

# SAP- ABAP (ADVANCED BUSINESS APPLICATION PROGRAMMING) COURSE CONTENTS

## 1. Introduction

- ERP Overview
- Business Process in Enterprise
- Various ERP Packages
- About SAP
- Features and advantages of SAP
- Technical Features of SAP

## 2. Architecture of R/3 System

- Client/Server Architecture
- Two-tier Vs Three tier Environments
- Multi-tier Architecture
- Login & Logoff
- Procedure Navigation
- Introduction to SAP screen environment

## 3. Components of ABAP Dictionary

- Database Tables
- Data Elements
- Domains
- Structures
- Views: Database View, Projections View,
- Help View, Maintenance View
- Table Types
- Type Groups
- Search Help: Elementary And Collective
- Lock Objects

## 4. Abap Programming

- Introduction to ABAP Editor
- ABAP Programming Features
- Keywords
- Data Types and Data Objects
- Operators
- String Handling
- Conditional Statements and Looping
- Structures Field Symbols

- ABAP Development Workbench
- Package Builder

## **5. ABAP Database Access**

- Open SQL
- Definition & Creation of Internal Tables
- Different Internal Table Types
- Different Operations on Internal Tables
- Control Level Processing
- Events and Joins

## **6. Modularization Techniques**

- Includes
- Subroutines: Types, Pass by value, pass by reference, pass by value and reference
- Function Modules, Exception Handling

## **7. Open SQL and Additional Topics**

- Different Select Statements
- Different Write Formats
- Message Class
- Selection Screen Designing
- Inter programming Communication

## **8. List Generation Techniques**

- List Requirement & Introduction
- Classical List
- Interactive List
- Abap List Viewer
- Logical Database

## **9. Performance Analysis**

- Reporting Standards
- Extended Program Check
- Debugger
- Runtime Analysis
- SQL Trace
- Code Inspector
- Advisable Select Statements
- Performance Factors on Database Tables and Internal Tables

## **10. The Workbench Organizer Transport System**

- Change Request Version Management
- Releasing Tasks and Releasing Request
- Transport

## **11.Dialog Programming**

- Introduction
- Screen Painter
- Menu Painter
- Table Control
- Tab strip Control
- Field Validation
- Calling Screen Sequence
- Changing Screen Attributes Dynamically

## **12.Data Migration Techniques**

- Requirement
- Direct Input Method
- Background Processing
- Conversion
- Interface Programming Using BDC Call
- Transaction and Session Method
- Recording Method
- Data Sets (Application Server File Handling )
- Legacy System Migration Workbench (LSMW)

## **13.Smart Forms**

- Designing Custom Smart forms
- Form Painter
- Table Painter
- Field List
- Style Builder
- Text Modules
- Print Program

## **14.Overview of Interactive Forms by Adobe**

## **15.Object Oriented ABAP**

- Introduction
- Keywords
- Class Builder
- Objects
- Local and Global Class Creation
- Object Handling
- Methods
- Abstraction, Encapsulation
- Inheritance, Polymorphism

- Event Handling
- Interface

## **16. Enhancements**

- Requirements
- SMOD / CMOD
- Function Exit
- Menu Exit
- Screen Exit
- Text Enhancement
- Table Enhancement

## **17. Business Add Ins**

- Introduction to BAdIs
- Difference between Customer Exits and BAdIs
- Implementation of BAdIs
- Function Implementation
- Screen Implementation
- Menu Implementation
- Definition of new BAdIs

## **18. CROSS APPLICATIONS**

### **19. Introduction to Distributed Database Environment**

- Introduction to Cross Application Architecture
- Preparing RFC (Remote Function Calling) Destinations
- Develop and call Remote Functions
- Working with RFC function modules

### **20. IDOC Interface**

- Basics
- Architecture
- Segment Creation
- Idoc Creation
- Logical Messages
- Processing Idoc
- Monitoring
- Documentation
- Need in ALE, EDI and BAPI
- Programming Idoc's
- Customer Modifications to the Idoc Interface
- Extending and Developing a Basic IDOC Type
- Programming in the IDoc Interface

- Customizing the Interface for New or

## **21. Extended IDocs.**

- Introduction
- Preparing RFC Destinations
- Develop and call Remote Functions
- Types of RFC
- Synchronous RFC
- Asynchronous RFC
- Transactional RFC.
- Application Link Enabling (ALE)
- Introduction,
- Concepts of data and process
- distribution
- Reasons for data and process distribution
- ALE Concepts and Features
- ALE Technology
- ALE Components for Outbound Process
- ALE Components for Inbound Process
- Configuring ALE
- Testing ALE

## **22. Electronic Data Interchange (EDI)**

- Introduction,
- EDI Standards,
- History of EDI,
- EDI Benefits
- Configuring and Testing EDI in SAP

## **23. Business Application Programming Interface (BAPI)**

- Business Framework Architecture
  - Introduction to BOR,
- Creating BAPI, R/3 to R/3, VB to R/3 using Bapi, Java to R/3 using Bapi.
- Reporting Using Bapi
- Data Upload Using Bapi Structures
- Working with BAPI Explorer