Day 1

- 1. Introduction to IBM Integration Bus
 - Explain need for Business Integration and Transformation
 - Overview of IBM Integration Bus
 - List and explain functions of primary components of IIB
 - Explaining Messaging concepts, Message flows, Message Models and Nodes.
 - All important features of IBM Integration Bus
- 2. Design and Setup Considerations
 - Briefly review roles and responsibilities IIB components
 - Discuss setting up IIB development environment
 - Installation steps for IIB Tool Kit / Integration Server
 - Exercise 1 Setting up the development domain
- 3. Introduction to Integration Bus Toolkit
 - Demonstrate the Integration Bus Toolkit
 - Explain the components of Toolkit
 - Demonstrate steps to create/test message flow using the Toolkit
 - Discuss components of IIB messages

Day 2

- 4. Working with Integration Bus Basic Nodes
 - Demonstrate using supplied nodes and describe use of most common ones
 - Explain message flow behaviors
 - Describe the different debugging techniques
 - Discuss IIB message parts and parsing
 - Explain various transformation options available
 - Briefly discuss coding basic ESQL statements
 - Exercise 2 Manipulating a message using ESQL
 - Explain working with databases
 - Exercise 3 Working with databases and subflows
 - Exercise 4 Updating a database using ESQL
 - Exercise 5 Using the DatabaseRetrieve node
- 5. Deep Dive into ESQL and Java Compute Node
 - Explain reference variables to process message trees
 - Discuss shared variables
 - Simple, Complex Comparison Operators
 - Conditional Statements
 - Various looping statements
 - SELECT statements use and its advantages
 - **Exercise 6 -** Caching a database table to improve performance
 - Exercise 7 Implementing reference variables in ESQL
 - Exercise 8 Implementing Java Compute Node in message flow

Day 3

- 6. Message Modeling using DFDL
 - Explain storing message layouts in the Toolkit
 - Describe implementation of message models
 - Examine shared libraries
 - Demonstrate import/use of C, XML and COBOL structures in the Toolkit
 - Exercise 9 Creating and working with a message model using DFDL
 - Exercise 10– Importing to create a message model
 - Exercise 11– Working with XML models
- 7. Routing data through message flows
 - Discuss Route, RouteToLabel, Label and DatabaseRoute nodes
 - Exercise 12 Working with routing techniques
- 8. Additional input and output options
 - Describe Timer nodes
 - Exercise 13 Implementing a time based flow

Day 4

- 9. Using File and email nodes
 - Explain File nodes
 - Discuss Email nodes
 - Exercise 14 Working with files in a message flow
- 10. Web Service Support
 - Describe Web Service support for Integration Bus
 - Discuss using the HTTP Nodes
 - Explain using SOAP nodes
 - RESTful API support in V10
 - Exercise 15 Implementing a SOAP message flow
 - Exercise 16 Creating an Integration Service
 - Exercise 17 Implementing a RESTful API in IIB (V10-optional)
- 11. Using kafka Nodes
 - Discuss Kafka Input and Output Nodes
 - Exercise 18 Working with Kafka nodes

Day 5

- 12. Publish/Subscribe Updates
 - Explore Pub/Sub uses
 - List steps to implement an IIB V10 pub/sub flow
 - Exercise 19 Implementing pub/sub in v10
- 13. Problem Determination tools
 - Explain message flow behaviors
 - Describe the different debugging techniques

- Exercise 20 Working with problem determination tools (Trace nodes, User Trace, Integrated Test Client, Debugger, Error Logs, The Exception List tree)
- 14. Monitoring Profiles
- 15. Basic MQSI commands