SSIS (SQL Server Integration Services) Training Course

Professional Development Training Course Outline

Category	Business Intelligence	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today’s data-driven digital economy, organizations require robust, scalable, and high-performance data integration solutions to enable business intelligence, analytics, and real-time decision-making. SQL Server Integration Services (SSIS) is a powerful ETL (Extract, Transform, Load) platform that empowers data engineers, database administrators, and business analysts to design efficient data pipelines, automate workflows, and ensure data quality across enterprise systems. SSIS (SQL Server Integration Services) Training Course is designed to equip learners with in-demand data integration skills, leveraging cloud-ready architectures, data warehousing strategies, and advanced transformation techniques aligned with modern big data ecosystems.

This comprehensive SSIS training program focuses on practical implementation, performance optimization, and real-world data engineering scenarios. Participants will gain hands-on experience in building scalable ETL pipelines, integrating diverse data sources, implementing data governance, and deploying enterprise-grade solutions. With a strong emphasis on trending technologies such as data lakes, cloud integration, and automation, this course prepares professionals to meet the growing demand for data integration specialists in industries embracing digital transformation, AI-driven analytics, and business intelligence platforms.

Programme Curriculum

SSIS (SQL Server Integration Services) Training Course

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Course Objectives

- Master ETL development using SSIS with enterprise data integration techniques
- Design scalable data pipelines for big data and cloud environments
- Implement data transformation, cleansing, and validation strategies
- Optimize SSIS package performance and execution efficiency
- Integrate heterogeneous data sources including APIs, flat files, and databases
- Deploy and manage SSIS solutions in production environments
- Apply data warehousing concepts and dimensional modeling
- Automate workflows using scheduling and event-driven processes
- Ensure data governance, security, and compliance standards
- Troubleshoot and debug SSIS packages effectively
- Leverage cloud integration with Azure Data Factory and hybrid solutions
- Build reusable and maintainable ETL frameworks
- Develop real-time data integration solutions for analytics

Organizational Benefits

- Improved data quality and consistency across systems
- Faster decision-making through real-time data availability
- Enhanced business intelligence and reporting capabilities
- Reduced operational costs through automation
- Scalable data integration infrastructure
- Increased productivity of data teams
- Stronger data governance and compliance
- Seamless integration with cloud platforms
- Better resource utilization and performance optimization
- Competitive advantage through data-driven insights

Target Audiences

- Data Engineers
- Database Administrators
- Business Intelligence Developers
- Data Analysts
- Software Engineers
- IT Professionals

- Cloud Solution Architects
- Project Managers

Course Duration: 5 days

Course Modules

Module 1: Introduction to SSIS and ETL Concepts

- Overview of ETL architecture and data integration lifecycle
- SSIS tools, components, and development environment
- Understanding control flow and data flow
- Data integration use cases in modern enterprises
- Introduction to SQL Server Data Tools (SSDT)
- Case Study: Building a basic ETL pipeline for sales data integration

Module 2: Data Flow and Transformations

- Data flow task and pipeline architecture
- Common transformations (lookup, merge, aggregate)
- Data cleansing and validation techniques
- Handling data types and conversions
- Error output and data quality management
- Case Study: Transforming raw customer data into structured format

Module 3: Control Flow and Workflow Automation

- Control flow tasks and containers
- Precedence constraints and workflow design
- Event handlers and logging mechanisms
- Scheduling with SQL Server Agent
- Dynamic package configuration
- Case Study: Automating daily ETL workflows for reporting systems

Module 4: Working with Data Sources and Destinations

- Connecting to relational and non-relational data sources
- Flat files, Excel, XML, and APIs integration
- OLE DB and ADO.NET connections
- Data staging and loading strategies
- Managing connection managers
- Case Study: Integrating multiple data sources into a centralized warehouse

Module 5: Advanced Transformations and Scripting

- Derived column and conditional split transformations
- Script task and script component usage
- Custom transformation development
- Data enrichment techniques
- Handling complex business logic
- Case Study: Implementing custom transformation using scripting

Module 6: Error Handling and Debugging

- Debugging SSIS packages effectively
- Logging and monitoring strategies
- Handling exceptions and failures
- Data error redirection techniques
- Performance bottleneck identification
- Case Study: Resolving errors in a failing ETL pipeline

Module 7: Deployment and Configuration

- Package deployment models (project vs package)
- Environment variables and configurations
- Version control and CI/CD integration
- Security and access control
- Managing SSIS catalog
- Case Study: Deploying SSIS packages in a production environment

Module 8: Performance Tuning and Optimization

- Performance tuning techniques for SSIS packages
- Parallel processing and memory optimization
- Efficient data loading strategies
- Indexing and query optimization
- Monitoring execution performance
- Case Study: Optimizing a slow-performing ETL process

Training Methodology

- Instructor-led interactive sessions with real-time demonstrations
- Hands-on labs and practical exercises
- Industry-relevant case studies and project-based learning
- Group discussions and collaborative problem-solving
- Use of real datasets for experiential learning
- Continuous assessment through quizzes and assignments
- Access to training materials and reference guides
- Post-training support and knowledge sharing

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com