Data Integration Education

Online Education • Certification • Enterprise Solutions

- ➢ **Data Integration Fundamentals and Best Practices**
- ➢ **Data Warehousing Fundamentals**
- ➢ **MDM Architecture and Implementation**
- ➢ **Data Virtualization**
- ➢ **Ensuring Data Quality in Data Integration**
- ➢ **Fundamentals of Data Modeling and Metadata Management**
- ➢ **Data Profiling**
- ➢ **Data Integration Techniques for Designing an ODS**
- ➢ **Data Parsing, Matching, and De-Duplication**
- ➢ **Data Quality Assessment**
- ➢ **Building and Operating a Data Warehouse**
- ➢ **Big Data Fundamentals**

TABLE OF CONTENTS

Data Integration (DI) is an essential information management capability that provides the foundation for enterprise-wide views of consistent, connected, and trusted business information. The alternative to data integration is data disparity which leads to miscommunication, misunderstanding, confusion, uncertainty, and misinformed business decisions and actions.

Data integration is important, but it is complex and challenging. The variety of reasons for data integration (data warehousing, master data management, data migration, etc.), the increasing scope of data sources (enterprise data, external data, big data, web data, etc.), and the growth in data integration techniques and technologies (ETL, ELT, federation, virtualization, etc.) all contribute to data integration complexities.

From defining integration requirements to acquiring and unifying data the integration choices are abundant. Effective and sustainable data integration systems depend on skilled and educated data professionals from architects to implementers.

WHAT OUR CUSTOMERS ARE SAYING

"The course instructors were very insightful, and were very knowledgeable."

I found the courses to be very well designed; they were intellectually stimulating and challenging, but the workload was manageable. The course instructors were very insightful, and were very knowledgeable with the great hands-on experience and provided interesting real life examples.

Marina Severinovskaya, CIMP Ex - Data Governance, CIMP - Data Quality, MDM, IM Foundations, USA

Full course descriptions begin on page 8.

Data Integration Fundamentals and Best Practices
Instructor: Dave Wells
This 5-hour course discusses architectures, requirements, methods, roles and activities of data integration that can be applied to achieve successful data integration projects for a variety of applications and circumstances.

Data Warehousing Fundamentals
Instructor: Mark Peco
This 5-hour course presents a holistic view of data warehousing components, concepts, and definitions. From a systems-thinking perspective, you'll see a framework that describes the building blocks and their interactions to generate real and measurable value.

MDM Architecture and Implementation
Instructor: William McKnight
This 4-hour course provides a comprehensive view of the critical elements for MDM success including business, architectural, people, process, project, and technology considerations. Learn from the real-world experiences of the instructor what it takes to make MDM work.

Data Virtualization
Instructor: Dave Wells
Data virtualization is a core component of next-generation data integration architectures, techniques, and technology. This 3-hour online training course will introduce you to the concepts, techniques, and capabilities of data virtualization.

Fundamentals of Data Modeling and Metadata Management
Instructors: Dave Wells and Arkady Maydanchik
This 3-hour course provides foundation knowledge about the most commonly used data modeling techniques: entity-relationship modeling and dimensional modeling. A similar foundation is built for metadata management with attention to common metadata purposes and metadata discovery methods.

Data Profiling
Instructor: Arkady Maydanchik
Data profiling is the process of analyzing actual data and understanding its true structure and meaning. It is one of the most common and important activities in information management. This 5-hour course teaches all practical skills necessary to succeed in a data profiling initiative.

Data Integration Techniques for Designing an ODS
Instructor: Angelo Bobak
Business data integration is a complex problem that must be solved when organizations change or enhance their internal structures. This 3-hour online course presents a simple yet thorough process that describes the challenges of building an Operational Data Store (ODS) and the solutions to these challenges.

Ensuring Data Quality in Data Integration
Instructor: Arkady Maydanchik
Without a comprehensive data quality monitoring program bad data spread like viruses through countless real-time and batch interfaces. This 5-hour course discusses various practices that can be put in place to maintain high data quality through data integration.

Data Parsing, Matching, and De-Duplication
Instructors: Kathy Hunter, William McKnight, Henrik Sørensen
To take advantage of the worldwide marketplace, businesses need to manage data globally. This reality poses very specialized and unique kinds of problems in data management. In this 4.5-hour course you will learn to identify and avoid the pitfalls of global information.

Data Quality Assessment
Instructor: Arkady Maydanchik
This 6-hour course gives comprehensive treatment to the process and practical challenges of data quality assessment. It starts with systematic treatment of various data quality rules and proceeds to the results analysis and building aggregated data quality scorecard.

Building and Operating a Data Warehouse
Instructor: Mark Peco
This 4.5-hour course re-defines the scope of the "modern" data warehouse. The need for planning and the role of architecture are described and clarified, followed by a discussion about the challenges related to gathering useful information requirements. This is followed by a discussion of design approaches, development, testing and quality management techniques.

Big Data Fundamentals
Instructor: William McKnight, Jake Dolezal
This practical session will help you make the most of big data and make the best choices to ensure information remains an unparalleled corporate asset. This 3.5 hour course will help you make the most of big data and make the best choices to ensure information remains an unparalleled corporate asset.

CIMP

CERTIFIED INFORMATION MANAGEMENT PROFESSIONAL

CIMP: Demonstrate Mastery. Achieve Success.

Certification is an important tool for job seekers and for employers seeking to hire the most qualified people. eLearningCurve offers a robust certification program, Certified Data Integration Professional (CIMP) that builds upon education to certify knowledge and understanding of data integration.

The CIMP Data Integration designation makes a clear statement that you have learned from the industry leaders and have demonstrated thorough understanding of data integration by passing several challenging exams.

For the true experts and standard bearers in the industry we offer the second level of CIMP certification - **CIMP Ex**. To earn the CIMP Ex designation you must demonstrate a combination of great **Ex**pertise, **Ex**perience, and **Ex**cellence.

WHAT SETS CIMP APART?

Rigorous exam system: We go beyond the basics. Rather than testing for knowledge that any industry professional should know, CIMP exams test an in-depth knowledge, comprehensive understanding, and ability to apply various concepts to a problem. You can be proud of your achievement of the CIMP designation, and hiring managers can be sure they are getting a highly knowledgeable employee.

Education to support certification: We believe that the best way to ensure success is to combine meaningful industry experience with thorough academic study. To that end, CIMP exams are aligned with our courses, developed and taught by top industry educators and professionals.

