

SAMBODHI

**SOFTWARE
TESTING**



ETL Testing Training Course

Project Based Immersive Learning Course

ETL Testing Training Course Overview

The ETL Testing course offered by Education Nest is suitable for both beginners and experts. The program is designed to guide learners through a step-by-step process that covers testing basics, such as understanding the difference between OLAP and OLTP, as well as Data Warehousing concepts, workflow, RDBMS, database testing versus data warehouse testing, checking data with SQL, data validation and correctness. In addition, students will be taught how to perform OLAP testing, including testing reports and cubes. Through hands-on projects, participants will gain practical knowledge of ETL testing, Performance Tuning, cubes, and other essential skills necessary to become a successful ETL Testing expert. The course includes real-world examples to help students gain an in-depth and comprehensive understanding of Data Warehousing and business intelligence concepts.

Benefits of ETL Testing Training Course:

ETL Testing training provides individuals with the knowledge and skills necessary to excel in the field of Data Warehousing and Business Intelligence, enabling them to advance their careers and increase their earning potential. In the present scenario, you will find numerous valid reasons to learn this course. One of the most obvious reasons is its high demand and vacancy for skilled

candidates. By getting started with ETL Testing Training, you will eventually come across some of the hidden facts, and the latest updates as well. The training course is entirely centered on equipping learners with job-specific skills.

Who should learn?

- Software Engineers
- Analysts
- BI/ETL developers
- ETL testers
- IT professionals
- Database professionals
- Mainframe professionals
- SQL developers

Why do you need ETL Testing Training Course?

Average Salary Growth:

The salary growth of ETL (Extract, Transform, and Load) professionals varies based on several factors such as experience, job location, industry, and skill level. According to data from Payscale, the average salary of an ETL Developer in the United States is around \$87,000 per year, with the salary ranging between \$57,000 to \$122,000. Also according to Indeed's salary data, on average, ETL professionals earn up to \$130,000 per annum. As the ETL professional gains experience and expertise, their salary can increase significantly.

Industries:

The demand for ETL (Extract, Transform, Load) Developers varies across different Multinational Corporations (MNCs) depending on their business needs and the industry they operate in. However, in general, ETL Developers are in high demand in MNCs that deal with large volumes of data, such as finance, healthcare, retail, and telecommunications.

Multinational Corporations (MNCs) like eBay, PayPal, FedEx, Amazon, Microsoft, JPMorgan Chase, IBM, UnitedHealth Group, Verizon, Oracle, Accenture, Deloitte, Capgemini and many other tech giants recruiting testing professionals.

Position in Market:

According to job research websites such as the U.S. Bureau of Labor Statistics (BLS) and Indeed, the demand for ETL (Extract, Transform, Load) professionals is projected to grow in the coming years. The BLS predicts that employment of database administrators, which includes ETL Developers, will grow by 10% from 2019 to 2029, which is much faster than the average for all occupations. Also according to Indeed the number of job postings for ETL Developers has increased by over 30% since 2017, indicating a growing demand for professionals with ETL skills.

Designations:

- ETL Developer
- Data Integration Developer
- Data Warehouse Developer
- Business Intelligence Developer
- Data Engineer
- ETL Specialist
- Data Integration Engineer
- Senior ETL Developer
- Lead ETL Developer
- Extract Transform Load (ETL) Analyst

Why ETL Testing Training Course from Education Nest

- **Free Demo on Request**
- **Live Interactive Learning**
- **Lifetime Access**
- **Flexible Schedules**

- **24x7 Support**
- **One on One Doubt Clearing**
- **Real Time Project-Based Learning**
- **Certificate Oriented Curriculum**

Key Skills Covered:

- Data Warehousing and how Business Intelligence works
- Understanding of ETL concepts
- Master Data Integration concepts
- Working with RDBMS
- Gain knowledge on Load Dimension tables
- Learn to recognize the connection & network errors
- Implement workflow & sessions for recovery

ETL Testing Training Course Syllabus

Module 1: (Data Ware Housing Concepts)

