



eLearningCurve

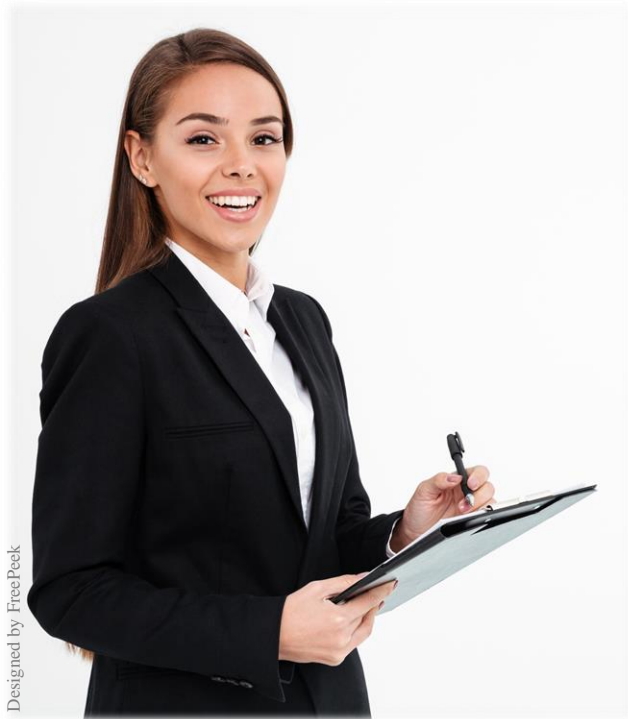
# Full Course Catalog

Data Literacy  
Data Stewardship  
Data Governance  
Data Quality  
Data Architecture  
Metadata Management  
Master Data Management  
Business Analysis  
Data Analytics  
Advanced Analytics



Online Education  
Certification  
Enterprise Solutions

# Table of Contents



Designed by FreePeek

ABOUT ELC	1
ELC CURRICULA AT-A-GLANCE	2-4
CERTIFICATION PROGRAMS	5
CIMP CERTIFICATION	5-6
CDS CERTIFICATION	7-8
DCAM CERTIFICATION	9
CDMC CERTIFICATION	10
DLC CERTIFICATION	11-12
DAC CERTIFICATION	13-14
EDUCATION PACKAGES	15
ENTERPRISE SOLUTIONS	16-17
COURSE DESCRIPTIONS	18-88
OUR INSTRUCTORS	87-93
ELC CUSTOMERS	94-96
CONTACT	97

## ABOUT eLearningCurve

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

Obtaining certification through eLearningCurve provides a clear statement you have learned from the industry leaders and demonstrated a thorough understanding of specific information management disciplines. There are multiple certification options to meet the needs of today's data professionals.

# Curricula-at-a-Glance

eLearningCurve offers a comprehensive online education and certification program in various disciplines of information management, from fundamentals to advanced topics. Explore our curriculum using the below chart or visit our website for complete track descriptions and course Sneak Peeks.

- **Business Analysis (DAC)**
- **Data Analytics (DAC)**
- **Advanced Analytics (DAC)**
- **Cloud Data Management (CDMC)**
- **Data Management Capability Assessment Model (DCAM)**
- **Data Literacy (DLC)**
- **Data Quality (CIMP)**
- **Data Governance (CIMP)**
- **Master Data Management (CIMP)**
- **Metadata Management (CIMP)**
- **Data Architecture (CIMP)**
- **Data Stewardship (CDS)**

Course Title	Page
AI Fundamentals: An Introduction to Artificial Intelligence ●●	18
Analytical Modeling, Evaluation, and Deployment Best Practices ●	19
Analytics-based Enterprise Performance Management ●	20
Analytics Fundamentals ●	21
Architecture and Design for Data Interoperability ●	22
Big Data Fundamentals ●●	23
Cloud Data Management Capabilities Framework (CDMC) ●	25
Crafting the Business Case for Data Quality ●●	26
Curating and Cataloging Data ●●	27
Data Architecture Fundamentals ●	28
Data Analysis Fundamentals ●●●	29
Data Analytics for Data Stewards ●●●	30
Data Ethics & Responsible AI: Fundamentals ●●●	31
Data Governance for Business Leaders ●	32
Data Governance for Data Stewards ●●●	33
Data Governance Fundamentals ●●●	34
Data Integration Techniques for Designing an ODS	35
Data Literacy Basics ●	36
Data Literacy in Data Analysis ●	37
Data Literacy in Data Management ●	38
Data Literacy Primer (with Data Literacy Self-Assessment) ●	39
Data Management Capability Assessment Model (DCAM) ●	40
Data Mining Concepts and Techniques ●●●	42
Data Mining in R ●	43
Data Model Scorecard ●	44
Data Modeling Fundamentals ●	45
Data Parsing, Matching, and De-Duplication ●●●	46
Data Privacy and Protection Fundamentals ●●●	47

Data Profiling ●●●	48
Data Quality Assessment ●●●	49
Data Quality for Data Stewards ●●	50
Data Quality Fundamentals ●●	51
Data Quality Scorecard ●●●●	52
Data Quality Specialist ●	53
Data Science Fundamentals ●	54
Data Stewardship Fundamentals ●●●	55
Data Understanding and Preparation for Analytics & Data Science ●	56
Data Visualization & Storytelling ●●	57
Data Warehousing Fundamentals	58
Deciphering Data Architectures ●	59
Designing and Implementing Analytics Data Architecture ●	60
Diagnostic Analytics Using Statistical Process Control ●●	61
DW and BI Data Modeling ●	62
Ensuring Data Quality in Data Integration ●●	63
Framing and Planning Analytics & Data Science Projects That Drive Business Impact ●	64
Fundamentals of Business Intelligence ●	65
Fundamentals of Machine Learning ●	66
Fundamentals of Predictive Analytics ●●●	67
How to Deploy Data Governance: Part 1 ●	68
How to Deploy Data Governance: Part 2 ●	69
Information Management Fundamentals	70
Introduction to Graph Databases ●	71
Introduction to NoSQL ●●	72
Knowledge Graph Architecture for the Enterprise ●	73
MDM for Data Stewards ●	74
MDM Fundamentals: Architecture and Implementation ●	75
Metadata Management for Data Stewards ●●●	76
Metadata Management Fundamentals ●●●●	77
Modernizing Data Governance ●	78
Organizing for Data Quality ●	79
Operational Data Architecture, Part 1: The Operational Data Landscape	80
Operational Data Architecture, Part 2: Architectural Data Management	81
Prescriptive Analytics Using Simulation Models ●	82
Putting the Science in Data Science: Fundamentals of Research Methods ●	83
Root Cause Analysis ●●●	84
Streaming Data: Concepts, Applications, and Technologies ●●	85
Web Analytics ●●	86



# What People are Saying about eLC

"I learned much more than I expected and found myself looking forward to sneaking in another 60 minutes on a course before work or after dinner. I really doubt there is any other way to gain as much practical industry knowledge as economically at your own pace in this domain."

**Steve Lutter**

**CIMP Ex - Data Quality, DM & Metadata, IM Foundations, BI,  
Data Governance, & MDM**

"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**



# Certification Programs

Take the inside track to success with one of our professional certification programs! An eLearningCurve certificate makes a clear statement you have learned from the industry leaders and demonstrated a thorough understanding of specific information management disciplines by passing several challenging exams.

## **Certified Information Management Professional**



**Data Quality ■ Data Governance ■ Master Data Management  
■ Metadata Management ■ Data Architecture**

The Certified Information Management Professional (CIMP) credential is earned by those who qualify, based on a combination of education and demonstrated knowledge in information management foundations or a specific information management discipline.

CIMP is specifically designed for information management professionals and practitioners who are recognized for their knowledge and ability to apply that knowledge in one or more of several information management disciplines. CIMP certification shows employers, colleagues, and collaborators you are committed to your profession, you are well trained, and they can have confidence in your abilities and knowledge.

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

CIMP Program is popular around the globe, with CIMP professionals in 30+ countries. The most convenient and cost-efficient method to enroll in the CIMP program is with one of our CIMP Packages. Each package includes all courses and exams necessary to earn CIMP or CIMP Ex in one of the tracks, all at a savings of 25% or more. Alternatively, you can simply enroll in courses and exams one at a time.

You can earn CIMP designation in multiple tracks. Courses that are included in the curricula for multiple tracks earn credit toward certification in all those tracks.