Designed with busy, working professionals in mind: No time-consuming or costly travel is required to complete coursework or to take your CIMP examinations. All courses and exams are available online. All that's required of candidates is an internet connection and the desire to demonstrate mastery of data governance topics and achieve success.

HOW DO I ENROLL?

The most convenient and cost-efficient method to enroll in the CIMP program is with one of our Education Packages. Each package includes all courses and exams necessary to earn CIMP or CIMP Ex. Alternatively, you can enroll in courses one at a time.

For more information about CIMP, including customer stories on the Web visit http://ecm.elearningcurve.com.

EDUCATION PROGRAMS

Education Program packages allow you to purchase bundles of online data integration courses at a significant discount. Whether you are looking for a comprehensive data quality education covering all relevant topics, or want to focus on a specific topic or job role, there is a program for you.

CIMP Data Integration Program offers education in data integration capped off with the Certified Information Management Professional (CIMP) designation in the Data Integration track. The program includes five courses chosen from our data integration curriculum, including Data Integration Fundamentals and Best Practices and at least two other "core" courses. Students, their managers, or program sponsors may pick different course combinations that are most suitable to individual student's roles and needs.

CIMP Ex Data Integration Program ensures thorough understanding of data integration expected from a true expert. The program includes all five "core" data integration courses and three elective courses, one of which can be chosen outside of the data integration curriculum. Upon completion of the program you will meet the academic requirements of the highest level of CIMP – CIMP Ex.

Many information management disciplines, such as data integration, data warehousing, data quality, and MDM are strongly interconnected. A true expert in one area would desire an in-depth knowledge in the other. **CIMP Ex Data Integration & Data Quality Program** combines education in data integration and data quality. The program includes 10 courses and allows you to earn CIMP in Data Integration and Data Quality tracks. **CIMP Ex Data Integration and MDM Program** includes 10 courses from our data integration and MDM curricula and allows you to earn a CIMP in Data Integration and Master Data Management tracks. **CIMP Ex Data Integration and Metadata Program** combine 10 courses from our data integration and Data Modeling and Metadata Management curricula and allows you to earn a CIMP in Data Integration and Data Modeling and Metadata Management tracks. **CIMP Ex Data Integration and Data Warehousing Program** combines 10 courses from our data integration and data warehousing curricula and allows you to earn a CIMP in Data Integration and Data Warehousing.

We recognize that everyone's needs are unique. If you cannot find a program for you, simply e-mail support@elearningcurve.com and tell us what you are looking for and we will tailor the program for your needs.

ENTERPRISE SOLUTIONS

Today more than ever companies are watching expenses and looking for ways to streamline processes, make training convenient, and create a consistent, scalable learning environment.

eLearningCurve Enterprise is a flexible, convenient, and cost-effective way to train your employees and ensure that all team members have access to data integration training they need when they need it. Whether your team or department work in the same office, or are on the other side of the world from each other, you can train them on time and on budget with eLearningCurve Enterprise.

Why eLearningCurve Enterprise?

➢ Comprehensive educational solution from a single provider
➢ Employees can take the courses they need when they need them
➢ Ensure all team members are trained to the same high standard
➢ Train employees no matter what their geographic location
➢ Employ a fully scalable education solution
➢ Minimize disruption to the business
➢ Maximize your employee training ROI
➢ Achieve 100% information comprehension
➢ Get "live" time with our instructors
➢ Stretch your training budget
➢ Get solutions for your specific needs

When you become an Enterprise customer we:

➢ Work with you to develop educational programs for different roles, positions, teams, departments
➢ Manage and track enrollment of all students in online classes and CIMP exams
➢ Track and report educational progress for each student
➢ Work with you to meet any specific educational needs, including:
  o Organize question and answer meetings (via Webinar) with course instructors for groups of students who complete online courses
  o Organize onsite sessions when appropriate, often for senior management.
  o Prioritize new course development, or customize existing courses, per customer needs
  o Create custom instances of our Learning Management System to reflect customer branding
  o Mount our online courses on the customer's Learning Management System

eLearningCurve Enterprise Benefits

PARTNERSHIP: *Comprehensive educational solution from a single provider.*
eLearningCurve will be your educational "partner-for-life" providing all employees with continuous information management education they need over the course of their careers. You can be sure that all employees, including new hires and transfers, come up to speed quickly and learn from a common state-of-the-art set of courses.

FLEXIBILITY: *Employees can take the courses they need when they need them.*
Educational needs vary from employee to employee and project to project. eLearningCurve's flexible program allows your employees to take the courses they need when they need them to best suit their role, projects, backgrounds or interests.

CONSISTENCY: *Ensure all team members are trained to the same high standard.* Train your existing team, and set up courses for new hires and transfers. Consider CIMP exams to verify that your employees utilize the same methodology, techniques, and terminology.

SCALABLITY: **Select an Education Partner who truly understands scalability.**
eLearningCurve Enterprise is 100% scalable. Roll out to a few employees, or your entire organization. If your team or department grows, it's no problem. Our solution can quickly and effortlessly accommodate groups of all sizes, even if they are geographically dispersed.

BREADTH: Acquire comprehensive education and certification.
We offer more than just a collection of courses, we offer information management education. Whether its data quality, data governance, MDM or another information management discipline or function we have you covered with a comprehensive set of courses, exams, and certification programs designed to impart knowledge, test understanding, and validate learning.

LOCATION: *Train employees no matter what their geographic location.*
Overcome geographical barriers to training. With eLearningCurve Enterprise you can train your entire team whether they are in the same office, or on the opposite sides of the world. Everyone can access our online courses from any place at any time.

LOGISTICS: *Minimize disruption to the business.*
It's not realistic for an entire department to take time off en masse for training. eLearningCurve's online format allows employees to study from their office or home, allocate full training days, or study an hour a day during lunch breaks.

ROI: *Maximize your employee training ROI.*
No need to worry about paying for flights, hotels and other travel expenses. 100% of what you spend goes towards learning, thus achieving top quality education at a fraction of the cost of in-person training.

RESULTS: *Achieve 100% information comprehension.*
Learn from top industry experts in data quality, data governance, master data management, data modeling, data warehousing, and business intelligence. Study at your own pace, listen to the material many times, and test your knowledge through CIMP certification exams.

SAVINGS: *Stretch your training budget.*
We offer various pricing options including volume discounts, pay-as-you-go model with increasing discounts, and other alternatives. We try to understand your needs and budget constraints, and meet them in the best way possible.

"LIVE" INTERACTION: *Spend time with our instructors.*
Arrange "live" Webinar sessions with the leading experts, practitioners, and educators, or purchase online/onsite training combination packages and get access to our education both online and "live" on-site.