- What is Data Warehouse?
- Need of Data Warehouse
- Introduction to OLTP, ETL and OLAP Systems
- Difference between OLTP and OLAP
- Data Warehouse Architecture
- Data Marts
- ODS [Operational Data Store]
- Dimensional Modeling
- Difference between relation and dimensional modeling

- Star Schema and Snowflake Schema
- What is fact table
- What is Dimension table
- Normalization and De-Normalization

Module 2: (Introduction to ETL Testing)

- ETL architecture.
- What is ETL and importance of ETL testing
- How DWH ETL Testing is different from the Application Testing
- SDLC/STLC in the ETL Projects (ex: V Model, Water fall model)

Module 3: (Challenges in DWH ETL Testing compare to other testing)

- Incompatible and duplicate data
- Loss of data during ETL process
- Testers have no privileges to execute ETL jobs by their own
- Volume and complexity of data is very huge
- Fault in business process and procedures
- Trouble acquiring and building test data

Module 4: (ETL Testing Work flow activities involved)

- Analyze and interpret business requirements/ workflows to Create estimations
- Approve requirements and prepare the Test plan for the system testing
- Prepare the test cases with the help of design documents provided by the developer team
- Execute system testing and integration testing
- Best practices to Create quality documentations (Test plans, Test Scripts and Test closure summaries)
- How to detect the bugs in the ETL testing

- How to report the bugs in the ETL testing
- How to co-ordinate with developer team for resolving the defects

Module 5: (Types of ETL Testing)

- Data completeness
- Data transformation
- Data quality
- Performance and scalability
- Integration testing
- User-acceptance testing
- SQL Queries for ETL Testing
- Incremental load testing
- Initial Load / Full load testing

Module 6: (Different ETL tools available in the market)

- Informatica
- Ab Initio
- IBM Data stage

Module 7: (Power Center Components)

- Designer
- Repository Manager
- Workflow Manager
- Workflow Monitor
- Power Center Admin Console

Module 8: (Informatica Concepts and Overview)

- Informatica Architecture

Module 9: (Sources)

- Working with relational Sources
- Working with Flat Files

Module 10: (Targets)

- Working with Relational Targets
- Working with Flat file Targets

Module 11: (Transformations – Active and Passive Transformations)

- Expression
- Lookup –Different types of lookup Caches
- Sequence Generator
- Filter
- Joiner
- Sorter
- Rank
- Router
- Aggregator
- Source Qualifier
- Update Strategy
- Normalizer
- Union
- Stored Procedure
- Slowly Changing Dimension
- SCD Type1

- SCD Type2 — Date, Flag and Version
- SCD Type3

Module 12: (Workflow Manger)

- Creating Reusable tasks
- Workflows, Worklets & Sessions
- Tasks
- Indirect Loading
- Constraint based load ordering
- Target Load plan
- Worklet , Mapplet , Resuable transformation
- Migration ?ML migration and Folder Copy
- Scheduling Workflow
- Parameter and variables
- XML Source, Target and Transformations

Module 13: (Performance Tuning)

- Pipeline Partition
- Dynamic Partition
- Pushdown optimization
- Preparation of Test Cases
- Executing Test case
- Preparing Sample data
- Data validation in Source and target
- Load and performance testing
- Unit testing Procedures
- Error handling procedures

Career Support

Profile Building:

Experienced professionals are available to offer tailored assistance in crafting your CV and online profiles, taking into account your unique educational and experiential background.

Interview Preparation:

The upcoming interview preparation service will include personalized one-on-one sessions and the option for mock interviews if needed.

Job Referrals:

At Education Nest, we receive a variety of job requirements from diverse sources such as organizations, our clients, HR consultants, and a vast network of Education Nest currently employed in different companies. We strive to meet these varied requirements to the best of our abilities.

Continuous Support:

We offer continuous support for as much time as you need it, and a considerable number of our learners receive multiple interviews offers and promising employment opportunities as a result of the abilities they gain during the program.