Training Course on Data Mapping and Inventory

Professional Development Training Course Outline

Category	Data Security	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In the era of digital transformation, organizations generate massive volumes of data daily. To ensure optimal data governance, compliance, and decision-making, understanding data mapping and maintaining a reliable data inventory has become a strategic priority. Training Course on Data Mapping and Inventory is designed to equip participants with essential skills in data lineage tracking, metadata management, and data classification, empowering organizations to ensure regulatory compliance, improve data security, and enhance business intelligence strategies.

Through real-life case studies, advanced data governance tools, and hands-on mapping exercises, this training emphasizes practical execution. Whether you're navigating GDPR, HIPAA, or internal compliance frameworks, this course lays a robust foundation for data accountability, impact assessments, and AI-readiness. Master the essential techniques of automated discovery, data cataloging, and data flow visualization for organizational success.

Programme Curriculum

Training Course on Data Mapping and Inventory

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Course Objectives

1. Understand the fundamentals of data mapping and data inventory management.
2. Learn how to create accurate data flow diagrams and entity relationship models.
3. Identify and document personally identifiable information (PII) across systems.
4. Implement automated data discovery tools for metadata extraction.
5. Comprehend the role of data lineage in data governance frameworks.
6. Apply best practices in data classification and sensitive data tagging.
7. Integrate compliance requirements like GDPR, CCPA, and HIPAA into data inventories.
8. Use data cataloging platforms for real-time data visibility.
9. Perform risk assessments and ensure regulatory audit readiness.
10. Align data mapping with AI governance, machine learning and cloud migration strategies.
11. Establish data stewardship roles and responsibilities.
12. Improve organizational efficiency with master data management (MDM) principles.
13. Conduct successful data inventory audits and gap analysis.

Target Audience

1. Data Governance Officers
2. IT Managers and System Architects
3. Business Analysts
4. Compliance and Risk Officers
5. Chief Data Officers (CDOs)
6. Data Privacy Professionals
7. Internal Auditors
8. Project Managers involved in data-driven projects

Course Duration: 10 days

Course Modules

Module 1: Introduction to Data Mapping

- Definition and purpose of data mapping
- Types of data maps (logical, physical, conceptual)
- Overview of structured vs unstructured data
- Importance in modern data governance
- Use cases across sectors
- **Case Study**: Implementing data mapping in a financial institution

Module 2: Understanding Data Inventory

- What is a data inventory?
- Key components of a good inventory
- Manual vs automated inventorying
- Inventory frequency and lifecycle
- Tools used in inventory management
- **Case Study**: Creating a dynamic inventory for a healthcare provider

Module 3: Data Lineage and Flow Diagrams

- Capturing data movement from source to destination

- Building lineage diagrams
- Granularity of lineage
- Benefits in compliance and analytics
- Tools for lineage tracking
- **Case Study**: GDPR audit preparation with data lineage

Module 4: Metadata and Data Catalogs

- Role of metadata in governance
- Metadata standards and types
- Cataloging structured and semi-structured data
- Data enrichment via catalogs
- Integration with enterprise platforms
- **Case Study**: Metadata management in a retail enterprise

Module 5: Sensitive Data Discovery

- Identifying sensitive data types
- Discovery tools and automation
- Use of regex and pattern-based discovery
- AI in sensitive data detection
- Documentation of findings
- **Case Study**: Locating PII for GDPR compliance

Module 6: Data Classification Techniques

- Levels of data classification
- Manual vs automated classification
- Policy-based classification
- Impact of classification on data use
- Integration with DLP systems
- **Case Study**: Financial sector data classification model

Module 7: Regulatory Compliance Integration

- Overview of GDPR, CCPA, HIPAA
- Data inventory's role in compliance
- Record of processing activities (RoPA)
- Reporting obligations
- Consent management
- **Case Study**: HIPAA-compliant inventory build

Module 8: Master Data Management (MDM)

- What is MDM and why it matters
- Core data domains (customer, product, location)
- Golden record creation
- MDM architecture
- Data quality in MDM
- **Case Study**: Customer MDM implementation in telecom

Module 9: Data Mapping for Cloud Environments

- Cloud data architecture
- Mapping across multi-cloud and hybrid platforms
- Tools like AWS Glue, Azure Data Factory

- Security considerations in the cloud
- Migration challenges
- **Case Study**: Cloud data migration strategy in an e-commerce company

Module 10: Automation Tools and AI in Data Mapping

- Overview of automation platforms
- Role of AI/ML in mapping
- Reducing manual overhead
- Visual mapping dashboards
- Tool comparison (Collibra, Alation, Talend)
- **Case Study**: AI-enabled data mapping in an insurance firm

Module 11: Risk Management and Data Mapping

- Identifying data risks
- Mapping for breach response
- Risk scoring methodologies
- Data risk mitigation strategies
- Role of inventory in incident response
- **Case Study**: Data breach investigation in education

Module 12: Creating Data Mapping Policies

- Policy frameworks and templates
- Roles and responsibilities
- Approval workflows
- Policy enforcement methods
- Training and awareness
- **Case Study**: Building an enterprise-wide mapping policy

Module 13: Auditing and Gap Analysis

- Internal audit checklists
- Identifying inventory and mapping gaps
- Reporting frameworks
- Evidence collection for audits
- Data inventory updates post-audit
- **Case Study**: Audit readiness for a public sector agency

Module 14: Visualization and Reporting

- Data visualization tools for mapping
- Dashboards and real-time monitoring
- Communicating data flows to stakeholders
- KPI development
- Custom reports by department
- **Case Study**: Executive-level data inventory dashboard

Module 15: Final Assessment and Strategy Roadmap

- Review of concepts and tools
- Designing a data mapping strategy
- Organization-specific inventory roadmaps
- Change management principles
- Preparing final presentations

- **Case Study**: End-to-end strategy rollout in a multinational corporation

Training Methodology

- Instructor-led interactive sessions
- Hands-on labs using real tools (e.g., Collibra, Alation, Talend)
- Group activities for policy drafting and risk assessments
- Case study discussions and scenario analysis
- Pre- and post-assessment quizzes

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	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

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