



# SAP ABAP + SAP OOABAP + SAP WebDynpro ABAP Training



## Course Main Topics

R – Reports [Classical , Interactive & AVL Reports]  
I – Interfaces [ALE/IDOC]  
C – Conversion [BDC, LSMW]  
E – Enhancements [User-exits & BADI's]  
F – Forms [Smartforms]

## Object Oriented ABAP (OOABAP)

## WebDynpro ABAP (WDA)

Interview FAQs & Resume Preparation

Conduct MOCK Interviews & Preparation

55 Hours

Online

60 Days ( from Course start )

Effective Technical Support

SNTech GS Easy Study Material

Many More Online Material links provided

Take care at individual candidates to maintain  
constant knowledge & Clarifications

Course Duration

Course Mode

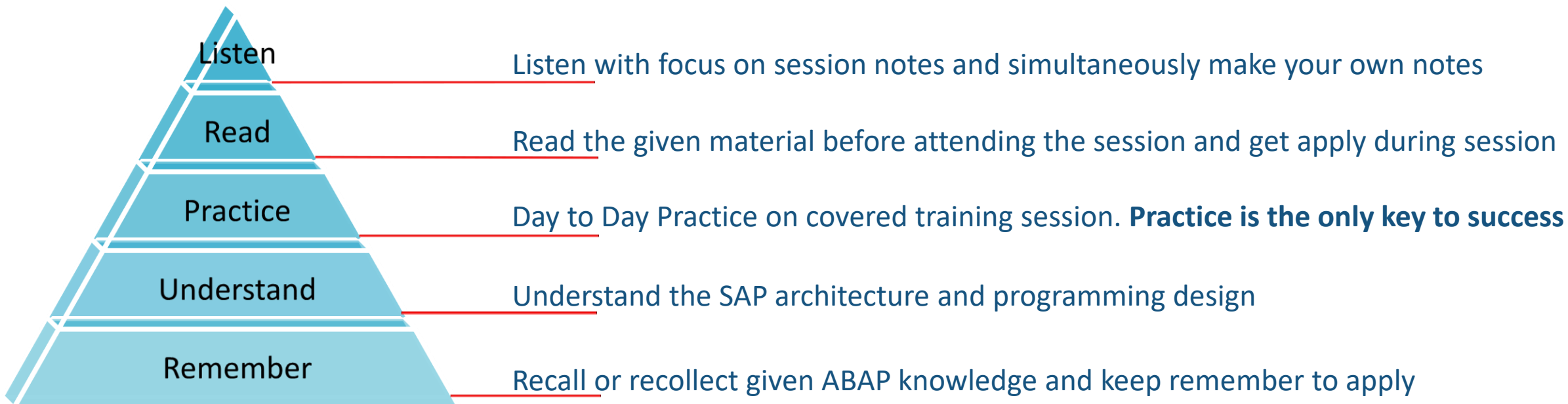
System Access

Study Material

SNTech Faculty



**Learning Strategies:** SNTech GS request every participant to strictly follow this strategy for their bright future ahead



**Inspiring quote:** “All of us do not have equal talent. Yet, All of us have an equal opportunity to develop our talents”  
- by Ratan TATA



## Course Content

### Topic 1 ERP & ABAP Introduction?

- ERP Overview
- SAP ERP software R/3 System overview
- SAP NetWeaver Architecture overview
- Advanced Business Application Programming (ABAP) overview

### Topic 2 ABAP Dictionary

Transaction code: SE11

- Introduction
- Domains
- Data element
- Field
- Structure
- Table Type
- Table
- Views
- Search Helps
- Lock objects



## Topic 3 ABAP Workbench

Transaction code: SE38 or SE80

- Introduction

### Report Types

- Classical Report
- Interactive List Report
- ALV Report
  - Classical ALV Report
  - List ALV Report
  - Blocked ALV

### Report Events

- Load-of-programme
- At-selection screen
- At-Line selection
- At-user command
- Initialization
- Start-of-selection
- End-of-selection ... ETC.,

### Data variable Declaration

- Variable Declaration
- Work area Declaration



- Internal Table Declaration
- Table Type Declaration
- Types Declaration
- Field-Symbol Declaration

**Internal table Type**

- Standard Internal Table
- Sorted Internal Table
- Hash Internal Table

**Modularization Techniques**

- Micros
- Sub routine
- Functional Module & BAPI

[Transaction code : **SE37**]

**Topic 4     Dialog Programming**

**Transaction code: SE38 /SE80**

- Introduction
- Screen Logic
- Screen Painter
- Menu Painter
- Table Control
- Transaction code creation

[Transaction code : **SE51**]

[Transaction code : **SE41**]



<b>Topic 5</b>	<b>File Handling</b>	<b>Transaction Code: SHDB</b>
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- BDC Introduction
- BDC – Call Transaction Method
- BDC – Session Method
- BDC file upload/download

[Transaction code: SM35]

<b>Topic 6</b>	<b>RFC</b>	<b>Transaction Code: SM59</b>
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- RFC Introduction
- Connection establishment using RFC between different systems

<b>Topic 7</b>	<b>Enhancement Framework</b>	
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- Introduction
- Customer/User exit (Menu exit, Screen exit)
  - Definition
  - Implementation
  - Implicit Enhancement
- Explicit Enhancement
  - BADI (Business Add-Ins) Definition
  - BADI (Business Add-Ins) Implementation

[Transaction code: **SMOD**]

[Transaction code: **CMOD**]

[Transaction code: **SE38/SE80**]

[Transaction code: **SE18**]

[Transaction code: **SE19**]



## Topic 8 Smartforms

Transaction Code: SMARTFORMS

- Introduction
- Windows
  - Main window
  - Copied window
  - Secondary window
  - Final Window
- Driver Program
- Style Builder

