



SAP BASIS S/4HANA Course Curriculum

Course Overview

The TechScholarss SAP BASIS S/4HANA Mastery Program is an industry-focused technical training program designed to develop practical skills required to administer and support SAP systems. It covers SAP architecture, installation, clients, users and authorizations, transports, monitoring, jobs, RFC, database concepts, SAP HANA and SAP S/4HANA technical operations.

The curriculum places strong emphasis on SAP S/4HANA, including its technical architecture, HANA-based environment, S/4HANA monitoring, jobs, interfaces, transports, upgrade and maintenance concepts, production operations and Fiori/Gateway administration.

Course Objectives

- Understand SAP architecture, instances, clients, work processes and system landscapes.
- Install and configure SAP systems and perform post-installation activities.
- Manage users, roles, authorizations and technical security concepts.
- Configure and manage Transport Management System and transport routes.
- Monitor work processes, system logs, locks, updates, dumps and performance.
- Create, schedule and troubleshoot background jobs.
- Configure and troubleshoot RFC destinations and technical connectivity.
- Understand SAP database and SAP HANA administration concepts.
- Understand S/4HANA technical architecture and Fiori/Gateway administration.
- Monitor S/4HANA systems and understand technical changes, upgrades and maintenance.
- Troubleshoot common BASIS incidents and follow production support practices.

Module 1: SAP BASIS Introduction & Architecture

Tools Covered: SAP GUI, SAP Kernel

- SAP BASIS overview and responsibilities
- Three-tier SAP architecture
- Application server and database concepts
- Instances, systems, clients and system IDs
- Dispatcher and work processes
- Dialog, background, update, spool and enqueue processes
- SAP kernel and profiles
- Development, Quality and Production landscapes

Module 2: SAP Installation & System Configuration

Tools Covered: SWPM, SAP Host Agent, SAPinst

- Installation prerequisites
- SAP Software Provisioning Manager
- SAP Host Agent
- Post-installation configuration
- SAP profiles and instance parameters
- Starting and stopping SAP systems
- System copy and refresh concepts
- Kernel upgrade and patching concepts



Module 3: Client Administration

Tools Covered: SCC4, SCCL, SCC9, SCC8

- Client concepts and settings
- Create and configure clients
- Logical systems
- Local and remote client copy
- Client export and import
- Client-dependent and cross-client data
- Client protection and administration best practices

Module 4: User & Authorization Administration

Tools Covered: SU01, PFCG, SU10, SUIM, ST01

- User types and lifecycle
- Create, lock and unlock users
- Password and login policies
- Single and composite roles
- PFCG role maintenance
- Authorization objects and field values
- User comparison and mass administration
- SUIM reporting and authorization trace

Module 5: Transport Management System (TMS)

Tools Covered: STMS, SE09, SE10

- Transport domain controller
- Transport domain and systems
- Transport routes and layers
- Workbench and Customizing requests
- Release and import requests
- Import queues and history
- Transport logs and return codes
- Common transport errors and troubleshooting

Module 6: SAP System Monitoring & Administration

Tools Covered: SM50, SM51, SM66, SM21, ST22, SM12, SM13, ST02

- Daily BASIS monitoring
- Work process monitoring
- Application server monitoring
- System log analysis
- ABAP dump analysis
- Lock and update monitoring
- Buffer and memory monitoring
- CPU and response-time analysis
- Technical health checks

Module 7: Background Job Administration

Tools Covered: SM36, SM37, SM38



- Background processing
- Create and schedule jobs
- Periodic and event-based scheduling
- Job classes and priorities
- Variants and job steps
- Job logs and monitoring
- Canceled and long-running jobs
- Rescheduling and troubleshooting

Module 8: RFC, Connectivity & Interfaces

Tools Covered: SM59, RFC, Gateway, TCP/IP

- RFC architecture and communication types
- RFC destinations
- ABAP and TCP/IP connections
- Trusted RFC concepts
- RFC authorization requirements
- Connection and authorization tests
- RFC error troubleshooting
- SAP Gateway overview
- Technical interface monitoring

Module 9: Database Administration Concepts

Tools Covered: DBACOCKPIT, SAP Database Monitoring

- SAP database architecture
- Database users and connectivity
- Space and growth monitoring
- Backup and recovery concepts
- Database health checks
- Database performance concepts
- Housekeeping concepts
- BASIS and DBA coordination