## What Sets CIMP Apart?

CIMP represents the best option for certification in the information management field today. Consider what sets CIMP apart from other certification programs:



**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:** There is no time-consuming or costly travel required to complete your coursework and take your CIMP examinations. All courses and exams are available on line. All that's required of candidates is an internet connection and the desire to demonstrate mastery of information management topics and achieve success.

[Learn More](#)

---

*"The CIMP certification in the Data Quality track has provided me a strong foundation for further developing my role in information and data management. The courses are well organized, practical and provide a good depth of knowledge. I was also impressed with the certification process including the responsiveness and support by the eLearningCurve team."*

---

## CDS Certification



### **Certified Data Steward (CDS) Is the Only Globally Recognized Professional Designation for Individuals Who Work in The Critical Role of Data Steward.**

Data stewardship is a critical role in modern data management. In the digital age, we have experienced rapid growth in volume and types of data, users and uses of data, and regulations for data privacy and protection. Advanced applications for data such as automation and artificial intelligence bring new opportunities, but they also create new risks. Data stewards are the “feet on the ground” who work day-to-day to achieve maximum data value with minimum risk by utilizing business, data, and people skills. They are the front line in building data literacy. Every company that is serious about governance, quality, security, self-service, and digital transformation must get serious about data stewardship.

The CDS program is designed to formalize the data stewardship role and recognize data stewards as valued and essential data management practitioners. The CDS credential attests to your dedication to learning, understanding, and applying the many practices, skills, and techniques of true data stewardship.

The mission of the Certified Data Steward (CDS) Program is to formalize the role of data stewardship and to drive recognition of Data Steward as a professional designation.

#### **To fulfill this purpose, CDS is committed to these goals:**

- Define, manage, and publish a comprehensive Data Stewardship Body of Knowledge (DSBOK)
- Identify the skills essential for data stewards and the resources through which those skills can be developed
- Offer comprehensive education in all areas of DSBOK
- Evaluate individual's capabilities through a comprehensive examination and experience review
- Recognize individuals who have met the requirements with the professional designation Certified Data Steward



The CDS designation makes a clear statement that you have learned from the industry leaders and demonstrated both depth of understanding and the skills to apply concepts, techniques, and practices of data stewardship, data quality, data governance, metadata management, and master data management.

For the true standard bearers in the data stewardship profession we offer the second level of CDS certification - CDS Ex. To earn CDS Ex designation you must demonstrate a combination of great Expertise, Experience, and Excellence.

[Learn More](#)

---

*"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!*

*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."*

---

## DCAM Certification



**DCAM® (Data Management Capability Assessment Model) is the industry-standard, best practice framework designed to assist today's information professionals in developing and sustaining a comprehensive data management and analytics program.**

DCAM certified professionals are recognized for expertise across a comprehensive knowledge continuum that includes data strategy, program management, business and data architecture, data and technology architecture, data quality management, data governance, data controls, and analytics management.

DCAM defines the strategic, organizational, technology and operational capabilities for data management and advanced analytics.

### **It covers the unique requirements associated with:**

- Management of data meaning: data architecture, identification management, taxonomies, glossary development
- Challenges of ensuring fit-for-purpose quality: business rule, data dimensions, control processes, supply chain management
- Implementing comprehensive Analytics Management best practices covering key requirements such as model explain ability and transparency for responsible AI and ML
- The art of working in the midst of continuously evolving organizational priorities

DCAM certification is achieved through taking the DCAM course and passing the online DCAM exam. Options are available for those who have been previously accredited through the EDM Council. Additionally, there are multidisciplinary packages available that combine DCAM with CDS and DLC.

[Learn More](#)

## CDMC Certification



**The CDMC (Cloud Data Management Capabilities) Framework is the world's first best practices, assessment and certification framework for effectively managing data in the cloud and accelerating adoption of cloud and hybrid cloud ecosystems.**

CDMC certified professionals are recognized for expertise across a comprehensive range of topics that include data governance and accountability, cataloguing and classification, data accessibility and usage, data protection and privacy, data lifecycle, and technical architecture.

The framework encompasses business, operation, and technology best practices for cloud data management. It incorporates standards and best practices for cloud, multi-cloud and hybrid-cloud implementations, incorporating automated key controls for managing and protecting sensitive data.

CDMC is applicable to students with a wide variety of perspectives:

- Companies: Comprehensive understanding of best practices, and gain exposure to use cases, especially assessment and certification
- Cloud Service Providers: Understanding of consumer requirements, and opportunities for automation
- Application, Technology and Data Providers: Insights on data management and control requirements of consumers
- Consultants and Systems Integrators: Understanding of best practices and how to apply certification and assessments
- Regulators: Understand industry consensus on best practice, and knowledge of auditable/certifiable Framework

CDMC certification is achieved through taking the CDMC course and passing the online CDMC exam. Options are available for those who have been previously accredited through the EDM Council. Additionally, there are multidisciplinary packages available that combine CDMC with CIMP and DCAM.

[Learn More](#)

## Data Literacy Certification



**Data literacy has become an essential skill set for everyone who works in business today, and a must for every organization to remain competitive.**

eLearningCurve's Data Literacy Certification (DLC) program offers the world's only comprehensive data literacy certification. Data literacy is the ability to understand, find meaning, interpret, and communicate using data. Data literacy is fundamental to success as a data-driven organization and is an essential skill set for every business and technical professional.

We offer three levels of certification:

- Basic DLC Package
- DLC Expert Package
- DLC Mentor Package

Additionally, there are several multidisciplinary packages that combine data literacy with CDS and DCAM.

**Enterprise customers can purchase an annual corporate license for the data literacy course material. The license allows you to put the course on your own Learning Management System (with seamless integration of courses and exams), and is renewed annually. Updated materials will be provided every year when the license renews. We can also customize content to address data literacy in the context of your specific business.**

## Benefits of Data Literacy Certification

**For individuals:** Everyone who works in business today is to some degree a data worker. Having the knowledge to collaborate with others both in management and in use of data is quickly becoming a requirement for nearly every management and functional role in business. Data literacy is now a standard business skill set that appears in job requirements and performance expectations. Data literate individuals stand out in their organizations as high performers, well-informed decision makers, and ideal collaborators. Data literacy leads directly to increased job satisfaction and greater career opportunities. Data Literacy Certification (DLC) makes a strong statement that you have developed the knowledge and skills needed to understand, interpret, and communicate with data.

**For the enterprise:** Data literacy is a differentiator between companies that thrive and those that struggle to survive. Recent studies find that organizations with aggressive data literacy programs outperform those who have not prioritized data literacy. Data is viewed by many as the most valuable commodity of the 21st century. Companies that fail to harness their data will quickly lose relevance, reputation, and revenue. A data literate workforce is fundamental to creating value from data. Collectively the workforce must have all of the skills to understand, find meaning, interpret, and communicate with data. Every individual needs to have working knowledge of where data comes from, how it is processed, how it is organized, how it is managed, and how it is used. Data Literacy Certification (DLC) helps to identify and fill knowledge gaps, and to assure that your workforce is a valuable and effective contributor to success as a data-driven enterprise.

**For CDOs:** CDO is a critical leadership role to create and sustain a data-driven organization. Shaping data culture is among the most important responsibilities of that role. Data culture is the collective beliefs and behaviors that shape an organization's capabilities to turn data into information, knowledge, and insights that drive decisions and actions. Collective beliefs and behaviors begin with collective knowledge and understanding. For data, that means data literacy—common knowledge and understanding about how to manage, analyze, and interpret data. The Data Literacy Certification (DLC) program provides education based on a comprehensive Data Literacy Body of Knowledge to all participants. DLC for your employees establishes the collective knowledge and understanding that is the foundation for constructive data culture. It is the first step along the path from data literacy to data culture and from data culture to data driven.

[Learn More](#)



## Data Analysis Certified



**Data analysis is an integral part of nearly every job role in business today. Data is ever-present and strongly influences individual and organizational performance.**

The ability to confidently navigate the path from data to information, understanding, decision, and action is a key characteristic of top performers. Whatever your role may be—business or technical, management or functional staff—data analysis is a valuable and important skill set. You can be sure that the demand for data analysis skills will increase at a rapid pace through the coming years.

Data Analysis Certified (DAC) is a professional designation that affirms your data analysis knowledge and skills. The DAC designation makes a clear statement that you have learned from leaders in the field and that you have demonstrated depth of understanding and ability to apply the concepts and techniques in one or more of three data analysis subject areas: business analysis, data analytics, and advanced analytics. The “data analysis certified” designation makes a strong statement when coupled with your specific job title.

