

Data Stewardship Fundamentals

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DS-01 Data Stewardship Fundamentals

Module 0: About the Course (5 min)

Module 1: Data Stewardship Concepts (25 min)

- Data Stewardship Defined
 - What is Stewardship? Part 1
 - What is Stewardship? Part 2
 - What is Stewardship? Part 3
- Kinds of Data Stewards
 - 5 Types of Data Stewards
- Data Stewards as Individuals
 - Who Becomes a Data Steward?
 - Characteristic of Data Steward
- Module Summary

Module 2: Data Stewardship Organizations (31 min)

- Organizational Structures
 - Hierarchical Organization
 - Matric Organization
 - Circular Organization Title
 - Data Stewardship Communities
- Collaborative Data Stewardship
 - Data Stewards as a Team
 - Data Stewards as Data Owners
 - Data Stewards and Data Architects
 - Data Stewards and Data Governors
 - Data Stewards and Data Producers
 - Data Stewards and Data Consumers
 - Data Stewards and Data Managers
- Data Stewardship and Data Ownership
 - Stewardship vs. Ownership
 - Stewardship and Ownership Synergies
 - Who are Data Owners?
 - Why Data Ownership Matters?
 - Data Ownership Challenges
- Module Summary: Part 1
- Module Summary: Part 2



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Module 3: Data Stewardship Roles and Responsibilities (26 min)

- Data Stewardship Roles
 - Data Stewards as Leaders
 - Data Stewards as Managers
 - Data Stewards as Facilitators
 - Data Stewards as Problem Solvers
 - Data Stewards as Coaches
- Data Stewardship Responsibilities
 - Stewardship and Data Strategy
 - Stewardship and Data Literacy
 - Stewardship and Data Policies
 - Stewardship and Data Policies – Policy Maintenance
 - Stewardship and Data Policies – Policy Compliance
 - Stewardship and Data Protection
 - Stewardship and Data Quality
 - Stewardship and Metadata Management
- Module Summary Part: 1
- Module Summary Part: 2

Module 4: Essential Knowledge – Part 1: Business and Data (27 min)

- Business Domains
 - Bridging Business and Technical Knowledge
 - Industry Knowledge
 - Business Function Knowledge
 - Business Initiatives Knowledge
- Data Strategy
 - Data and Business Capabilities
 - Data and Value Creation
 - Data and Risk Management
 - Data Culture
- Data Operations
 - Business Process Communications – The Key Role of Data
 - Business Processes and Data Operations
 - Data Creation and Data Steward Knowledge
 - Data Retrieval and Data Steward Knowledge
 - Data Updating and Data Steward Knowledge
 - Data Deletion and Data Steward Knowledge
- Data Consumption
 - Optional Data Use Cases
 - Business Intelligence and Analytics
 - Data Science
- Module Summary: Part 1
- Module Summary: Part 2



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Module 5: Essential Knowledge – Part 2: Managing Data (59 min)

- Data Management
 - Critical Data Elements (CDEs)
 - Data Integration
 - Data Curation
 - Data Provisioning
 - Operational Data Management
 - Analytical Data Management
 - Decentralized Data Management
- Metadata Management
 - Kinds of Metadata
 - Uses of Metadata
 - Users of Metadata
 - Data Semantics
 - Data Semantics and Data Management
 - Data Semantics and Data Modeling
 - Data Modeling
 - Data Modeling Levels of Abstraction
 - Common Kinds of Data Models
 - Data Cataloging
- Data Quality
 - Scope of Data Quality
 - Data Correctness
 - Data Integrity
 - Data Usability
 - Data Objectivity
 - Detecting Data Quality Defects
 - Correcting Data Quality Defects
 - Preventing Data Quality Defects
 - Measuring Data Quality
 - Data Observability
- Data Privacy and Protection
 - Data Classification
 - Regulatory Compliance
 - Authentication, Authorization, and Access
- Module Summary: Part 1
- Module Summary: Part 2

Module 6: Data Stewards as Problem Solvers (10 min)

- A Diagnostic Guide
- Problem Solving Skills
- 14 Core Data Management Processes
- Common Data Dysfunction Symptoms
- Common Causes Data Dysfunction
- Solutions for Data Dysfunction



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- From Symptoms to Solutions
- Facilitating Collaborative Solutions
- Module Summary

Module 7: Implementing and Evolving a data Stewardship Program (19 min)

- Executive Sponsorship
- Guiding Principles for Data Stewardship – Part 1
- Guiding Principles for Data Stewardship – Part 2
- Stewardship is a Team Job
 - Data Stewardship Teams
 - Staffing the Stewardship Organization
- Data Stewardship Roadmap
 - Data Stewardship Metrics and KPIs
 - Data Stewardship Maturity
- Module Summary: Part 1
- Module Summary: Part 2
- Course Summary: Part 1
- Course Summary: Part 2