

Course Code: ZM668GS

Course Title: IBM App Connect Enterprise V11 Application Development

## Description:

This course is also available as classroom course *IBM App Connect Enterprise V11 Application Development* (WM668G).

IBM App Connect Enterprise provides connectivity and universal data transformation in heterogeneous IT environments. It enables businesses of any size to eliminate point-to-point connections and batch processing, regardless of operating system, protocol, and data format.

This course teaches you how to use IBM App Connect Enterprise to develop, deploy, and support message flow applications. These applications use various messaging topologies to transport messages between service requesters and service providers, and allow the messages to be routed, transformed, and enriched during processing.

In this course, you learn how to construct applications to transport and transform data. The course explores how to control the flow of data by using various processing nodes, and how to use databases and maps to transform and enrich data during processing. You also learn how to construct data models by using the Data Format Description Language (DFDL).

## Objectives:

- Describe the features and uses of IBM App Connect Enterprise
- Develop, deploy, and test message flow applications
- Generate message flow applications from predefined patterns
- Use the IBM App Connect Enterprise Toolkit problem determination aids to diagnose and solve development and runtime errors
- Describe the function and appropriate use of IBM App Connect Enterprise processing nodes
- Write basic Extended Structured Query Language and Java programs to transform data
- Use the IBM Graical Data Mapping editor to transform data
- Define, use, and test simple XML and Data Format Description Language (DFDL) data models
- Describe supported transport protocols and how to call them in message flows

## Exercises

- Exercise 1: Importing and testing a message flow
- Exercise 2: Creating a message flow application
- Exercise 3: Connecting to IBM MQ
- Exercise 4: Adding flow control to a message flow application
- Exercise 5: Creating a DFDL model
- Exercise 6: Processing file data
- Exercise 7: Using problem determination tools

- Exercise 8: Implementing explicit error handling
- Exercise 9: Referencing a database in a map
- Exercise 10: Transforming data by using the Compute and JavaCompute nodes
- Exercise 11: Creating a runtime-aware message flow

## Prerequisites:

Before taking this course, you should have:

- A basic understanding of current IT technologies such as Structured Query Language (SQL), Extensible Markup Language (XML), Java, and XML Path language (XPath)
- A familiarity with the Eclipse development environment
- A basic understanding of transport protocols such as HTTP and FTP, and message-oriented middleware such as Java Message Service (JMS) and IBM MQ

## Duration:

40 Hrs

## Topics:

- Introduction to IBM App Connect Enterprise
- Application development fundamentals
- Exercise: Importing and testing a message flow
- Creating message flow applications
- Exercise: Creating a message flow application
- Connecting to IBM MQ
- Exercise: Connecting to IBM MQ
- Controlling the flow of messages
- Exercise: Adding flow control to a message flow application
- Modeling the data
- Exercise: Creating a DFDL model
- Processing file data
- Exercise: Processing file data
- Using problem determination tools and help resources
- Exercise: Using problem determination tools
- Exercise: Implementing explicit error handling
- Mapping messages with the Graical Data Mapping editor
- Referencing a database in a message flow application
- Exercise: Referencing a database in a map
- Using Compute nodes to transform messages
- Exercise: Transforming data by using the Compute and JavaCompute nodes
- Processing JMS, HTTP, and web service messages
- Preparing for production
- Exercise: Creating a runtime-aware message flow

## Audience:

This course is designed for experienced integration specialists and senior-level developers with experience in application development, messaging middleware applications, and transport protocols such as HTTP and FTP.