Imagine the power of the message when you present yourself as Data Analysis Certified Operations Manager, Data Analysis Certified Financial Controller, Data Analysis Certified Marketing Specialist, Data Analysis Certified Business Analyst, Data Analysis Certified Data Scientist, etc.

**As Data Analysis Certified, You will be met with new respect, engage in thought-provoking conversations, and find new opportunities for career growth.**

### Who Needs DAC?

DAC is designed for everyone who needs to analyze data to fulfill their job responsibilities. Analyzing data—once the domain of technical professionals—is now a core business capability. Data is abundant in business today, and it is available and accessible to everyone. Data analysis is an essential skill set for everyone from business managers to data scientists.

## Why DAC?

Data Analysis certification is a strong complement to Data Literacy certification. Everyone in business needs data literacy skills to understand and act upon the information and insights that are derived from data. Those who turn data into information and insights must have a combination of data literacy skills and data analysis skills. DAC builds and recognizes the skills that are needed to:

- Frame data analysis projects and find the right data to analyze
- Explore, understand, and prepare data for analysis
- Apply a variety of analysis techniques to find patterns and meaning in data
- Visualize data and communicate data analysis results

DAC is a meaningful certification that attests to your data analysis knowledge and skills. But it is much more than a certificate of knowledge. The process of earning DACP is one of learning, growth, and acquiring new knowledge. Choosing among the many courses, you'll find opportunities to learn about the entire analysis process: framing analysis problems and projects, finding and evaluating data, exploring and preparing data, finding patterns and meaning in data, data visualization and storytelling, and turning analysis into action.

## Levels of Certification

- DAC Certification is earned by completing 4 courses and passing the corresponding exam.
- DAC Ex Certification asserts that you have demonstrated expertise, experience, and excellence as a data analysis practitioner. You will earn this certification with 7 courses, passing corresponding exams at the expert level, and demonstrating at least 5 years of work experience in related business and/or information management roles.

## DAC Tracks

DAC is organized as three tracks, each designed to meet the learning and certification needs of particular roles and responsibilities.

- The **Business Analysis** track is designed for business professionals who need to analyze data—managers, knowledge workers, and business and data analysts.
- The **Data Analytics** track is suited to information management professionals with responsibility for BI and performance management systems.
- The **Advanced Analytics** track is designed for those with data mining and data science roles and responsibilities.

[Learn More](#)

# Educational Packages

We've made it easier than ever to get the comprehensive information management education you need at a great price. Education Packages allow you to purchase bundles of online courses at a significant discount. Whether you are looking for a comprehensive information management education covering all disciplines, or want to focus on a specific topic or job role, there is a program for you.

We recognize that everyone's needs are unique. If you are unable to find a program for you, simply e-mail [support@elearningcurve.com](mailto:support@elearningcurve.com) and tell us what you are looking for and we will tailor the program to meet your needs.

## **DCAM PACKAGES**

**DCAM Certification**  
**DCAM & CDS**  
**DCAM & CIMP Data Governance**  
**DCAM & CIMP Data Architecture**  
**DCAM & CDS Ex**  
**DCAM & CIMP Ex Data Governance**  
**DCAM & CIMP Ex Data Architecture**  
**DCAM & DLC Ex Package**  
**DCAM & DLC Mentor Package**

## **CIMP & CIMP Ex PACKAGES**

**CIMP Data Quality**  
**CIMP Data Governance**  
**CIMP Master Data Management**  
**CIMP Metadata Management**  
**CIMP Data Architecture**  
**CIMP & CDMP Data Quality Package**  
**CIMP Ex Data Quality**  
**CIMP Ex Data Governance**  
**CIMP Ex Master Data Management**  
**CIMP Ex Metadata Management**  
**CIMP Ex Data Architecture**  
**CIMP Ex Data Quality & Governance**  
**CIMP Ex Data Quality & MDM**  
**CIMP All-Course Access License**

## **CDMC PACKAGES**

**CDMC Certification**  
**CDMC & DCAM**  
**CDMC & CIMP Data Governance**  
**CDMC & CIMP Ex Data Governance**  
**CDMC, DCAM, & CIMP Data Governance**  
**CDMC, DCAM, & CIMP Ex Data Governance**

## **CDS & CDS Ex PACKAGES**

**CDS Package**  
**CDS Ex Package**  
**CDS & CIMP Data Quality**  
**CDS & CIMP Data Governance**  
**CDS & CIMP Data Quality + Governance**  
**CDS Ex & CIMP Data Quality**  
**CDS Ex & CIMP Data Governance**  
**CDS & DCAM**  
**CDS Ex & DCAM**  
**CDS & DLC Expert**  
**CDS DLC Mentor**  
**CDS Ex & DLC Mentor**

## **DATA LITERACY PACKAGES**

**DLC Package**  
**DLC Ex Package**  
**DLC Mentor Package**  
**CDS & DLC Ex Package**  
**CDS & DLC Mentor Package**  
**CDS Ex & DLC Mentor Package**  
**DCAM & DLC Ex Package**  
**DCAM & DLC Mentor Package**  
**DLC Ex & DAC Business Analysis Package**  
**DLC Ex & DAC Data Analytics**  
**DLC Ex & DAC Advanced Analytics**

## **DAC PACKAGES**

**DAC Business Analysis Package**  
**DAC Data Analytics Package**  
**DAC Advanced Analytics Package**  
**DAC Ex Business Analysis Package**  
**DAC Ex Data Analytics Package**  
**DAC Ex Advanced Analytics Package**  
**DAC & CDS Package**  
**DAC All-Course Access License**

# 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 information management 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 solutions from a single provider
- Employees can take the courses they need when convenient for them
- Ensure all team members are trained to the equivalent high standard
- Train employees anywhere, no matter what their geographic location
- Employ a fully scalable education solution
- Minimize disruptions 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'll work with you to develop educational programs for various roles, positions, teams, and departments within your company. We'll manage and track enrollment of all students in online classes and taking CIMP exams. We'll also track and report educational progress for each student and work with you to meet any specific educational needs, including:

- Organizing question and answer meetings (via webinar) with course instructors for groups of students who complete online courses
- Organizing onsite sessions when appropriate, often for senior management
- Prioritizing new course development or customizing existing courses, per customer needs
- Creating custom instances of our learning management system to reflect customer branding
- Mounting our online courses on the customer's learning management system

# Enterprise Benefits

**PARTNERSHIP:** *Comprehensive educational solution from a single provider.* We'll be your educational "partner-for-life," providing employees with the continuous information management education they will need over the course of their careers.

**FLEXIBILITY:** *Employees can take the courses they need when they need them.* Our flexible program allows employees to take the courses they require 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.

**SCALABILITY:** *Select an Education Partner who truly understands scalability.* Roll out to a few employees, or your entire organization. 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 a full information management education. We have you covered with a comprehensive set of courses, exams, and certifications designed to impart knowledge, test understanding, and validate learning.

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

**LOGISTICS:** *Minimize disruption to the business.* Our 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. One hundred percent of what you spend goes toward 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 information management topics. Employees can study at their own pace, listen to the material as many times as necessary, and test their knowledge through CIMP certification exams.

**SAVINGS:** *Stretch your training budget.* We offer various pricing options, including volume discounts and a pay-as-you-go model with increasing discounts, among other alternatives.

**"LIVE" INTERACTION:** *Spend time with our instructors.* Organize question and answer meetings (via webinar) with course instructors for groups of students who complete online courses.

**INFORMATION MANAGEMENT 101 Mini-classes.** As a benefit to our enterprise customers, we offer a certain number of complimentary licenses for our 101 mini-classes.

**CUSTOM COURSEWARE:** *Get solutions for your specific needs.* Let us know which courses your organization requires the most. We'll work with top instructors in the industry to meet your needs in the most expedient manner.



# Course Description

## AI Fundamentals: An Introduction to Artificial Intelligence

Instructor: **Natasha Balac**

Duration: 5 hours

Artificial Intelligence (AI) is a field that is continually and actively growing and changing, expanding human capability beyond imagination. AI has captured the attention of scientists, engineers, and business people across industries worldwide, exploring ways to find insight and create value from smart products.

This 5-hour course presents the basics of AI from historical to modern AI with the illustrative applications of endless possibilities. We will examine how AI already impacts every aspect of our daily lives and explore emerging AI-based technologies with examples of applications and implications, as well as opportunities. To understand some of the deeper concepts, such as natural language processing, face recognition, and autonomous driving, we will explore several basic AI concepts: four major types of AI, as well as machine learning, logic and planning, probabilistic technology, deep learning, and neural networks.