CUSTOMIZATION: *Get solutions for your specific needs.*
Our Learning Management System can be customized to reflect your company's branding or we can mount our courses on your corporate LMS.

Data Integration Fundamentals and Best Practices
Instructor: Dave Wells
Duration: 5 hours

Integrated data is at the heart of many business and technical disciplines today. Data warehousing, operational data integration, and master data management focus on integration as a key part of managing data as an asset. Business intelligence, performance management, and business analytics depend on integrated data to meet business requirements for management and decision-making information. Integration is important, but it is challenging to understand data sources, select and apply integration techniques, and design and deliver integrated databases.

This online training course discusses architectures, requirements, methods, roles and activities of data integration that can be applied to achieve successful data integration projects for a variety of applications and circumstances.

You will learn:
- ➢ Concepts, principles, and terminology
- ➢ Common methods of data integration
- ➢ How to perform the essential steps of data integration including requirements definition, data capture, data transformation, and data delivery
- ➢ Data integration techniques and technologies including ETL, ELT, virtualization, and federation
- ➢ Techniques for source-to-target mapping and data transformation
- ➢ Roles, purpose, and variations of data integration architecture including architectural constructs for data warehousing, master data management, and operational data integration
- ➢ Business and technical roles, responsibilities, knowledge, and skills that are central to data integration projects and processes

This course is geared towards:
- ➢ Data integration architects, designers, and developers
- ➢ Business intelligence practitioners, project managers, and architects
- ➢ Data warehousing practitioners, project managers, and architects
- ➢ MDM practitioners, project managers, and architects
- ➢ ERP implementers and system integrators
- ➢ Business subject experts and data subject experts with roles in data integration projects and processes

Course Outline

About the Course (5 min)

Data Integration Concepts (44 min)

- o Data Integration Defined
- o Data Integration Dependent Programs
- o Data Integration Projects

Data Integration Methods (49 min)
- o Data Integration Techniques
- o Data Integration Frequency
- o Data Integration Systems
- o Data Integration Challenges
- o Data Integration Activities

Understanding Data (61 min)
- o Identifying Data Sources
- o Profiling Data
- o Qualifying Data Sources
- o Documenting Data Sources

Integrating Data (78 min)
- o Integration Requirements
- o Data Capture
- o Data Transformation
- o Data Delivery

Data Integration Architecture (37 min)
- o Architecture Concepts
- o Data Warehousing Architecture
- o MDM Architecture
- o Operational Data Integration Architecture

Data Integration Roles and Responsibilities (28 min)
- o Overview
- o Knowledge and Skills
- o Understanding the Data
- o Getting the Data
- o Transforming the Data
- o Delivering the Data
- o Using the Data

Data Warehousing Fundamentals

Instructors: Mark Peco
Duration: 5 hours, 30 minutes

The primary purpose of data warehousing is to put raw data into an "analyzable state" and deliver data and information that is useful, relevant and accessible. Though data warehousing is a mature discipline, it continues to develop driven by new perspectives, innovative ideas, evolving technology and competitive business pressures.

There are many concepts and components to be understood, integrated, and collectively implemented for data warehousing success. Many organizations fail to understand and embrace the full breadth of these components – how they interact and how they change over time. Lack of understanding brings confusion, misalignment, and failure to realize full value from data warehousing investments.

This online training course presents a holistic view of data warehousing components, concepts, and definitions. From a systems-thinking perspective, you'll see a framework that describes the building blocks and their interactions to generate real and measurable business value. The framework positions architecture as an essential foundation for a data warehousing system, then describes the five essential and enabling sub-systems of data warehousing.

You will learn:
- DW concepts and terminology
- The purpose and capabilities of successful DW and its roles in creating business value
- Roles and essential components of five critical sub-systems
- How the sub-systems interact to constitute a complete and cohesive DW system
- The common challenges & risks inherent in DW

This course is geared towards:
- DW teams who need to build a common foundation of concepts and terminology
- DW program and project managers
- Data warehouse architects
- Data warehouse designers and developers
- DW maintenance and support specialists
- Business and Data SMEs with data warehousing project roles and responsibilities
- Data Management Analysts
- Anyone who is new to data warehousing
- Anyone with an interest in the capabilities, opportunities and challenges of DW

Course Outline

About the Course (8 min)

Introduction to Data Warehousing (67 min)
- Fundamental Ideas
- Systems Concepts
- Architecture Considerations
- Systems View of Data Warehousing
- Data Warehousing System Review

Data Acquisition and Refinement (62 min)
- Getting Started
- Parts
- Exploration & Discovery System
- Refining & Integration System
- Transportation System

Data Provisioning and Retention (45 min)
- System Context
- Getting Started
- Parts
- Storage & Packaging System
- Technology System
- Inventory System

Information Delivery & Consumption (35 min)
- System Context
- Getting Started
- Parts
- Usage System
- Delivery System
- Content Quality System

Building and Development (58 min)
- System Context
- Getting Started
- Parts
- Participation System
- Construction System
- Asset & Process Quality System

Leadership and Control (34 min)
- System Context
- Getting Started
- Parts
- Stakeholder System
- Governance System

Putting the Pieces Together (24 min)
- Perspective & Alignment
- Data Warehousing System
- Course Summary

MDM Architecture and Implementation

instructor: William McKnight
Duration: 4 hours

More complex and demanding business environments lead to more heterogeneous systems environments. This, in turn, results in requirements to synchronize master data. Master Data Management (MDM) – an essential discipline to get a single, consistent view of an enterprise's core business entities – customers, products, suppliers, and employees. MDM solutions enable enterprise-wide master data synchronization.

Given that effective master data for any subject area requires input from multiple applications and business units, enterprise master data needs a formal management system. Business approval, business process change, and capture of master data at optimal, early points in the data lifecycle are essential to achieving true enterprise master data. MDM takes knowledge, skill, and organization to be successful.

This online training course provides a comprehensive view of the critical elements for MDM success including business, architectural, people, process, project, and technology considerations. Learn from the real-world experiences of the instructor what it takes to make MDM work.

