SAP ABAP/CA

- **Introduction to ERP**
- **Introduction to SAP & R3 Architecture**
- **Introduction to ABAP/4**
  - What is ABAP? R/3 Repository
  - Logon to SAP Environment.
  - Transaction Codes
  - Multitasking Commands
  - Comments. Errors
  - ABAP/4 Editor (SE38)
  - Steps for Creating a Program
  - Elements in R/3 Screen
  - Output Statements
  - Operators in ABAP
  - Data, Parameter & Constant Statements
  - Data Types & Classification
  - Data Objects & Classification
  - Text Elements
  - String Operations
  - Control Statements
  - Field Strings
- **ABAP Dictionary**
  - ABAP Dictionary Introduction
  - Data Dictionary Functions
  - Data Dictionary Objects
  - Data Base Tables, Type Groups, Domains
  - Search helps
  - Search help Exits
  - Lock objects
  - Primary Key and Fore
  - Table Maintenance Generator
  - Table Events
- **Packages**
  - Creating a package
  - Difference between local objects & packages
  - Transferring local objects to packages

- **Variants**
  - Variants Introduction
  - Creating variants in ABAP Editor & Data Dictionary

- **Message Classes**
  - Message Class Introduction
  - Message types
  - Calling message class in Report & Dialog programs
  - Dynamic Message Handlings
- **Selection Screens**
  - Selection screen Introduction
  - Parameter Statement. Selection-option Statement
  - Selection-screen Statement
  - Screen table and its fields
  - Dynamic screen modification by using Modif Id key
- **Open SQL Statements**
  - Select
  - Insert
  - Modify
  - Update
  - Delete
- **Internal Tables**
  - Internal Tables Introduction
  - Declaring Internal Table
  - Populating Internal Table
  - Processing Internal Table
  - Initializing Internal Tables
  - Inner Joins and For All Entries
  - Working with Standard Sorted and Hashed Internal Tables
  - Control Break Statements
- **Debugging Techniques**
  - Debugging Techniques Introduction
  - Break-points (Static & Dynamic)
  - Watch points
  - Dynamically changing internal tables contents in Debugging Editor
  - Options to step through the program in Debugging Editor

➢ Modularization Techniques

- Modularization Techniques Introduction
- Macros
- Includes
- Subroutines
- Passing Parameters to Subroutines
- Passing Tables to Subroutines
- Function Groups & Function Modules

➢ Reports

- Reports Introduction. Classical Reports
- Interactive Reports
- Techniques Used For Interactive Reports
- Hotspot. Hide. Get Cursor

➢ Dialog/Module Pool Programming/Transaction

- MRP Introduction
- Relationship between Screen, Flow Logic and Program
- Flow Logic Events
  - ❖ Process before output (PBO)
  - ❖ Process after Input (PAI)
  - ❖ Process on Value Request (POV)
  - ❖ Process on Help Request (POH)
- Include Programs in MPP
  - ❖ Include TOP
  - ❖ Include Io1
  - ❖ Include O01
  - ❖ Include F01
- Dynamic Screens
  Leave Screen. Leave to Screen
  Call Screen. Set Screen
- Processing of List from Transaction and Vice Versa
- Elements in Screen Layout
  - ❖ Table Controls
  - ❖ Steps Loops
  - ❖ Tab strip Controls
  - ❖ Sunscreens

➢ Batch Data Communication

- BDC Introduction. Recording
- BDC Methods
  Call Transaction Methods. Session Methods
- Handling Table Controls in BDC
- Legacy System Migration Workbench
  Different Methods. Flat file creation

Uploading data

- File Handling
  Application Server. Presentation Server

➢ SAP Scripts

- SAP Scripts Introduction
- Components of SAP Scripts
  Layout Set. Standard Text
  Out Put Program
- Modifying Standard SAP Script Layouts
- Including Logos
- SAP Script Utilities – Upload / Download

➢ Smart Forms

- Smart Forms Introduction
- Graphics Management
- Style Maintenance
  Paragraph Formats. Character Formats
- Writing print program and designing layouts
- Working with Mail, Secondary and Final Window
- Working with Different Node levels in Smart Forms