### You will learn to:

- Demonstrate a fundamental understanding of AI and apply basic principles of AI to problems that require inference, perception, and learning
- Demonstrate awareness and a fundamental understanding of various applications of AI techniques in intelligent agents, expert systems, artificial neural networks, autonomous vehicle, and other machine learning models
- Demonstrate an ability to share in discussions of AI, its current scope and limitations, and societal impact

### This course is geared towards:

- Business managers and executives
- Technology managers and executives
- Data science and data engineering team members
- Process improvement professionals
- IT analysts and developers
- Data management analysts
- Technology and business architects
- Analytics, business intelligence, data science, and data engineering program leaders
- Anyone with an interest in understanding the capabilities, opportunities, and challenges offered by artificial intelligence

## Analytical Modeling, Evaluation, and Deployment Best Practices

Instructor: **Deanne Larson**

Duration: **3 hours**

Understanding the business problem provides insight into the data needed as well as what algorithms to consider. The choice of which algorithm to use is a challenging one as there can be several that may address the same business problem. This 3-hour course focuses on how to match the business problem to candidate algorithms, produce comparable models, choose the best performing model, and once in production, how to address ongoing value.

### **You will learn to:**

- Match the problem to the analytical model
- Choose a relevant algorithm
- Evaluate models for the best option
- Prepare for model deployment
- Monitor models
- Support model operations

### **This course is geared toward:**

- Business analysts
- Data analysts
- Data scientists
- Project leads
- Business subject matter experts who support data science projects

## **Analytics-based Enterprise Performance Management**

Instructor: **Gary Cokins**

Duration: **4 hours**

Many organizations are far from where they want and need to be when it comes to improving performance, and they apply intuition rather than hard data when making decisions. Enterprise and corporate performance management (EPM/CPM) is now viewed as the seamless integration of managerial methods.

The EPM/CPM methods include: balanced scorecards with KPIs; strategy maps; enterprise risk management (ERM); driver-based planning and budgets, and rolling financial forecasts; what-if scenario planning with sensitivity analysis; activity-based costing (ABC) for product, service-line, channel, and customer profitability measurement and management; supply chain management; Lean and Six Sigma quality management; and resource capacity planning.

This 4-hour online course describes how to complete implementation of the full vision of analytics-based enterprise performance management to improve organizational performance.

### **You will learn:**

- To view enterprise and corporate performance management (EPM/CPM) as the seamless integration of managerial methods rather than as a process
- How business analytics is an advance over BI and where big data fits
- To identify and differentiate strategic KPIs in a balance scorecard and operational performance indicators (PIs) in dashboards
- Proper calculation of product, service-line, channel, and customer profitability for analysis, insights, and actions
- “Predictive accounting” for capacity-sensitive, driver-based budgets / rolling financial forecasts, what-if analysis, and outsourcing decisions
- To overcome implementation barriers such as behavioral resistance to change and fear of being held accountable

### **This course is geared toward:**

- CXOs
- CFOs
- Financial officers and controllers
- CIOs and information technology professionals
- Managerial and cost accountants
- Financial and business analysts
- Budget managers and more

## **Analytics Fundamentals**

Instructors: **Mark Peco and Dave Wells**

Duration: **6 hours**

Analytics is a mainstream topic in almost every walk of life today. In business, it is discussed in the boardroom, at strategy sessions, in operational settings, during marketing campaigns, and in technology groups. In everyday life, it is used to manage social networks, personal fitness, personal health, and much more.

Analytics offers tremendous potential for organizations to improve competitive positioning, generate new insights, guide decision-makers, and shape positive outcomes. Success with analytics requires an understanding of many parts that must work together to turn potential into results. The ability to harness data, technology, people, and processes cohesively is fundamental to success.

This online course provides a foundation to understand the scope and the key success factors of analytics. Concepts and terminology are introduced, and scope of analytics is discussed to set context and provide a frame of reference for topics that follow. Business analytics is described and made tangible through a variety of industry use cases and functional examples. Data analytics is presented as a set of information building blocks to enable the business analytics applications. A breadth of analytics possibilities is described using a capabilities framework to position a wide range of algorithms and modeling techniques.

### **You will learn:**

- Key definitions, concepts, and the terminology of analytics
- Business analytics use cases and functional applications
- Descriptions and scope of data analytics
- Common analytics techniques and how they can be applied
- Some analytics examples used to address a variety of applications
- Key processes and methodologies to manage analytics work and activities

### **This course is geared toward:**

- Business & technology managers and executives
- Business & IT analysts and developers
- Statisticians and analytic modelers
- Process managers and decision-makers
- Business measurement analysts & data management analysts
- Technology and business architects
- BI and analytics program managers and team members

## Architecture and Design for Data Interoperability

Instructor: **Dave Wells**

Duration: **3 hours**

Data integration has been the primary method of resolving data disparity for decades. However, integration brings challenges with multiple copies of data and many data pipelines. Data interoperability is quickly becoming a practical alternative to copy-based data integration. Interoperability eliminates the proliferation of data copies and reduces the number and complexity of ETL processes and data pipelines. Interoperability also supports agility and adaptability. Data is not force-fitted into a rigid schema but instead positioned as independent components that can be configured to fit many different use cases.

Making data interoperable begins with data architecture to identify interoperability patterns and weave them into your existing data management architecture. Knowing what patterns you'll use – APIs, data products, data contracts, semantic mapping, open links, etc. – is an essential first step. Next, you'll need to identify the technologies needed to enable each pattern and fit them into your technology stack. With those pieces in place, you're ready to provide design guidelines and begin migration planning.

### You will learn:

- What data interoperability is and why it is important
- The full scope of data management architecture – operational and analytical data
- How operational data management practices contributes to data friction and technical debt
- How analytical data management practices become barriers to data interoperability
- How data interoperability mitigates data friction and reduces technical debt
- How existing data management architecture can be adapted for interoperability
- Semantic data modeling and mapping as the foundation of data interoperability
- Interoperability patterns using APIs, data products, data contracts, and data virtualization
- How a semantic layer works as the nucleus of data interoperability

### This course is geared toward:

- Practicing and aspiring data engineers of all types – data product engineers, data pipeline engineers, and database engineers
- Data strategists including CDOs, CIOs, and other executives with roles in defining data strategy
- Data warehouse and data lake architects, designers, developers, and implementers
- Master data management (MDM) architects, designers, developers, and implementers
- Application systems architects, designers, developers, and implementers



## Big Data Fundamentals

Instructor: **William McKnight and Jake Dolezal**

Duration: **3 hours, 30 minutes**

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, large insurance companies, telecommunications, healthcare companies, and sizeable 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 “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 about 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 projects started and drop 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’ll 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 toward:**

- BI program and project managers
- Business and data analysts
- BI architects and BI developers
- Data architects & integrators
- Analytics developers and consumers

## Cloud Data Management Capability Framework

Instructor: **Colin Gibson, et al.**

Duration: **5 hours, 45 minutes**

CDMC (the Cloud Data Management Capabilities) Framework is the industry-standard, best practice framework for the management and control of sensitive and important data in cloud, multi-cloud and hybrid-cloud environments. The development of CDMC was facilitated by the EDM Council with the contribution of over 300 professionals from over 100 organizations including cloud consumers, cloud service providers, technology providers and consultancies. CDMC provides organizations the ability to assess their current state cloud data management capabilities and identify gaps for remediation. CDMC also enables cloud service and technology providers to audit and certify that their products and services support and automate key controls for the control of sensitive data in cloud environments.

