

# IBM Integration Bus Developer Training Syllabus

## Introduction to IBM WebSphere MQ concept

- What is Message Queues?
- Types of queues and messaging
- Server and client communication

## Introduction to IBM Integration Bus and toolkit

- Describe the features and uses of the Integration Bus
- Integration Bus component and toolkit

## Product Planning and Installation

- Planning and considering IIB component for Installation
- Install and setup Integration Bus environment for development

## Application development fundamentals

- What is message flows and node?
- Describes Message parser and internal Message representation
- Write basic ESQL methods to transform messages

## Working Message Flows

- What is Message Flows and Nodes?
- Sub flows
- Explorer of Message Flow Node Palette
- Explain Node Terminals -> In, Out, Catch, Failure

## Message Tree and Parsers

- Concept of Message Tree
- Explain Logical Tree Structure
- How message tree is constructed from Message

- Environment Tree
- Local Environment Tree
- Exception List
- Explain Parsers
- Domains - SOAP, XML, DFDL, JSON
- Promoted Properties and User-Defined Properties

## Developing Integration Solution

- Explain different type of development starts
- Create an Application
- Create an Library
- Create Integration Project from scratch

## Transformation and Enrichment

- Explaining of Message Transformation
- Using ESQL
- Using Maps

## Developing message flows

- Design and develop flows using MQ Nodes
- Design and develop flows using HTTP Nodes
- Design and develop flows using SOAP Nodes
- Design and develop flows using File nodes
- Integration with Data base using Database Nodes
- Different type of Routing and enrichment
- Error handling design for different protocols Integration

## Working with Routing

- How to route messages using nodes
- Route Node
- Message Filter using Filter node
- Route to Label and Label node

## Exception Handling

- What is Exception handling?
- Try Catch Node handling
- Exception Handling for Transaction enabled and non-Transaction enabled
- Explain connecting Failure and Catch Terminal

## Deployment

- Creating Bar file with needed resources
- How to recreate and refresh Integration server
- Override Promote properties
- Deploying Bar on Server
- Verifying the Deployment logs

## Trouble shooting on development issues

- Debug and trouble shoot message flow issues
- Message flow performance and monitoring