Module 10: SAP HANA Administration

Tools Covered: SAP HANA Cockpit, HDBSQL

- HANA architecture and services
- System and tenant databases
- HANA users and privileges
- System monitoring
- Memory and CPU monitoring
- HANA backup and recovery
- Tenant administration concepts
- HANA start/stop and troubleshooting

Module 11: SAP S/4HANA Technical Administration

Tools Covered: SAP S/4HANA, SAP HANA

- S/4HANA technical architecture
- System landscape concepts



- Technical changes and simplification overview
- S/4HANA monitoring
- Jobs, interfaces and transports
- Upgrade and maintenance concepts
- Production operations

Module 12: SAP Fiori & Gateway Administration

Tools Covered: SAP Gateway, OData, Fiori Launchpad

- Fiori architecture
- Launchpad and catalogs
- Technical roles
- Gateway activation concepts
- OData services
- ICF/SICF services
- Gateway error monitoring
- Fiori troubleshooting
- Frontend-backend connectivity

Module 13: SAP Security & Technical Hardening

Tools Covered: PFCG, SU01, RZ10, RZ11

- Technical security fundamentals
- Password and login policies
- Security profile parameters
- User and role governance
- Authorization trace
- RFC and trusted-system security
- SNC overview
- Audit and security logging concepts

Module 14: Performance Tuning & Troubleshooting

Tools Covered: ST03N, ST02, ST06, ST12, ST05

- Workload analysis
- Operating system monitoring
- Database and application performance
- Memory and buffer concepts
- SQL trace
- Runtime analysis
- Long-running transactions and jobs
- Bottleneck identification
- Root-cause analysis

Module 15: Backup, Recovery, Patching & Maintenance

Tools Covered: SUM, Kernel, SAP Notes

- Backup strategy
- Database recovery
- Kernel patching
- Support packages



- SAP Notes
- SUM overview
- Maintenance windows
- Post-maintenance validation

Module 16: High Availability & Disaster Recovery

Tools Covered: SAP HANA System Replication, HA/DR

- High Availability concepts
- Application server redundancy
- Database HA
- HANA System Replication
- Disaster Recovery
- RPO and RTO
- Failover and failback
- Monitoring and operational readiness

Module 17: Real-World SAP BASIS Projects

Tools Covered: SAP BASIS, TMS, HANA, Fiori

- SAP landscape setup
- Client creation and copy scenario
- User and role administration
- Transport landscape project
- Production monitoring project
- Background job troubleshooting
- RFC connectivity project
- HANA monitoring and backup scenario
- Fiori/Gateway troubleshooting
- Kernel maintenance
- Performance troubleshooting
- Production incident root-cause analysis

Module 18: Resume Building & Interview Preparation

Tools Covered: SAP BASIS Support Scenarios

- SAP BASIS resume preparation
- Technical project profile
- Daily BASIS activity explanation
- Production support questions
- Architecture questions
- User and authorization questions
- TMS questions
- Monitoring and troubleshooting questions
- HANA and S/4HANA questions
- Fiori/Gateway questions
- Scenario-based questions
- Mock interviews and HR preparation

Tools & Technologies Covered



- SAP BASIS / SAP NetWeaver
- SAP S/4HANA Technical Administration
- SAP HANA
- SAP GUI
- SWPM
- SUM
- SAP Host Agent
- TMS
- PFCG
- SAP Fiori
- SAP Gateway
- RFC
- Background Jobs
- System Monitoring
- Performance Analysis
- Backup & Recovery

Career Opportunities After This Program

- SAP BASIS Consultant
- SAP BASIS Administrator
- SAP S/4HANA Technical Consultant
- SAP HANA Administrator
- SAP Technical Support Consultant
- SAP System Administrator
- SAP Application Support Consultant
- SAP Fiori / Gateway Technical Consultant
- SAP Technical Operations Analyst
- SAP Production Support Consultant
- SAP Implementation Consultant

Why Choose TechScholarss?

- Industry-oriented SAP BASIS curriculum
- Hands-on system administration practice
- Real-world SAP support scenarios
- Live project-based learning
- Practical S/4HANA technical administration
- Experienced technical trainers
- Flexible online and offline batches
- Resume and interview preparation
- Internship support
- Placement assistance
- Industry-focused certification

Certification

Students completing the program can receive a TechScholarss SAP BASIS Course Certificate, subject to the institute's completion criteria.



Program Outcome

By the end of the program, learners should be able to understand SAP technical architecture, administer users and authorizations, manage transports, monitor SAP systems, schedule jobs, configure RFC connectivity, work with SAP HANA and S/4HANA technical environments, support Fiori/Gateway components and troubleshoot common production BASIS issues.