The CDMC course provides a comprehensive perspective on capabilities needed to manage and control data at scale in cloud environments. The curriculum is organized into six core components covering 37 essential data management capabilities and 14 key controls. Each capability is supported by a series of requirement statements including specific objectives, implementation advice, artifacts and scoring guidance that enables the evaluation of cloud data management initiatives. The CDMC course is organized into its six core components:

- Governance & Accountability
- Cataloging & Classification
- Access & Usage
- Protection & Privacy
- Data Lifecycle
- Data & Technical Architecture

### You will learn:

- A comprehensive understanding of Cloud Data Management best practices
- The objectives and key considerations of each of the detailed sub-capabilities
- The drivers and automation opportunities associated with each of the key controls
- Use cases for the framework, including its use in assessment and certification
- The relationship between CDMC and the EDM Council's DCAM framework
- The resources that are available to support the adoption and use of CDMC

**This course is geared towards:**

- Cloud migration / adoption managers and executives
- Business managers and executives
- Data managers and executives
- Technology managers and executives
- Cloud and technology architects
- Data management analysts
- Business analysts
- Anyone involved in or impacted by migration to and adoption of cloud services and technologies
- Anyone with an interest in understanding the capabilities, challenges and opportunities offered by cloud data management

**Your instructors for this course are:**

Colin Gibson – *Senior Advisor, EDM Council*

John Bottega – *President, EDM Council*

Rob Wentz – *KPMG*

Chris Grote – *Atlan*

Stuart Woodward – *Ortecha*

Jubair Patel – *Microsoft*

Emmanuel Raymond – *TietoEvry*

Terry Hedin – *London Stock Exchange Group*

## Crafting the Business Case for Data Quality

Instructor: **Tom Redman**

Duration: **3 hours, 30 minutes**

Bad data harms almost all organizations, adding cost to operations, angering customers, increasing risk, and making it more difficult to craft and execute strategy. Good business cases help build support for the hard work necessary to improve. Two important components of a business case are Business Benefits and a Cost-of-Poor-Data-Quality (COPDQ) analysis. To be clear, assigning dollar values to some benefits and costs is extremely difficult. As Dr. Deming observed, "the true costs of poor quality are unknown and unknowable." Dr. Deming was referring specifically to manufacturing but, so far anyway, his insights have proven true for quantifying the cost of poor data as well.

Critically, a good business case engages both "the head and the heart," narrowing the focus to the benefits and costs that have the greatest logical and emotional appeal to the organization. For example, a company pursuing a strategy of customer intimacy may be far more concerned about any costs associated with customer anger than increased operational costs. Finally, the business case must be sold in powerful ways.

This online training course offers a comprehensive analysis of the benefits of high-quality data and the costs of poor data quality, capped with the detailed process of developing and delivering a powerful and effective business case.

### **You will learn to:**

- Think through the benefits of high-quality data & the costs of poor data
- Distinguish costs that are estimable from those that are not
- Perform a cost-of-poor-data-quality (COPDQ) analysis
- Create a business case that engages both "the head & the heart"
- Deliver and sell a business case for data quality

### **This course is geared toward:**

- Those tasked with getting a data quality program started or advancing an existing program
- Those who must build support for their data quality efforts
- Those seeking to advance data quality in the face of indifference, tight budgets, opposition, etc.
- Data stewards and data quality professionals who want to better understand the costs and benefits of data quality

## Curating and Cataloging Data

Instructor: **Dave Wells**

Duration: **3 hours**

As the world of data management grows and changes, the roles and participants in data ecosystems must adapt. With the convergence of several influences—big data, self-service analytics, and self-service data preparation—we need to actively manage the inventory of self-service data. Data curation is both a data inventory management process and a data governance activity. The data curator is responsible for overseeing a collection of data assets and making it available to and discoverable by anyone who needs data. Cataloging maintains the collection of metadata that is necessary to support browsing, searching, evaluating, accessing, and securing datasets.

This 3-hour online training course will explore how curating and cataloging work together to meet the data needs of business and data analysts, to provide self-service data to complement self-service analytics, and to realize the promise of democratizing data analytics.

### **You will learn:**

- The concepts, responsibilities, and skills of data curation
- The role of the data curator in data governance and the differences between a data curator and a data steward
- The needs of data seekers and the ways that curating and cataloging help to meet them
- The purpose, content, and uses of a data catalog
- The state of data cataloging tools and technology
- Guidelines for getting started with data curating and cataloging

### **This course is geared toward:**

- Business and IT leaders struggling with the paradoxes of modern data management
- Analytics and BI designers and developers who are dependent on fresh and relevant data for every analytics use case
- Data management professionals at all levels, from architects to engineers
- Data governance professionals—especially data stewards who need to adapt to the changing world of modern data management



## **Data Architecture Fundamentals**

Instructors: **Mark Peco and Dave Wells**

Duration: **5 hours**

Data architecture frames how data is managed from the point of creation or collection, through processing of many kinds, to distribution, usage, and business impact. It provides concepts, structures, guidelines, and standards needed for consistency, reliability, resilience, adaptability, and sustainability of data management processes and practices.

Data architecture is a complex undertaking that describes how the many parts of data management fit together. Looking outward from data architecture, it must work together with business architecture, systems architecture, and technology architecture as an integral part of enterprise architecture. Looking inward, it must connect the dots among data models, structures, sources, processes, flows, products, services, technologies, users, use cases, business impacts, and more.

This 5-hour online course looks at the concepts, principles, and products of data architecture through six different lenses – business alignment, data lifecycle management, data usage, content & structure, processing & storage, and technology. Putting the pieces together, the course concludes with a look at six steps to architecture design, six methods of architecture implementation, and the importance of continuously evolving data architecture.

### **You will learn:**

- Multiple, complementary definitions of data architecture
- Why data architecture is needed – both business and technical cases
- How data architecture relates to enterprise architecture, data culture, and data governance
- Six perspectives of data architecture and the underlying concepts of each
- What is produced by architectural activities and processes
- How data architecture is developed, managed, and implemented
- Best practices for data architecture

### **This course is geared towards:**

- Practicing and aspiring data architects
- CDOs, CIOs, and other executives with a role in defining data strategy
- Enterprise, business, systems, technology, analytics, and other architects who work with data architects
- Data engineers, application designers and developers, data systems designers and developers, and others who apply data architecture
- Anyone who needs to collaborate with data architects, and everyone with an interest in data architecture

## **Data Analysis Fundamentals**

Instructors: **Dave Wells and Mark Peco**

Duration: **4.5 hours**

Data analysis is a topic that is important to everyone in business today. Data analysis is no longer the domain of technical specialists, statisticians, and data scientists. Everyone has access to data today, and we all analyze data as a routine part of our day-to-day jobs. Understanding the basics of analyzing data is important for every business professional today.

The course also looks at human factors in data analysis. Cultural influences are discussed as an important consideration. Traits of a good analyst – curiosity, imagination, skepticism, and more – are explored along with collaboration and complementary thinking styles. This course provides a comprehensive look at the work of analyzing data. From introductory concepts through all of the technical activities, to the human side of data analysis, you'll get complete coverage of data analysis fundamentals.

### **You will learn:**

- Data analysis concepts, applications, and processes
- Descriptive and inferential statistics concepts and their applications in data analysis
- Preparing for data analysis – project and problem framing
- Getting the right data for analysis – data searching and data acquisition
- Understanding the data – data exploration with profiling and visualization
- Data cleansing and data structuring
- Data improvement, enrichment, and formatting
- Statistical data analysis techniques
- Algorithmic data analysis techniques
- Data visualization and storytelling
- Data analyst traits and skills

### **This course is geared toward:**

- Business managers who are the de facto data analysts for most organizations
- Business and data analysts whose primary responsibility is finding meaning and insights in data
- Managers of organizations and teams with data analysis responsibilities
- Everyone who uses data for decision making in their day-to-day activities
- Anyone with data analysis responsibilities
- Anyone who has access to data and desire to get more value from the data
- Everyone with an interest in data analysis

## **Data Analytics for Data Stewards**

Instructors: **Mark Peco, Deanne Larson, and Eric Siegel**

Duration: **5 hours**

The objective of this 5-hour course is to provide an overview of the many disciplines that make up the field of data analytics, ranging from business intelligence to data science. The goal is to build a basic knowledge of each discipline for data stewards who work with and support participants and stakeholders in all dimensions of data analytics.

### **You will learn:**

- The fundamental concepts and practices of business intelligence
- The fundamental concepts and practices of business analytics
- The concepts and principles of predictive analytics
- The concepts and principles of data mining
- The concepts and principles of data science
- The roles of data analytics in a data-driven organization

### **This course is geared toward:**

- Data stewards
- Business or IT professionals who want to become data stewards
- Business or IT counterparts working with data stewards
- Information management professionals who want to learn about data analytics

## **Data Ethics & Responsible AI: Fundamentals**

Instructor: **Diana L. Ascher, Ph.D., MBA**

Duration: **3 hours**

This online course delves into the importance of data ethics and responsible AI in data management organizations. It identifies basic ethical principles pertaining to data and describes how these arise from three general ethical frameworks. Participants will consider the data ethics implications of several case studies and current events. Participants will learn how to recognize the data ethics aspects of the DCAM framework for application in real-world situations.