[Transaction code: SMARTSTYLES]

## Topic 9 Workflows

Transaction Code: SWDD

- Introduction
- Workflow builder
- Basic step types
- Triggering event mechanisms [Function module: SWE\_EVENT\_CREATE, SAP\_WAPI\_RAISE\_EVENT]
- Business Workplace

## Topic 10 Interface Documents (Idoc's)

- Introduction
- Inbound Interface Demo
- Outbound Interface Demo

## Topic 11 Basic Object-Oriented ABAP features



## OOABAP – Course Content

### Topic 12 Object Oriented ABAP [OOABAP]

Transaction Code: SE24

- What is Object Oriented ABAP and Concepts ?
- SAP Class Builder Introduction
- Write First SAP class

### Topic 13 Working with class methods in OOABAP

- Class methods and creating methods in sap classes
- Create a class method to get material details in SAP OOPS
- Using table types in methods in SAP classes
- User-defined types in SAP Classes

### Topic 14 Events in Object Oriented ABAP

- What are Events in SAP classes ?
- Example of using Events in SAP OOABAP classes

### Topic 15 Constructors in SAP OOABAP

- What is CONSTRUCTORS in SAP OOABAP ?
- Using Constructor method in SAP OOABAP
- Using CLASS CONSTRUCTOR in SAP OOABAP





## **Topic 16 Interfaces in SAP OOABAP**

- Interface Concept in Object Oriented ABAP
- Creating Class Interface in SAP OOABAP
- Using aliases for interface methods in SAP OOABAP

## **Topic 17 Inheritance in SAP OOABAP**

**Transaction Code: SE24**

- Inheritance in SAP OOABAP
- Using inheritance in SAP OOABAP

## **Topic 18 Local Classes in SAP OOABAP**

- What is a local Class in OOABAP ? Properties of local class in OOABAP
- Local class with attributes in OOABAP

## **Topic 19 Local Classes with methods in OOABAP**

- Local class with methods in SAP OOABAP
- Local class with tables in SAP OOABAP
- Local class with user-defined types in SAP OOABAP

## **Topic 20 Events in Local Classes in SAP OOABAP**

- Local class with event and event handler method in SAP OOABAP



### **Topic 21 Local class constructor in OOABAP**

- Using CONSTRUCTOR in local class
- Using CLASS-CONSTRUCTOR in SAP Local classes

### **Topic 22 Interfaces in local classes in SAP OOABAP**

- Creating and Using interfaces in Local Classes in SAP OOABAP

### **Topic 23 Inheritance in local classes in SAP OOABAP**

- Using inheritance in local classes in SAP ABAP Using inheritance in SAP OOABAP

### **Topic 24 Developing ALV using OOABAP**

- Introduction to ALV using OOABAP
- ALV with structure using OOABAP
- Using field catalog in OOALV

### **Topic 25 ALV Factory Method with OOABAP**

- ALV Using Factory Methods using OOABAP
- ALV factory method with user defined types
- Hotspot in ALV with OOABAP factory methods
- Interactive ALV with factory method using events
- Totals and Subtotals in ALV factory methods
- Top of page and end of page in OOALV with factory methods

## **Topic 26 Singleton Pattern on ABAP Objects**

- Singleton Concept in Object Oriented ABAP
- Creating global singleton class in OOABAP
- Creating Local singleton class in OOABAP

## **Topic 27 Exception Handling in SAP OOABAP**

- Handling exception using standard exception classes provided by SAP
- Handling exception using customized exception classes



## Web Dynpro ABAP – Course Content

### Topic 28 Introduction to WebDynpro ABAP

Transaction code : SE80

- Outlining the Benefits of Web Dynpro
- Explaining Web Dynpro Architecture
- Navigating Between Views
- Using View Assemblies
- Explaining Web Dynpro Architecture and Relationships Between Entities
- Usage of Assistance Class
- Faceless Component

### Topic 29 WebDynpro Controllers

- Explaining Web Dynpro Controllers
  - Component Controller
  - Window Controller
  - View Controller
  - Interface Controller

### Topic 30 WebDynpro Context at Design Time

- Defining the Context
- Setting Context Node Properties
- Context Mapping



### **Topic 31 WebDynpro User Interface**

- Defining the View Layout
- Data Binding and Controlling UI Element Behavior
- Using Composite UI Elements and Static Context Menus

### **Topic 32 WebDynpro Controller and Context Programming**

- Understanding Controller Methods and Attributes
- Using Controller Methods to Access the Context at Runtime
- Adding New Elements to a Context Node
- Implementing Supply Functions

### **Topic 33 WebDynpro Internationalization and Messages**

- Using ABAP Dictionary Texts and the Online Text Repository
- Implementing an Assistance Class
- Reporting Messages

### **Topic 34 WebDynpro Value Help and Semantic Help**

- Providing Value Help, Value Selectors, Semantic Help, Keyboard Access



### **Topic 35 WebDynpro Dialog boxes (Popups)**

- Creating Dialog Boxes

### **Topic 36 WebDynpro Component Reuse**

- Reusing Web Dynpro Components
- Declaring a Component Usage
- Implement Advanced Aspects of Component Reuse

### **Topic 37 WebDynpro Adaptation Techniques**

- Adapting Web Dynpro Applications
- Configuring Web Dynpro Applications
- Enhancing Web Dynpros
- Modifying the Context at Runtime and the UI at Runtime

### **Topic 38 WebDynpro Additional Topics**

- Using SAP List Viewer (ALV) in Web Dynpro for ABAP
- Integrating Web Dynpro in the Portal
- Monitoring and Debugging Web Dynpro Applications