You will learn:
- ➢ *Architectures* — The variety of **architectural approaches** to MDM and guidelines to determine which is right for your organization
- ➢ *Roles and Responsibilities* — The **people dimension** of MDM including roles of sponsors, program managers, analysts, designers and developers, DBAs, and more
- ➢ *Tool Selection* — The **technology dimension** of MDM including information gathering, proof-of-concept, and scoring and selection techniques.
- ➢ *Process Improvement* — The **process dimension** of MDM including workflow optimization that leads to business process improvement, and information management process improvements such as using MDM to conform dimensions of analysis at earlier points of the data lifecycle
- ➢ *MDM Implementation* — The **project dimension** of MDM including activities of planning, requirements analysis, design, test strategy, data migration, design, development, and integration

This course is geared towards:
- ➢ Anyone involved in managing Enterprise Master Data
- ➢ MDM Program and Project Managers
- ➢ MDM Analysts, Designers, and Developers
- ➢ Data Architects
- ➢ Information Systems Project Managers
- ➢ Data Integration and Data Warehousing Program and Project Managers
- ➢ Business Data Owners and Data Stewards
- ➢ Business Users of Enterprise Master Data

Course Outline

About the Course (7 min)

Introduction (30 min)

MDM Architecture (79 min)
- o Architecture Approaches
- o Conforming Dimensions for the Enterprise
- o Business Process Workflows
- o Data Quality
- o Data Quality Case Example
- o Syndicated Data
- o Architecting Syndicated Data

MDM Tool Selection (49 min)
- o Request for Information and Request for Proposal
- o Proof of Concept and Final Selection

Planning for Success (77 min)
- o MDM Project Management
- o MDM Project Roles and Responsibilities
- o Organizing and Planning for MDM Success
- o Case Study

Data Virtualization

Instructor: Dave Wells
Duration: 3 hours

The work of data integration has become increasingly complex in recent years. Business needs for real-time and low latency data, expanded uses of unstructured data, and accelerated interest in big data analytics are but a few of the trends that change the data integration landscape. Extract-transform-load (ETL) processing was sufficient for the once relatively simple task of combining data from multiple transactional databases was to build a data warehouse, operational data store, or master data hub. Today's data integration challenges go well beyond the capabilities of ETL technologies with needs to integrate enterprise data with external data, Web data, clickstream data, end-user data, big data, cloud data, and more. To meet these new requirements, data integrators need more tools in the integration toolbox. Data virtualization doesn't replace ETL; it complements ETL and offers new tools to meet new integration needs.

Data virtualization is a core component of next-generation data integration architectures, techniques, and technology. This online training course will introduce you to the concepts, techniques, and capabilities of data virtualization. It will prepare you to expand your data integration capabilities, deliver business-speed information, and make the most of recent advances in data integration technology.

You will learn:
- ➢ Data virtualization definitions, concepts, and terminology
- ➢ Business case and technical rationale for data virtualization
- ➢ Foundational principles of virtualization – abstraction, views, and services
- ➢ How to extend the data warehouse with virtualization
- ➢ How virtualization is applied for unstructured data, big data, and cloud data challenges
- ➢ How to mix and match virtualization with ETL technology to optimize data integration architectures and processes

This course is geared towards individuals who:
- ➢ BI, MDM, and data warehousing program and project managers
- ➢ Data integration architects, designers, and developers
- ➢ Data and technology architects

Course Outline

About the Course (6 min)

Data Virtualization Concepts and Principles (29 min)
- o Overview
- o Data Virtualization Basics
- o Why Data Virtualization
- o The Data Virtualization Foundation
- o Review

Data Integration Architecture (19 min)
- o Overview
- o Integration Architecture Concepts
- o Reference Architectures
- o Integration Architecture Examples
- o Review

Data Virtualization in Integration Architecture (49 min)
- o Overview
- o Virtualization in Data Integration Projects
- o Data Virtualization Use Cases
- o Data Warehousing Use Cases
- o Data Federation Use Cases
- o MDM and EIM Use Cases
- o More Data Virtualization Applications
- o Practical Data Virtualization
- o Review

Data Virtualization Platforms (20 min)
- o Overview
- o Platform Requirements
- o Platform Capabilities
- o Platform Variations
- o Some Platform Vendors
- o Review

Implementing Data Virtualization (16 min)
- o Overview
- o Analysis
- o Design and Modeling
- o Development
- o Deployment and Operation
- o Review

Getting Started with Data Virtualization (28 min)
- o Overview
- o Skills, Competencies, and Human Factors
- o Goal and Expectations
- o Best Practices
- o Case Studies
- o Review

Ensuring Data Quality in Data Integration

Instructor: Arkady Maydanchik
Duration: 5 hours

Corporate data universe consists of numerous databases connected by countless real-time and batch data interfaces. The data continuously move about and change. The databases are endlessly redesigned and upgraded, as are the programs responsible for the data integration. The typical result of these dynamics is that information systems get better, while data quality deteriorates. Without a comprehensive data quality monitoring program bad data spread like viruses.

This online training course discusses various practices that can be put in place to mitigate the problem and maintain high data quality through data integration.

You will learn to:
 - The data quality challenges that are inherent in data integration
 - The critical role of data quality monitoring in data integration
 - Specific techniques to monitor and manage quality for batch data integration
 - Use of Statistical Process Control (SPC) methods in monitoring data quality
 - The impacts of change on data quality and techniques to address those impacts
 - How an enterprise integration hub can be applied to managing data quality

This course is geared towards:
 - Data integration practitioners
 - Data quality practitioners
 - Data warehousing practitioners
 - MDM practitioners
 - Others in the trenches involved in design, development, and maintenance of data integration systems

Course Outline

About the Course (8 min)

Introduction (60 min)
 - Data Integration Basics
 - Data Quality in Data Federation
 - Data Quality in Data Consolidation
 - Data Quality in Real-Time Interfaces
 - Data Quality in Batch Interfaces
 - Beyond Monitoring

Data Consolidation and Cleansing (60 min)
 - Data Quality in Data Conversion
 - Data Cleansing
 - Data Quality in Data Consolidation

Error Monitors in Batch Interfaces (77 min)
 - Monitoring Techniques
 - Batch Integrity Rules
 - Master Data Integrity Rules
 - Dynamic Integrity Rules
 - Monitor Management
 - Error Correction
 - Root Cause Analysis
 - Statistical Process Control

Change Monitors in Batch Interfaces (95 min)
 - Examples
 - Change Monitor Defined
 - Which Metrics to Monitor
 - Implementing the Monitors
 - Heuristic Monitors
 - Basic Statistical Monitor
 - Handling Non-Stationary Data

Fundamentals of Data Modeling and Metadata Management

Instructor: Dave Wells and Arkady Maydanchik
Duration: 3 hours

Every information management professional needs to have some basic knowledge of data modeling and metadata management. You can't manage information effectively without understanding the data meaning, constraints and relationships, and these disciplines provide the essential tools to collect, record, and organize such knowledge.