### **You will learn:**

- What data ethics really means
- The many forces driving the urgency of data ethics
- The benefits and harm that can result from data
- The risks of data breaches
- The importance of trust and how it is created
- How data ethics integrates into the 8 components of DCAM
- The very strong relationship data ethics and data governance
- Three steps toward data ethics actualization

### **This course is geared toward:**

- Stewards of business data
- Information professionals seeking guidance in this emerging area
- Professionals who have been asked to implement or participate in a data governance program

## **Data Governance for Business Leaders**

**Instructor: John Ladley**

**Duration: 3 hours**

Corporate data and information require governance. Without governance, the promised benefits of information assets cannot occur.

Most of the burden for data governance success falls on business users of information. Business personnel must learn to be stewards, owners, and change agents while still accomplishing their day-to-day responsibilities. Many information management and governance initiatives originate in business areas, but the realities of sustaining governance need to be fully understood before real change occurs.

This course covers basic governance concepts that business participants need to understand and describes the steps they can take to make governance a successful business initiative.

### **You will learn to:**

- Build a relevant business case for data governance
- Talk with business leadership
- Design governance teams and projects
- Sustain governance through measurements

### **This course is geared toward:**

- Anyone burdened with poor data quality
- Business people in charge of data quality initiatives
- Data owners and data stewards
- Data governance managers
- Data quality or governance professionals who need to gain business support

## Data Governance for Data Stewards

Instructors: **Maria C. Villar, John Ladley, and Dave Wells**

Duration: **4 hours, 45 minutes**

Data Governance is an essential part of modern data management. We work in an age where data is abundant, everyone depends on data, and most people are both creators and consumers of data. Like people, capital, and raw materials, data is a core resource for production. Data is a valuable business asset, but unfortunately, data is messy. Data without policies, standards, and guidelines is sure to have high risk and limited value. Data governance manages the policies, standards, and processes necessary to bring order to otherwise chaotic data management. In many ways, data governance is more a human endeavor than a technical pursuit. We don't really govern data. We govern how we manage and work with data.

In this age of data-driven business, every organization needs data governance. It is at the heart of managing value, risk, quality, compliance, and data culture. Many organizations are in the process of implementing a data governance program, but most are struggling or only partially successful. Understanding the many dimensions of data governance, focusing on your organization's specific needs and priorities, and tailoring governance to your organization's culture, information maturity, priorities, and sponsorship are important factors to minimize struggles and operate a successful data governance program. This course examines the dimensions, challenges, and success factors of data governance, providing fundamental knowledge for every data governance participant and stakeholder.

### **You will learn:**

- What data governance is and why it is so important in today's data-driven world
- The business goals of data governance
- The very strong connection between data governance and value creation
- Why governance is a critical leadership discipline for data-driven organizations
- The roles, responsibilities, and organizational structures of a data governance program
- The roles of governance in security, privacy, and compliance
- The roles of governance in data quality management

### **This course is geared towards:**

- Everyone with responsibilities to lead or participate in a data governance program
- Everyone with data management responsibilities (you are key stakeholders in data governance)
- Executives and business leaders with interest in data value, risk, protection, and quality
- Everyone who relies on data to make decisions
- The roles of governance in data quality management

## Data Governance Fundamentals

Instructors: **Maria C. Villar, Theresa Kushner, Dave Wells, Jed Summerton, Evan Levy, and Tom Redman**

Duration: **5-hours**

Data Governance is an essential part of modern data management. We work in an age where data is abundant, everyone depends on data, and most people are both creators and consumers of data. Like people, capital, and raw materials, data is a core resource for production. Data is a valuable business asset, but unfortunately, data is messy. Data without policies, standards, and guidelines is sure to have high risk and limited value. Data governance manages the policies, standards, and processes necessary to bring order to otherwise chaotic data management. In many ways, data governance is more a human endeavor than a technical pursuit. We don't really govern data. We govern how we manage and work with data.

In this age of data-driven business, every organization needs data governance. It is at the heart of managing value, risk, quality, compliance, and data culture. Many organizations are in the process of implementing a data governance program, but most are struggling or only partially successful. Understanding the many dimensions of data governance, focusing on your organization's specific needs and priorities, and tailoring governance to your organization's culture, information maturity, priorities, and sponsorship are important factors to minimize struggles and operate a successful data governance program. This course examines the dimensions, challenges, and success factors of data governance, providing fundamental knowledge for every data governance participant and stakeholder.

### You will learn:

- What data governance is and why it is so important in today's data-driven world
- The business goals of data governance
- The very strong connection between data governance and value creation
- Why governance is a critical leadership discipline for data-driven organizations
- The roles, responsibilities, and organizational structures of a data governance program
- The roles of governance in security, privacy, and compliance
- The roles of governance in data quality management

### This course is geared towards:

- Everyone with responsibilities to lead or participate in a data governance program
- Everyone with data management responsibilities (you are key stakeholders in data governance)
- Executives and business leaders with interest in data value, risk, protection, and quality
- Everyone who relies on data to make decisions
- The roles of governance in data quality management



## Data Integration Techniques for Designing an ODS

Instructor: **Angelo Bobak**

Duration: **3 hours**

In today's modern business environment, corporate entities are constantly merging or splitting, internal divisions are sold off to other 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, along with the solutions to these challenges. It will show 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 Özsu 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
- How to identify and resolve data conflicts when integrating data
- The importance of master data and data quality in schema integration

### **This course is geared toward:**

- 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

## Data Literacy Basics

Instructor: **Deane Larson, Mark Peco, and David Wells**

Duration: **5 hours**

**This material is available as part of Data Literacy certification. Please visit our [Data Literacy Certification](#) page for more information.**

The study material contains a high-level overview of all 12 data literacy topics from the Data Literacy Body of Knowledge (BOK).

### **You Will Learn:**

- Data concepts including various kinds of data and the ways that data is typically organized
- Database fundamentals for many database types including flat files, relational databases, and NoSQL databases
- How knowledge about data is managed by metadata and data catalogs
- Data governance purposes and processes including policy management, quality management, and data curation
- Data resource management including data warehousing, data lakes, data integration, and data engineering
- How to find, evaluate, and prepare data for your purposes and projects
- Data analysis techniques
- Data visualization techniques
- The path from data to action and
- business impact

### **This Course is Geared Toward:**

- Anyone working to increase their data literacy
- Those who work with data as part of job responsibilities and needs to know more about data
- Anyone who needs to understand the roles and responsibilities of others who work with data
- Anyone who wants to get a big-picture, end-to-end understanding of all things related to data

## Data Literacy in Data Analysis

Instructor: **Deane Larson, Mark Peco, and David Wells**

Duration: **4 hours**

**This material is available as part of Data Literacy certification. Please visit our [Data Literacy Certification](#) page for more information.**

The study material includes comprehensive information related to data literacy for Data Analysts. It covers topics such as finding and evaluating data, data preparation, data analysis techniques, data visualization, and taking analysis to action.

### **You Will Learn:**

- Skills and techniques for finding and evaluating data including project framing, data searching, and data evaluation
- The practices and processes of data preparation including data engineering, data exploration, and data transformation
- Statistical data analysis techniques and analytic modeling methods
- Data visualization skills for reading and for creating charts and graphs
- Steps to get from data analysis to action and business impact including data storytelling and value chain analysis
- 

### **This Course is Geared Toward:**

- This course is designed to meet the learning needs of those who are preparing to take the Data Literacy Certification exam in Data Analysis

## **Data Literacy in Data Management**

Instructor: **Mark Peco and David Wells**

Duration: **4 hours**

**This material is available as part of Data Literacy certification. Please visit our [Data Literacy Certification](#) page for more information.**

The study material includes comprehensive information related to data literacy for Data Managers. It covers topics such as managing data knowledge, data governance, data resource consolidations, managing the data resource, and using the data resources.

### **You Will Learn:**

- Practices for managing knowledge about data including metadata management, data modeling, data profiling, and data cataloging
- Data governance practices including policy management, curating and cataloging, quality management, data stewardship, and data ethics
- Architectures and processing methods for data consolidation
- Data resource management architectures & methods including data warehousing, data lakes, and master data management
- The many different uses of a managed data resource including business intelligence, business analytics, and data science

### **This Course is Geared Toward:**

- This course is designed to meet the learning needs of those who are preparing to take the Data Literacy Certification exam in Data Management

## **Data Literacy Primer (with Data Literacy Self-Assessment)**

Instructor: **David Wells**

Duration: **84-minutes**

We live and work in a data-centric world. Data is everywhere today and it is a part of nearly every business role, process, and activity. Every business professional is both a creator and a consumer of data. The prevalence of data makes data literacy an essential skill set for all business professionals. Data literacy is the ability to understand, find meaning, interpret, and communicate with data. A data literate individual has a working knowledge of where data comes from, how it is organized, how it is managed, and how it is used.

