



SAP ABAP — Complete Course Content

WC Skills • World Class Skills Institute

Duration	10 Weeks
Target Audience	Developers moving into SAP ABAP
Prerequisites	Programming fundamentals and basic database concepts.

What this document contains

A module-wise training roadmap covering concepts, hands-on labs, project work, assessment checkpoints and interview preparation. The syllabus is designed as a structured course plan for classroom or live-online delivery.

Course Objectives & Learning Outcomes

By the end of this course, learners should be able to explain the core concepts, perform the practical tasks listed in the labs, troubleshoot common scenarios, document their work and complete the capstone with a professional implementation approach.

- Understand the architecture, terminology and end-to-end workflow of the subject.
- Perform guided hands-on exercises using the relevant tools and development/administration environment.
- Apply troubleshooting, testing, documentation and best-practice techniques.
- Build a portfolio-ready capstone demonstrating practical competency.
- Prepare for technical interviews with scenario-based questions and implementation discussions.

Detailed Module-wise Curriculum

Module 1: ABAP Foundations

- ABAP workbench and development objects
- Packages, transports and naming standards
- Data types, variables, constants and operators
- Control statements and loops
- Modularization with forms, function modules and methods

Hands-on Lab: Lab: build a console-style ABAP report with reusable routines.

Module 2: Internal Tables & Work Areas

- Structures, work areas and field symbols
- Standard, sorted and hashed internal tables
- READ, LOOP, MODIFY, DELETE and COLLECT
- Performance-aware table processing
- Debugging table contents

Hands-on Lab: Lab: process an order dataset using multiple internal table types.

Module 3: Open SQL & Dictionary

- Transparent tables, views and domains
- Data elements and search helps
- Open SQL SELECT, JOIN, aggregation and grouping
- Database-independent coding practices
- Indexes and basic SQL performance

Hands-on Lab: Lab: create a custom table and report with joins and selection criteria.

Module 4: Reports & Selection Screens

- Classical and executable reports
- Selection-screen blocks and validation
- ALV concepts and SALV
- Variants and dynamic selections
- Messages and user-friendly output

Hands-on Lab: Lab: build an ALV sales report with filters and totals.

Module 5: Object-Oriented ABAP

- Classes, interfaces and visibility
- Constructors and inheritance
- Polymorphism and exception handling
- Events and design principles
- ABAP Unit fundamentals

Hands-on Lab: Lab: create an OO service class and unit tests.

Module 6: DDIC, Enhancements & Forms

- Dictionary activation and dependencies
- User exits, BAdIs and enhancement spots
- Implicit/explicit enhancements
- Smart Forms/Adobe Forms overview
- Output troubleshooting

Hands-on Lab: Lab: add a controlled enhancement without modifying standard code.

Module 7: APIs, Integration & Debugging

- RFC, BAPI and IDoc concepts
- Web services and OData overview
- Update tasks and asynchronous processing
- Debugger, breakpoints and watchpoints
- ST05/SAT performance analysis basics

Hands-on Lab: Lab: debug a failing business process and document the root cause.

Module 8: Modern ABAP & Capstone

- ABAP 7.4/7.5+ syntax
- Inline declarations and expressions
- CDS/RAP awareness
- Clean ABAP and code review
- Capstone: end-to-end business report or service

Hands-on Lab: Lab: deliver, test, document and transport the capstone.

Practical Delivery Plan

Phase	Focus	Expected Evidence
1	Concept + demonstration	Notes, diagrams and guided exercises
2	Hands-on practice	Working configuration/code and screenshots/logs
3	Troubleshooting	Issue reproduction, diagnosis and resolution notes
4	Mini project	Functional solution with test cases
5	Capstone	End-to-end project, documentation and presentation

Assessment & Certification Readiness

Recommended assessment pattern: module quizzes (20%), practical labs (30%), mini project (20%), capstone (20%) and interview/viva (10%). Completion certificates, placement support and any certification claims should follow the institute's current published policy and the relevant vendor's certification rules.

Capstone Requirements

- Problem statement and scope
- Architecture/process diagram
- Implementation or configuration
- Test cases and results
- Troubleshooting notes
- User/technical documentation
- Final presentation and interview questions

Interview Preparation Topics

Learners should be able to answer architecture questions, explain the difference between key concepts, troubleshoot a real scenario, justify design choices, discuss performance/security considerations and walk through the capstone from requirement to deployment/support.

Recommended Learning Resources

Use official product documentation and current vendor guidance for version-specific commands, configuration steps and certification requirements. Validate training examples in a non-production environment before applying them to customer systems.