This online training course is designed to provide foundation knowledge about the most commonly used data modeling techniques: entity-relationship modeling and dimensional data modeling. A similar foundation is built for metadata management with attention to common metadata purposes - classification, description, guidance, and control - as well as metadata discovery methods including applied data profiling.

You will learn:
➤ The core elements of describing data: meaning, constraints, and relationships
➤ Common metadata processes, practices, and standards
➤ The role and application of data profiling in metadata management
➤ The basics of entity-relationship data modeling
➤ The basics of dimensional data modeling

This course is geared towards:
➤ Aspiring data modelers who need to start with the basics
➤ Data and database analysts and designers
➤ Data stewards
➤ Data governance participants and practitioners
➤ Data quality professionals
➤ Anyone with a role in information management that includes need to understand the data

Course Outline

About the Course (8 min)

Understanding Data (15 min)
o Views of Data
o Projects Flow
o Describing the Data Meaning
o Describing the Data Constraints
o Describing the Data Relationships
o Describing the Data

Metadata Management (43 min)
o Metadata Defined
o Metadata Purposes
o Metadata Classification
o Metadata Management Processes
o Metadata Organizations
o Metadata Skills and Competencies
o Metadata Architecture
o Metadata Standards
o Metadata Tools and Technologies

Data Modeling (69 min)
o Data Modeling Defined
o Data Modeling Purpose
o Data Modeling and People
o Data Modeling Processes
o Entity-Relationship Modeling
o Supplemental Models/Additional E-R Concepts
o Dimensional Data Modeling

Data Profiling (42 min)
o What is Data Profiling
o Myth and Reality of Data Profiling
o Profiling Techniques
o Profiling Challenges
o Role of Profiling
o People and Technology

Data Profiling

Instructor: Arkady Maydanchik
Duration: 5 hours

Data profiling is the process of analyzing actual data and understanding its true structure and meaning. It is one of the most common and important activities in information management. Data profiling is the first critical step in many major IT initiatives, including implementing a data warehouse, building an MDM hub, populating metadata repository, as well as operational data migration and integration. It is also the key ingredient to successful data quality management.

While proliferation of commercial tools made data profiling accessible for most information management professionals, successful profiling projects remain elusive. This is largely because the tools allow gathering large volumes of information about data, but offer limited means and guidelines for analysis of that information.

In this online training course you will learn all practical skills necessary to succeed in a data profiling initiative.

You will learn:
- The what, why, when, and how of data profiling
- Various data profiling techniques, from simple column profiling to advanced profiling methods for time-dependent and state-dependent data
- How to efficiently gather data profiles
- How to analyze the data profiling information and ask the right questions about your data
- How to organize data profiling results
- How to perform dynamic data profiling and identify changes in data structure and meaning

This course is geared towards:
- Data quality practitioners
- MDM practitioners
- Metadata management practitioners
- IT and business analysts involved in data management
- Those responsible for implementation and maintenance of various data management systems

Course Outline

About the Course (5 min)

Quality Basics (30 min)
- Quality Basics
- Quality Defined
- Quality and Defects
- Quality Economics

Quality Management (93 min)
- Quality Management Practices
- Quality Management Gurus
- Quality Management Methodologies
- Related Disciplines
- Measurement and Standards

Data Quality Basics (45 min)
- Data Quality Defined
- Data and Purpose
- Dimensions of Data Quality

Data Quality Management (74 min)
- Data Quality Processes
- Data Quality Techniques
- Data Quality Tools and Technology
- Data Quality Projects
- Building-In Data Quality
- Data Quality Organizations

> "Clear, well-structured and extremely useful."
> —Tatyana Loctionova, Russia
>
> "I really enjoyed this course… I thought the material was of excellent depth and breadth."
> —Kari Jones, New Zealand.

Data Integration Techniques for Designing ODS

Instructors: Angelo Bobak
Duration: 3 hours

In today's modern business environment, corporate entities are constantly merging or splitting, internal divisions are sold to different companies, and new business lines are created in order to meet the challenges of difficult economic times. Business data integration is a complex problem that must be solved when organizations change or enhance their internal structures. New IT departments must be merged with old ones, and transactional, operational, and master data must be integrated in order to be managed efficiently, if the business is expected to grow and be profitable.

The goal of this course is to present a simple yet thorough process that describes the challenges of business data integration and the solutions to these challenges. It will show you how the application of a technique called "schema integration" addresses these challenges.

Schema integration is both a theory and process that was pioneered by experts in the field of data management. We will discuss the techniques of two of these pioneers, M. Tamer Ozsu and Patrick Valduriez in the design of an Operational Data Store (ODS) for a small business..

You will learn:
  ➢ The underlying architecture of the Operational Data Store (ODS)
  ➢ The different types of ODS Architectures
  ➢ The theory behind schema integration
  ➢ The schema integration process
  ➢ Identifying and resolving data conflicts when integrating data
  ➢ The importance of master data and data quality in schema integration

This course is geared towards:
  ➢ The Logical and Physical Data Modeler
  ➢ The Data Architect
  ➢ The Database Administrator
  ➢ Project Managers
  ➢ Data Warehouse Architects
  ➢ Anyone wishing to enter the field of database design and ODS implementation

Course Outline

About the Course (4 min)

Introduction to Operational Data Stores (45 min)
  o Overview
  o What is an ODS
  o Master Data and The ODS
  o Data Quality and the ODS
  o Loading the ODS
  o ODS and Data Warehouse Architectures

Theory of Scheme Integration (58 min)
  o Overview
  o Data Integration Pioneers
  o Schema Integration Types
  o Schema Integration Process
  o Resolving Data Conflicts
  o Profiling Data
  o Defining the ETL Specifications to Merge Data
  o Tracking Data Lineage
  o Schema Integration ETL Tools

Maintenance (30 min)
  o Overview
  o Adding New Sources
  o Adding New Destinations
  o Modifying Existing Sources
  o Modifying Existing Destinations
  o Retiring Old Sources
  o Retiring Existing Destinations
  o Managing Security and Access
  o Monitoring and Managing Storage Capacity
  o Monitoring Performance
  o Physical Design Techniques to Increase Performance
  o Key Project Roles and Responsibilities

Case Study (38 min)
  o Overview
  o Databases to Integrate
  o Data Dictionaries
  o Tools You Will Need
  o Performing the Integration
  o Concluding Remarks

Data Parsing, Matching and De-duplication

Instructors: Kathy Hunter, William McKnight, Henrik Sørensen
Duration: 4 hours, 20 minutes

Data parsing, standardization, matching, and de-duplication are the cornerstones of successful Master Data Management (MDM). They are also critical parts of successful data quality programs, and are key steps in building data warehouses as well as any data integration and consolidation initiatives. You could say that today few organizations can function effectively without implementing data parsing and matching processes often in many data domains.