Data literacy doesn't require that every knowledge worker must become deeply technical – only that they have practical understanding of the terminology, concepts, and practices needed to weave data into their day-to-day activities. This course is designed to provide the fundamental knowledge that is the foundation of data literacy.

### **You Will Learn:**

- Various kinds of data and how each contributes to business understanding
- Types of data storage ranging from basic files to SQL and NoSQL databases
- Types and roles of metadata
- Finding and using metadata
- Essential data management practices – governance, protection, and ethics
- Multiple kinds of data resources – warehouse, data lake, etc. – and how each contributes to data management and business value
- Processes and techniques to find patterns, meaning, and insights through data analysis
- Techniques for communicating with data – both reading and creating data visualizations

### **This Course is Geared Toward:**

- Anyone who is interested to learn about data – especially business people who find that data and analysis of data are increasingly important to their work activities and job responsibilities.

**Data Literacy Self-Assessment** is a part of the Data Literacy Primer Course. This self-assessment aims to help you identify the level of your data capabilities, knowledge gaps, and areas where learning is needed.

## **Data Management Capability Assessment Model (Course plus Certification Exam)**

Instructor: **John Bottega, Mark McQueen, and Colin Gibson**

Duration: **5 hours**

DCAM (the Data Management Capability Assessment Model) is the industry-standard, best practice framework designed to assist today's information professional in developing and sustaining a comprehensive data management program, and one that is a business and operational priority in their firm. DCAM was developed by industry professional members of EDM Council, the global non-profit association for data management. The DCAM model is used by a substantial majority of financial industry firms, including Tier 1 and Tier 2 banks plus regulators, with rapid adoption across other industries such as insurance, pharmaceutical and manufacturing.

The DCAM course provides a comprehensive perspective on capabilities needed to develop and implement a practical data management function. The curriculum is organized into eight core components covering over 100 essential data management capabilities and sub-capabilities. Each capability is supported by a series of requirement statements including specific objectives, scoring guidance, implementation advice and artifacts needed for evaluation of data management programs. The latest DCAM v2 Course includes new capabilities for provisioning of data to advanced analytics and AI/ML initiatives and includes data ethics.

### **You will learn:**

- A comprehensive understanding of Data Management best practices
- How to assess existing data management capabilities, to identify gaps and to introduce best practices
- How to identify and prioritize opportunities to advance your Data Management and Advanced Analytics initiatives
- The core, logical components that are applicable and understandable in the real world of data management
- Real DCAM v2 use cases

### **The DCAM course is organized into its eight core components:**

- Data Strategy & Business Case
- Data Management Program & Funding
- Business & Data Architecture
- Data & Technology Architecture
- Data Quality Management
- Data Governance
- Data Control Environment
- Analytics Management

**This course is geared towards:**

- Business Managers and Executives
- Data Managers and Executives
- Technology Managers and Executives
- Data Management Analysts
- Data Science and Data Engineering Team Members
- Business Analysts
- Analytics Managers
- Process Managers and Decision Makers
- Business Measurement and Performance Analysts
- Technology and Business Architects
- Analytics, Business Intelligence, Data Science and Data Engineering Program Leaders
- Anyone with an interest in understanding the capabilities, opportunities and challenges offered by data management

This DCAM Certification Package includes the DCAM course plus the certification exam.

***Please note:*** Knowledge of DCAM is beneficial to any data management professional. However, students should be aware that DCAM is proprietary to the EDM Council and can only be used in assessments by individuals who are employees of members of the Council.



## **Data Mining Concepts and Techniques**

Instructor: **Deanne Larson**

Duration: **3 hours**

Data mining originated primarily from researchers running into challenges posed by new data sets. Data mining is not a new area but has re-emerged as data science because of new data sources such as big data. This course focuses on defining both data mining and data science and provides a review of the concepts, processes, and techniques used in each area.

This 3-hour online course will give insight into the data mining process, explain models and algorithms, and provide an understanding of how to match the appropriate data mining models to the correct problems.

### **You will learn:**

- The definitions of data mining and data science
- The role of statistics in data mining
- Machine learning concepts
- To differentiate between supervised and unsupervised learning
- The data mining process
- How to conduct an exploratory data analysis
- To identify data mining models and algorithms
- How to match the problem with the model
- Model validation techniques
- How to deploy data mining models

### **This course is geared toward:**

- Analysts looking to gain foundational data mining knowledge
- Analysts looking to understand data mining models
- Analysts looking to apply the appropriate data mining models to the correct problem
- Attendees who have a basic understanding of undergraduate statistics, data types, databases, and data management concepts

## Data Mining in R

Instructor: **Deanne Larson**

Duration: **3 hours, 30 minutes**

With increasing interest in big data, the topic and skills around data mining get new attention, including a strong interest in the value that can be derived from large data sets. Data mining is the process of selecting, exploring, and modeling large amounts of data to uncover previously unknown information for the benefit of business.

R is an open-source software environment for statistical computing and graphics and is very popular with data scientists. R is being used for data analysis, extracting and transforming data, fitting models, drawing inferences, making predictions, plotting, and reporting results. This online training course will show you how to use R basics, work with data frames, data reshaping, basic statistics, graphing, linear models, nonlinear models, clustering, and model diagnostics.

### You will learn:

- R basics such as basic math, data types, vectors, and calling functions
- Advanced data structures such as data frames, lists, and matrices
- R base graphics
- R basic statistics, correlation, and covariance
- Linear models such as decision trees and random forests
- To apply clustering using K-means
- Model diagnostics

### This course is geared toward:

- Data analysis and business analytics professionals
- Anyone who is interested in learning data mining techniques to discover insights into data, and who has some statistical and programming experience

## **Data Model Scorecard**

Instructor: **Steve Hoberman**

Duration: **3 hours**

A frequently overlooked aspect of data quality management is that of data model quality. We often build data models quickly, in the midst of a development project, and with the singular goal of database design. Yet the implications of these models are far-reaching and long-lasting. They affect the structure of implemented data, the ability to adapt to change, the understanding of and communication about data, the definition of data quality rules, and much more. In many ways, high-quality data begins with high-quality data models.

This online training course presents Steve Hoberman's Data Model Scorecard®, which provides the tools necessary to measure and manage data model quality.

### **You will learn:**

- The importance of having an objective measurement of data model quality
- The categories that make up the scorecard, including correctness, completeness, structural soundness, flexibility, standards, and model consistency
- How to apply the scorecard to different types of models
- Techniques to strengthen data models, including model reviews, model substitutes (screens, prototypes, sentences, spreadsheets, and reports), and the use of automated tools to enforce modeling best practices and standards
- How to introduce the scorecard into a development

### **This course is geared toward:**

- Data modelers
- Data analysts
- Data architects
- Data stewards
- Database administrators

## Data Modeling Fundamentals

Instructor: **Dave Wells**

Duration: **4 hours, 45 min**

Data modeling is a set of techniques that are fundamental to the processes of understanding, designing, implementing, and curating data. Despite the many declarations that “data modeling is dead” it continues to be an essential part of effective data management. Data Modeling is not dead, but the practices of data modeling are different today than in the past.

Once the domain of database designers and developers, data modeling is now an important skill for data engineers, data scientists, data analysts, application developers, and data curators. Modeling for traditionally structured data is now extended to encompass the variety of big data and NoSQL data types. Semantic data modeling simplifies data integration and is essential to achieve data interoperability. In today’s data modeling practices, long-standing modeling techniques are combined with new and different techniques to adapt to variety in data and data management use cases.

### You will learn:

- What data modeling is and why it is important for modern data management
- Data modeling use cases and the roles of data modeling in data management
- Top-down data modeling for data requirements analysis and database design
- Data model reverse engineering to explore, understand, and describe existing data
- Entity-Relationship data modeling techniques
- Multi-dimensional modeling techniques
- NoSQL data modeling techniques including key-value, document, and graph data modeling
- Semantic data modeling techniques including modeling of ontologies and taxonomies

### This course is geared toward:

- Data engineers responsible to design, build, and support databases of all types
- Data engineers responsible to design, build, and support data pipelines
- Data analysts, data scientists, and data engineers who need to investigate, understand, and document data
- Data architects responsible for data standards, data interoperability, and data integration
- Data warehouse and data lake architects, designers, developers, and implementers
- Master data management (MDM) architects, designers, developers, and implementers
- Application systems architects, designers, developers, and implementers
- Anyone with responsibility for or interest in data modeling

## Data Parsing, Matching, and Deduplication

Instructors: **Kathy Hunter, William McKnight, and Henrik Sørensen**

Duration: **4 hours, 20 minutes**

Data parsing, standardization, matching, and deduplication are the cornerstones of successful master data management (MDM). They are also critical parts of successful data quality programs and are the 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.

