and audit program for ISO 20022 message auditing.
- Analyze and evaluate the results of an ISO 20022 message audit.

## **Module 11: ISO 20022 Message Compliance**

Module 11 of the ISO 20022 Lead Auditor Course provides an in-depth look at ISO 20022 message compliance. It covers topics such as message structure, message validation, message security, and message processing. It also provides guidance on how to audit and assess the compliance of ISO 20022 messages.

### ***Lessons***

- Overview of ISO 20022 Message Compliance
- Understanding the ISO 20022 Message Standards
- Analyzing the ISO 20022 Message Structure
- Assessing the ISO 20022 Message Compliance
- Auditing the ISO 20022 Message Compliance
- Identifying and Resolving ISO 20022 Message Compliance Issues
- Best Practices for ISO 20022 Message Compliance
- Regulatory Requirements for ISO 20022 Message Compliance
- Risk Management for ISO 20022 Message Compliance
- Reporting on ISO 20022 Message Compliance

**After completing this module, students will be able to:**

- Understand the ISO 20022 message standards and their application in the financial services industry.
- Identify the key components of an ISO 20022 message and the associated compliance requirements.
- Develop an audit program to assess the compliance of an organization's ISO 20022 message implementation.
- Analyze the results of an audit and provide recommendations for improvement.

## **Module 12: ISO 20022 Message Governance**

Module 12: ISO 20022 Message Governance is a module in the ISO 20022 Lead Auditor course that covers the principles and practices of message governance for ISO 20022 messages. It provides an overview of the message governance process, including the roles and responsibilities of the various stakeholders, the message lifecycle, and the message validation process. It also covers the use of message validation tools and the importance of message governance in ensuring the accuracy and integrity of ISO 20022 messages.

### ***Lessons***

- Overview of ISO 20022 Message Governance
- Understanding the ISO 20022 Message Governance Framework
- Analyzing the Benefits of ISO 20022 Message Governance
- Implementing ISO 20022 Message Governance
- Assessing the Impact of ISO 20022 Message Governance
- Auditing ISO 20022 Message Governance
- Best Practices for ISO 20022 Message Governance
- Troubleshooting ISO 20022 Message Governance Issues
- Regulatory Requirements for ISO 20022 Message Governance
- Risk Management and ISO 20022 Message Governance

### **After completing this module, students will be able to:**

- Understand the principles of ISO 20022 message governance and its importance in the financial services industry.
- Identify the key components of ISO 20022 message governance and their roles in the financial services industry.
- Analyze the impact of ISO 20022 message governance on the financial services industry.
- Develop strategies to ensure compliance with ISO 20022 message governance requirements.

## **Module 13: ISO 20022 Message Risk Management**

Module 13 of the ISO 20022 Lead Auditor Course focuses on ISO 20022 Message Risk Management. It covers topics such as message risk management principles, message risk management processes, message risk management tools, and message risk management best practices. It also provides guidance on how to identify, assess, and manage message risks.

### ***Lessons***



- Overview of ISO 20022 Message Risk Management
- Risk Identification and Assessment
- Risk Mitigation Strategies
- Risk Monitoring and Reporting
- ISO 20022 Message Risk Management Best Practices
- ISO 20022 Message Risk Management Auditing
- ISO 20022 Message Risk Management Compliance
- ISO 20022 Message Risk Management Governance
- ISO 20022 Message Risk Management Tools and Techniques
- ISO 20022 Message Risk Management Standards and Regulations

### **After completing this module, students will be able to:**

- Understand the principles of ISO 20022 message risk management and its importance in the financial services industry.
- Identify and assess the risks associated with ISO 20022 message processing.
- Develop and implement effective risk management strategies for ISO 20022 message processing.
- Monitor and review the effectiveness of ISO 20022 message risk management processes.

## **Module 14: ISO 20022 Message Documentation**

Module 14 of the ISO 20022 Lead Auditor Course provides an in-depth look at the ISO 20022 message documentation. It covers topics such as message structure, message types, message components, and message validation. It also provides guidance on how to interpret and use the message documentation to ensure compliance with the ISO 20022 standard.

### ***Lessons***

- Overview of ISO 20022 Message Documentation
- Understanding the ISO 20022 Message Structure
- Analyzing the ISO 20022 Message Content
- Identifying the ISO 20022 Message Components
- Evaluating the ISO 20022 Message Documentation
- Applying the ISO 20022 Message Documentation Requirements
- Auditing the ISO 20022 Message Documentation
- Ensuring Compliance with ISO 20022 Message Documentation
- Managing the ISO 20022 Message Documentation
- Troubleshooting ISO 20022 Message Documentation Issues

### **After completing this module, students will be able to:**

- Understand the ISO 20022 message structure and its components.
- Analyze the ISO 20022 message structure and its components.
- Identify the different types of ISO 20022 messages and their purpose.
- Develop an audit plan to assess the effectiveness of ISO 20022 message documentation.

# Module 15: ISO 20022 Message Troubleshooting

Module 15 of the ISO 20022 Lead Auditor Course provides an in-depth look at troubleshooting ISO 20022 messages. It covers topics such as message structure, message validation, message mapping, and message routing. It also provides guidance on how to identify and resolve common issues with ISO 20022 messages.

## ***Lessons***

- Overview of ISO 20022 Message Troubleshooting
- Identifying Common Message Errors
- Analyzing Message Error Logs
- Troubleshooting Message Errors
- Resolving Message Errors
- Best Practices for Message Troubleshooting
- Message Troubleshooting Tools
- Message Troubleshooting Strategies
- Message Troubleshooting Techniques
- Message Troubleshooting Processes

## **After completing this module, students will be able to:**

- Understand the ISO 20022 message structure and its components.
- Identify and troubleshoot common errors in ISO 20022 messages.
- Analyze and interpret ISO 20022 messages.
- Develop strategies to ensure the accuracy and integrity of ISO 20022 messages.