This need is further magnified if your company has gone global and plans to create databases that combine name- and address-related data from all corners of the world. Managing global information effectively takes specialist knowledge and the ability to show consideration for the differences that exist throughout the world. Worldwide there are more than 10,000 languages, 130 address formats, 36 personal and hundreds of business name formats. All of these variables are further complicated by the need to respect national and regional cultures. Failure to consider formats, styles, and cultures has huge impact on quality of data and quality of business relationships.

This online training course is aimed at data quality and master data management (MDM) professionals as well as those responsible to work with global information. The field is broad and the details are many. The purpose of this course is to provide a broad and in-depth review of data parsing, standardization, matching, and de-duplication techniques, as well as extensive overview of specific problems and solutions when dealing with global data.

You will learn:
- ➢ Data parsing, standardization, matching, and de-duplication techniques
- ➢ How to find and use external reference data
- ➢ How data parsing and matching contribute to improving data quality, MDM, and data warehousing
- ➢ Which data domains, entities and data elements may benefit from data parsing and matching
- ➢ Challenges of global data and ways to overcome these challenges

This course is geared towards:
- o Master data management professionals
- o Data quality professionals
- o Information architects
- o Developers of data warehousing systems
- o Business professionals who work with global data

Course Outline

About the Course (8min)

Introduction (17 min)

Implementation Fundamentals (70 min)
- o Parsing and Standardization
- o Introduction to Data Matching
- o Data Matching Techniques
- o Data Matching Destinations
- o Evaluating Data Matching Tools

External Reference Data (45 min)
- o External Data Sources
- o Syndicated Customer Data
- o Syndicated Product Data
- o Using the Web

Challenges of Global Data (58 min)
- o Introduction to Global Information
- o Global Data: What You Need to Know
- o Variations by Country and Region
- o Cultural and Legal Impacts
- o Characters and Diacritics

Overcoming the Challenges of Global Data (59 min)
- o Data Profiling
- o Consistent Data Structures
- o Preparing Global Data for Effective Use

> "Absolutely excellent course: thought through and well delivered."
> —Marina Severinovskaya, USA
>
> "Good information on global data!"
> —Gregg Bostwick, USA

Data Quality Assessment

Instructors: Arkady Maydanchik
Duration: 6 hours

More and more companies initiate data quality programs and form data stewardship groups every year. The starting point for any such program must be data quality assessment. Yet in absence of a comprehensive methodology, measuring data quality remains an elusive concept. It proves to be easier to produce hundreds or thousands of data error reports than to make any sense of them.

This online training course gives comprehensive treatment to the process and practical challenges of data quality assessment. It starts with systematic treatment of various data quality rules and proceeds to the results analysis and building aggregated data quality scorecard. Special attention is paid to the architecture and functionality of the data quality metadata warehouse.

You will learn:
➢ The what, why, when, and how of data quality assessment
➢ How to identify and use data quality rules for assessment
➢ How to ensure completeness of data quality assessment
➢ How to construct and use a data quality scorecard
➢ How to collect, manage, maintain, warehouse and use data quality metadata

This course is geared towards:
➢ Data quality practitioners
➢ Data stewards
➢ IT and business analysts and everyone else involved in data quality management

> **"It has been a very good experience learning about DQ Assessment in a formal way!"**
> **—Vikram Khanna, USA**

Course Outline

About the Course (9 min)

Introduction (53 min)
o Why Assess Data Quality
o Business Value of Data Quality Assessment
o Types of Data Errors
o Data Quality Assessment Approaches
o How Rule-Driven Approach Works
o Project Planning
o Project Steps

Data Quality Rules Overview (63 min)
o Attribute Domain Constraints
o Relational Integrity Constraints
o Complex Data Relationships

Rules for Historical Data (56 min)
o Historical Data Overview
o Timeline Constraints
o Value Pattern Rules
o Rules for Event Histories
o Rules for State-Dependent Objects

Finding Data Errors (76 min)
o Discovering Data Quality Rules
o Implementing Data Quality Rules
o Building Rule Catalog
o Building Error Catalog
o Fine-Tuning Data Quality Rules

Aggregate Data Quality Scores (66 min)
o School Report Card Example
o A First Look at DQ Scorecard
o Defining Aggregate Scores
o Score Tabulation

Building Data Quality Scorecard (61 min)
o Basic Scorecard Example
o Recurrent Data Quality Assessment
o Database and Enterprise-Wide DQ Scorecard

Building and Operating a Data Warehouse

Instructors: Mark Peco
Duration: 4.5 hours

Due to rapid growth of non-traditional data sources, availability of new technologies and growing expectations of managers to compete on analytics, the traditional data warehouse is re-defined and presented within a broader modern context. A corporate data ecosystem is evolving and presents new opportunities for creating business capabilities that were not previously possible. Amidst these changes, the data warehouse continues to play foundational and integral roles within the expanding data landscape.

This course re-defines the scope of the "modern" data warehouse. The need for planning and the role of architecture are described and clarified, followed by a discussion about the challenges related to gathering useful information requirements. This is followed by a discussion of design approaches, development, testing and quality management techniques.

The true value delivered to the organization by a data warehouse depends on operational and service activities that leverage the data components previously implemented. It is through this combination of data and technology assets with managed operations and services that desired analytical and business capabilities are created. The design and implementation approaches of operations and services are provided to highlight this key requirement. The course material presents a full life cycle of the data warehouse including business context, scope, requirements, design, implementation and operations.

You will learn:
- The components that define a data warehouse platform
- Trends that are impacting the modern data warehouse
- To position the data warehouse platform in the big data era
- Architectural options and considerations
- Development options and approaches
- The requirements gathering process
- Necessary design activities
- How operations and service processes enable business capabilities

This course is geared towards:
- Data warehousing program and project managers
- Data warehouse architects
- Data scientists and analytics professionals
- Big Data practitioners
- Data warehouse designers and developers

Course Outline

About the Course (8 min)

Introductory Concepts (71 min)
- Overview
- Data and Information
- The Modern Data Landscape
- Generating Information
- The Need for Metadata
- Defining the Data Warehouse
- Implementation Approaches

Planning and Architecture (72 min)
- Overview
- Implementation Planning
- Architecture Overview
- Requirements Analysis
- Information Requirements

Design and Development (73 min)
- Overview
- Design Activities
- Design Decisions
- Design Example
- Development

Operations and Service Delivery (39 min)
- Overview
- Services
- Categories of Services
- Managing a Service Catalog
- Managing Performance

Big Data Fundamentals
Instructor: William McKnight & Jake Dolezal
Duration: 3.5 hours

Big data has gone mainstream. It reaches well beyond the initial group of Silicon Valley "new economy" tech companies and the new media companies that helped launch the industry. The big data adoption landscape has expanded to include automakers, big finance, big insurance companies, telecommunications, healthcare companies and big retailers. Big data is past the hype phase and adoption is accelerating, but success is not a given and challenges remain.