➢ ALV Reports

- ALV Scripts Introduction
- ALV through Function Modules
- ALV Types
- Tree ALV
- Hierarchy Sequential ALV
- LIST and GRID ALV. Object Oriented ALV
- Interactive ALV

➢ Runtime Analysis & SQL Tracing

- Introduction to Distributed Environment
- Introduction to Cross Applications

➢ RFC

- Introduction to RFC
- Synchronous Asynchronous And Transaction RFC
- Creating RFC Destination between 2 Systems
- Creating Remote Enabled Function Modules
- Creating Program using Remote Enabled Function Modules
- Differentiate Pass by value Pass by Reference

- **ALE**
  - ALE Basics
  - Overview of outbound & Inbound Process
  - Configuration Steps. Define logical systems
  - Assign client to logical system
  - RFC destination
  - Customer distribution model. Creating Ports
- **IDOCS**
  - What is an Idoc?
  - Types of Idocs
  - Basic Idocs. Extension Idocs
  - Creating Idocs. Message Types
  - Assigning Idoc type to Message type
  - Handling Standard Message Type and Idoc Type
  - Enhancing an IDOC
  - Distributing Master Data through Standard Idoc types
  - Send whole copy & sending only the changes
  - Idoc Filtering. Segment Filtering
  - Reduced Message type
  - Message Control Technique
  - Writing Inbound and Outbound IDOC programs
  - Exits handling in IDOC
  - Extending IDOCs and developing programs
- **EDI**
  - EDI Basics
  - Difference between ALE & EDI
  - Overview of Outbound & Inbound Process
  - Configuration Steps. Port Creation
  - Creation of Customer Distribution Model
  - Activation of Change Pointers
- **BAPIs**
  - BAPI Overview
  - Introduction to BOR
  - Creating BAPI from the Scratch
  - Handling Standard BAPIS
  - Extending BAPI's

- **Workflow**
  - What is workflow?
  - Overview of workflow
  - Configuration of Work flow
  - Work flow scenario Development
  - Working with single and multiple tasks
- **User Exits**
  - User Exits Overview
  - Types of User Exits
    - Field Exit. Screen Exit, Function Exit. Menu Exit
- **BADIs**
  - BADIs Overview
  - Defining a BADI
  - Implementing a BADI
  - Single implementation BADI
  - Multiple Implementation of BADI
  - Filter dependent BADI's
- **Enhancement Sport**
  - Concept of Enhancement Spots
  - Implicit Enhancement Spots
  - Explicit Enhancement Spots
- **BTE**
  - Concept of Events
  - Implementing business Transaction Events
- **OO-ABAP**
  - Object Oriented ABAP Overview
  - Defining a Class
  - Implementing a Class
  - Data Abstraction
  - Encapsulation
  - Inheritance
  - Polymorphism
  - Constructors and its visibility
  - Local classes and Global classes
  - Polymorphism
  - Interfaces, Defining and Implementing
  - Event Triggering and handling
  - ALV using OOPS
  - Converting local classes to global classes
  - Visibility of Methods in Global Classes

- Event Handler technique in Object oriented ABAP
- Redefining methods in subclass
- Final Classes and Methods
- Abstract Classes and Methods
- Demo on “Narrow Casting”
- Binding in ABAP
- Implementing Persistent Service using Transaction Service
- Create a transaction for local class methods
- Working with interfaces
- Working with events
- Enhancing a Standard Class
- Working on Polymorphism (More details)
- Working with import, export and change parameters of a class
- Inserting data into the database table using Classes
- Working with Constructor (More details)
- Working with inheritance (More details)
- Working with the keyword SUPER

➢ Adobe Forms

- Adobe Forms Over View
- Adobe Forms Basic
- Online and Offline forms
- Print Forms
- Interactive Adobe forms

➢ Release Management Topics

- Correction & Transport request (CTS)
- Transport Organizer
- Work Bench Request
- Task Creation
- Release Objects

➢ HR - ABAP

- HR ABAP Fundamentals
- Components of HR Module
- HR Technical Overview
- Working with info types
- Logical Database PCH and PAP
- Time Constraint
- Custom info type creation and Enhancement
- Reporting methods