This informative technical general session is full of the "need to know" for anyone involved in an enterprise data landscape. Learn from experienced enterprise information strategists with real project experience about the path that big data is on, the obstacles along the path, and how to confidently join the big data revolution. Learn the players in the technology landscape and the ideal workloads for big data in enterprises. Learn where big data adds value to an existing enterprise information strategy and how to get the projects started and dropping the "not in production" label.

This 3.5-hour online course addresses the technical community as well as the user community, providing guidance on how to penetrate and benefit the enterprise. This practical session will help you make the most of big data and make the best choices to ensure information remains an unparalleled corporate asset.

You will learn:
- ➢ A workable definition of big data so you know it when you see it
- ➢ Drivers for big data
- ➢ Big data in the enterprise
- ➢ The Hadoop framework for analytical big data
- ➢ NoSQL and operational big data
- ➢ An overall information architecture with big data

This course is geared towards:
- ➢ Business and Data Analysts
- ➢ BI Architects and BI Developers
- ➢ Data Architects
- ➢ Data Integrators
- ➢ Analytics Developers and Consumers
- ➢ Anyone who needs to understand the business and technical implications of Big Data

Course Outline

About the Course (8 min)

Big Data Definition (34 mins)
- o Big Data Introduction
- o Big Data Technology
- o Enablers for Big Data

Big Data Drivers (28 mins)
- o Value Density of Data
- o Before Data was Big…
- o Once Big Data Grew, Value was Realized
- o Data is too Valuable to Discard
- o Data is too Valuable to Ignore
- o Focus Before Big Data
- o Focus After Big Data
- o Performance/Workload Optimization
- o Cost of Storage
- o Other Cost Drivers
- o Analytic Need
- o Implication for IT Skills

Big Data in the Enterprise (21 mins)
- o The Great Database Thaw
- o Data Access in the Modern Enterprise
- o Marz's Lambda Architecture
- o Row vs. Columnar Stores
- o In-Memory
- o Big Data & Analytics
- o Leveraging Hadoop for Analytics

Hadoop Ecosystem (40 mins)
- o Hadoop Overview
- o Hadoop Distributions
- o Hadoop Framework

NoSQL (31 mins)
- o NoSQL "Schemaless" Data Modeling
- o NoSQL Heartburn
- o Key-Value Stores
- o Document Oriented Database
- o Graph Oriented Database
- o Stream Processing Engines
- o NewSQL

Enterprise Architecture with Big Data (45 mins)
- o Modern Components of Information Architecture
- o ETL with Big Data Systems
- o Analytic Patterns with Hadoop
- o Where Do We go from Here?

OUR INSTRUCTORS

Angelo Bobak

Angelo Bobak is a seasoned data architecture professional and published author with over 20 years' experience in Business Intelligence, Data Architecture, Data Modeling, Master Data Management, and Data Quality. Currently he is working at ATOS Origin NA as a Director/Senior Data Architect in the areas of Global Master Data Management, Data Integration and Data Quality. Past experience includes positions as an IT consultant, manager and data architect with companies such as Siemens, Praxair, Avaya, Pepsi and several financial institutions on Wall Street such as Merrill Lynch, Bankers Trust and International Securities Exchange (ISE).

Jake Dolezal

Jake Dolezal has over 16-years' experience in the Information Management field with expertise in business intelligence, analytics, data warehousing, statistics, data modeling and integration, data visualization, master data management, and data quality. Jake has experience across a broad array of industries, including: healthcare, education, government, manufacturing, engineering, hospitality and gaming. He is also the author of the book *I Survived Stats: A Less Frustrating Approach to Help Students Survive and Pass a Statistics Course* (forthcoming).

Kathy Hunter

Kathy always says she has data in her blood. Joining Harte-Hanks in 2002, she built an information management practice and, with her highly skilled team, was responsible for instituting their highly successful Global Data Management solution set. From information quality and data governance through to providing global data solutions and guidance she attained a reputation for expert knowledge and successful delivery in global information management to her clients. Kathy is known for her pragmatic approach to topics, providing helpful hints and practical examples in order to solve tough problems.

William McKnight

William is president of McKnight Consulting Group, which includes service lines of Master Data Management, IT assessment, Big Data, Columnar Databases, Data Warehousing, and Business Intelligence. He functions as Strategist, Lead Enterprise Information Architect, and Program Manager for sites worldwide. Many of his clients have gone public with their success stories. William is a Southwest Entrepreneur of the Year Finalist, a frequent best practices judge, has authored hundreds of articles and white papers and given hundreds of international keynotes and public seminars. His team's implementations from both IT and consultant positions have won Best Practices awards. William is a former Information Technology Vice President of a Fortune 50 company, a former engineer of DB2 at IBM and holds an MBA from Santa Clara University.

Arkady Maydanchik

For more than 20 years, Arkady Maydanchik has been a recognized leader and innovator in the fields of data quality and information integration. As a practitioner, author and educator he has been involved in some of the most challenging projects industry has seen. These projects were often the result of major corporate mergers and the need to consolidate and integrate databases of enormous variety and complexity. Arkady's client list includes such household names as Dun & Bradstreet, Hewitt Associates, Kimberly Clark, Raytheon, Sprint, Verizon, and Xerox.

Mark Peco

Mark Peco is an experienced consultant, educator, practitioner and manager in the fields of Business Intelligence and Process Improvement. He provides vision and leadership to projects operating and creating solutions at the intersection of Business and Technology. Mark is actively involved with clients working in the areas of Strategy Development, Process Improvement, Data Management and Business Intelligence.

Henrik Sørensen

Henrik Liliendahl Sørensen has over 30 years of experience in working with Master Data Management and Data Quality and is a charter member of the International Association of Information and Data Quality. Currently Henrik works with Master Data Management at Tata Consulting Services and as Practice Manager at Omikron Data Quality besides writing on a well trafficked blog about data quality, master data management and the art of data matching. Henrik is the founder of the Data Matching and the Multi-Domain MDM groups on LinkedIn.

Dave Wells

Dave Wells is a consultant, teacher, and practitioner in the field of information management. He brings to every endeavor a unique and balanced perspective about the relationships of business and technology. This perspective —refined through a career of more than thirty-five years that encompassed both business and technical roles— helps to align business and information technology in the most effective ways. Dave is a frequent contributor to trade publications and is a co-author of the book *BI Strategy: How to Create and Document*. He also speaks at a variety of industry events

OUR CUSTOMERS

eLearningCurve has over 2,500 students in 70+ countries around the globe. Our enterprise customers include numerous Fortune 500 and Global 1,000 companies as well as governmental institutions in various countries.

CUSTOMER STORIES

"I would highly recommend eLearningCurve to anyone thinking of getting their certification in the data field"

Having started the certification program with a very limited knowledge base in the area of data quality, I was a little intimidated and unsure of what to expect. My concerns were quickly alleviated by the quality of instructors and course materials and the superb delivery method of the classes. Classes in the curriculum built upon each other, giving you a great base in the topic and then continuing to build on that foundation. There were no "throwaway" classes in that principles were taught and reinforced as you progressed along your journey to certification.

I would highly recommend eLearningCurve to anyone thinking of getting their certification in the data field and to anyone looking for a greater understanding of the data profession. I could not be happier with the courses and knowledge that I gained through this program.

Joseph Fagnoni, CIMP – Data Quality, Data Governance, USA

"I was very pleased with the courses and the certification process with eLearningCurve."

I was very pleased with the courses and the certification process with eLearningCurve. The individual courses were very well prepared and clearly presented. I believe that this knowledge is critical for both novice and experienced data management professionals.

Clarence W. Hempfield, Jr., CIMP – Data Quality, USA

"The selection of classes available through eLearningCurve have provided me incredible insight and more information on best practices…"

In Australia, it is not often you get the chance to study under international industry thought leaders and gurus. Actually, I misspeak, it is often. It is whenever you like thanks to eLearningCurve's online delivery!

These days it is common place for professionals to learn tools and software but not focus on methodology. The selection of classes available through eLearningCurve have provided me incredible insight and more information on best practice and methodology than any other conference or training course I have attended thus far in my career. The material is challenging, thought provoking, and extremely informative. The tests require focus and understanding beyond the point of remembering the words said - they push you to apply the principles. You get plenty of time to access and review the material, so anyone can fit this in around their busy schedule.

Stuart Brown, CIMP - Data Governance, Australia

"Very clear, well-structured, with interesting examples and based on extended practical experience."

After eLearningCurve courses, I have realized that in the last 3 years:

- We created data quality rules catalogue.
- We implemented our Error Monitors and few Change Monitors.
- We started to use data quality control in source, staging and target DB area.

But all these solutions could be initially designed much better with the knowledge, which I have received now with eLearningCurve.

The instructors and courses material are really of great value. Very clear, well-structured, with interesting examples and based on extended practical experience. I would certainly recommend the certification for any professional interested in gaining a better understanding of Data Governance and definitely for any data quality practitioner.

Tatyana Loctionova, CIMP – Data Quality, Russia

"As a team leader I expect this to improve considerably the team performance."

I have acquired CIMP in Data Quality recently. I have been working in Data Quality field for 10 years and this certification helped me to deepen and structure my knowledge. To pass the CIMP examination one needs deep understanding of the subject and the ability to apply the knowledge in different everyday situations. I have some colleagues who have recently started their "way in data quality field" and I have recommended they take the certification. As a team leader I expect this to improve considerably the team performance. I also want to point out the attitude of people working for eLearningCurve: I have always received the necessary support or recommendations whenever asked. This made the learning process not only valuable from knowledge acquirance point of view but also very pleasant from emotional point of view.

Ilze Smeltere, CIMP - Data Quality, Latvia

CONTACT US

Director, Enterprise Solutions: Arkady Maydanchik
arkadym@elearningcurve.com

Director, Marketing: Michelle Johnson
mjohnson@elearningcurve.com

Director, Education: Dave Wells
dwells@infocentric.org

Director, Technology: Varya Belyaevskaya
varka@elearningcurve.com

Customer Support:
support@elearningcurve.com

Phone: 1-630-242-1659

Mailing Address: 305 Midwest Club Parkway, Oak Brook IL, 60523, USA

RESELLERS

Denmark
Right Training

Contact:
Jan Sørensen
+45 31 45 04 99
jms@righttraining.dk

South Africa and sub-Saharan Africa
Master Data

Contact:
Gary Allemann
+27 11 485 4856
gary@masterdata.co.za

DATA INTEGRATION COURSE PRICING

Packages

CIMP Data Integration Package	$1,895.00
CIMP Ex Data Integration Package	$2,895.00
CIMP Ex Data Integration + Data Quality Package	$3,395.00
CIMP Ex Data Integration + MDM Package	$3,395.00
CIMP Ex Data Integration + Metadata Package	$3,395.00
CIMP Ex Data Integration + Data Warehousing Package	$3,395.00

Individual Courses

Data Integration Fundamentals and Best Practices	$500.00
Data Warehousing Fundamentals	$550.00
MDM Architecture and Implementation	$400.00
Data Virtualization	$285.00
Ensuring Data Quality in Data Integration	$525.00
Fundamentals of Data Modeling & Metadata	$295.00
Data Profiling	$515.00
Data Integration Techniques for Designing an ODS	$295.00
Data Parsing, Matching, and De-Duplication	$435.00
Data Quality Assessment	$575.00
Data Integration Fundamentals and Best Practices	$500.00
Building and Operating a Data Warehouse	$445.00
Big Data Fundamentals	$350.00

Exams

Exam for each course	$80.00

Enterprise Discounts

About eLearningCurve

eLearningCurve offers comprehensive online education programs in various disciplines of information management. With eLearningCurve, you can take the courses you need when you need them from any place at any time. Study at your own pace, listen to the material many times, and test your knowledge through online exams to ensure maximum information comprehension and retention.

eLearningCurve also offers two robust certification programs: CIMP & CDS. Certified Information Management Professional (CIMP) builds upon education to certify knowledge and understanding of information management. Certified Data Steward (CDS) is a role-based certification designed for the fast growing data stewardship profession.

Finally, eLearningCurve's Enterprise Program is a flexible, scalable, cost-effective solution for teams and enterprises.