This online training course is aimed at data quality and master data management (MDM) professionals, as well as those responsible for working 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 deduplication techniques, as well as an extensive overview of specific problems and solutions when dealing with global data.

### **You will learn:**

- Data parsing, standardization, matching, and deduplication 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
- The challenges of global data and ways to overcome these challenges

### **This course is geared toward:**

- Master data management professionals
- Data quality professionals
- Information architects
- Developers of data warehousing systems
- Business professionals who work with global data

## Data Privacy and Protection Fundamentals

Instructor: **Evan Levy**

Duration: **5 hours**

The business world is undergoing a transition in today's data-driven economy. As the value of data has grown, the awareness of the need for protection, privacy, and liability has become top-of-mind. For many years, companies were able to acquire, collect, and use customer and other personal information without concern for rules, laws, and liabilities. That's no longer the case.

The frequent occurrence of data misuse and theft has created the need for companies to reexamine their approach to data protection and privacy. Most business people think little about their company's responsibilities in retaining customer data to support business decision-making. Unfortunately, the development of laws around the world focused on data protection, privacy, and responsibility has created a new set of challenges in the world of data usage and business analytics. The day is quickly approaching when companies will need to be able to manage and track data usage, data location, and customer consent.

In this 5-hour course, Evan Levy discusses the details of data privacy and protection and reviews the activities that go into supporting a data privacy and protection initiative.

### You will learn:

- The key concepts of data privacy and protection
- The impact of data privacy on an existing analytics environment
- An approach to integrating data privacy and protection into a data lifecycle
- The phases and activities involved in a data privacy/protection initiative
- About the stakeholders and participants in a data protection initiative

### This course is geared toward:

- Chief data officers
- Compliance and risk officers
- Program/project management
- Business sponsors
- BI/analytics developers
- Data architects
- Data management staff

## 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, and populating a metadata repository, as well as operational data migration and integration. It is also the key ingredient in successful data quality management.

While the proliferation of commercial tools made data profiling accessible for most information management professionals, successful profiling projects remain elusive. This is largely because these tools allow for the gathering of 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 the practical skills necessary to succeed with 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 appropriate 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 toward:**

- Data quality practitioners
- MDM practitioners
- Metadata management practitioners
- IT and business analysts involved in data management
- Those responsible for the implementation and maintenance of various data management systems



## Data Quality Assessment

Instructor: **Arkady Maydanchik**

Duration: **5 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 the absence of a comprehensive methodology, measuring data quality remains an elusive concept. It has proven to be easier to produce hundreds or thousands of data error reports than to make any sense of them.

This online training course provides a comprehensive treatment for the process and practical challenges of data quality assessment.

It starts with the systematic treatment of various data quality rules and then proceeds to results analysis and building aggregated data quality scorecards. 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 the completeness of a 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 toward:**

- Data quality practitioners
- Data stewards
- IT and business analysts and anyone else involved in data quality management

## **Data Quality for Data Stewards**

**Instructor: Arkady Maydanchik, Olga Maydanchik, and Dave Wells**

**Duration: 5 hours**

Since data quality is one of the core responsibilities of data stewards, each steward needs to have a foundation built upon concepts, principles, terminology, and methodology of data quality management.

This online training course provides an overview of the field of data quality with the goal of building strong fundamental knowledge for data stewards. It covers topics ranging from data quality definitions and dimensions to key data quality management practices and methodologies, as well as core data quality processes and projects.

### **You will learn:**

- Basic concepts, principles, and practices of quality management
- How quality management principles are applied to data
- The dimensions of data quality
- Common causes of data quality problems
- An introduction to data quality assessment
- An introduction to root cause analysis
- An introduction to data quality monitoring

### **This course is geared toward:**

- Data stewards
- Business or IT professionals who want to become data stewards
- Business or IT counterparts working with data stewards
- Information management professionals who want to learn about data quality

## Data Quality Fundamentals

Instructor: **Dave Wells**

Duration: **4 hours, 30 minutes**

Data quality is a large and complex field with many dimensions. Every data quality practitioner needs to have a foundation built upon concepts, principles, and terminology that are common in quality management. Building upon that foundation, they need to understand how quality management concepts and principles are applied to data, as well as the language and terminology that specifically apply to data quality.

This online training course provides an overview of the field of data quality with the goal of building strong foundational knowledge.

### **You will learn:**

- Basic concepts, principles, and practices of quality management
- General quality management terminology
- Data-specific quality management terminology
- How quality management principles are applied to data

### **This course is geared toward individuals who:**

- Are getting started in the data quality field
- Are preparing for in-depth study of data quality and need to start with the basics
- Work with data quality professionals and need to understand what they do
- Need to "speak the data quality language"

## **Data Quality Scorecard**

**Instructor: Olga Maydanchik**

**Duration: 5 hours**

Data quality scorecards have become very popular, and many organizations are starting to build them. What they have found is the path to a meaningful and useful DQ Scorecard is riddled with traps and obstacles.

This online training course provides a comprehensive treatment for the processes and practical challenges of data quality scorecarding.

It starts with a few real, live-use cases that showcase what a scorecard can do for a company when done correctly. First of all, systematic treatment of various DQ scorecard challenges is provided. Then the course proceeds to the ins and outs of the successful DQ scorecard, from the underlying data model to the effective processes that need to be set up in order to produce the scorecard efficiently. Multiple examples to illustrate every important point are provided in the class.

### **You will learn:**

- The methodology behind data quality metrics calculations
- The best way to organize data quality-related metadata collected during typical data quality projects
- Effective data visualization techniques for depicting data quality measurements
- The typical pitfalls that accompany data quality scorecard implementation and how to avoid them
- How to achieve scorecard adoption and usage by the business users

### **This course is geared toward:**

- Data quality practitioners
- Data stewards and data governance practitioners
- IT analysts, business analysts, and anyone else involved in data quality management
- Developers tasked with DQ scorecard creation

## Data Quality Specialist

Instructor: **Michele Valentini**

Duration: **3 hours 51 minutes**

The Data Quality Specialist course, grounded in DAMA International's Data Management Body of Knowledge (DMBOK) framework provides a comprehensive exploration of Data Quality concepts and practices. The course begins with an overview of the DMBOK Framework, then positions data quality as a core discipline of data management before examining the concepts, tools, techniques, and activities of data quality management.

This course provides essential knowledge for everyone with data quality responsibilities, as well as those preparing for data quality certification. CDMP assures your understanding of widely accepted data quality concepts and practices as described by the Data Management Body of Knowledge (DMBOK). CIMP certifies that you have completed a course of in-depth study and have acquired the knowledge and skills needed to be a highly effective data quality practitioner. The CIMP exam is included as part of eLearningCurve certification packages. The CDMP exam is separately purchased and administered through DAMA. To learn more about CDMP certification visit DAMA's CDMP Information page.

### You will learn:

- Relevance, benefits and challenges of Data Quality
- How to define Data Quality metrics and indicators
- How to setup relevant tools to support your data quality management function
- How to build a strategy to improve and maintain your data quality

**This course is geared toward:** Business and IT professionals at all levels from novices to experienced practitioners. Everyone with roles, responsibilities, or interest in data quality concepts, techniques, and practices. Individuals seeking professional recognition and certification for data management discipline. The course is especially pertinent for those with roles in:

- Data Quality Management
- Business Intelligence & Data Warehousing
- Data Modeling and Data Architecture
- Data Analytics and Data Science
- Data Governance and Data Stewardship
- Business and IT Program Management, Project Management, and Consulting

## Data Science Fundamentals

Instructors: **Mark Peco and Natasha Balac**

Duration: **4 hours, 50-minutes**

Data science has matured into a cross-functional discipline. In simple terms, its main purpose is to extract meaningful information from a variety of data sources. Effective data science is a critical enabler for companies to become “data-driven” and to “compete on analytics”. To give shape to data science as a discipline, this course introduces core principles and concepts to provide a solid foundation for comprehension. Data science is described in terms of its purpose, capabilities, techniques, approaches, and skills. Its dependencies on other disciplines and how it enables value creation within the broader “data-driven” ecosystem are also provided.

This course introduces data science and sets the stage for understanding how process, data, skills, culture, methodology, and technical building blocks collectively drive results.

### You will learn:

- Key concepts necessary for successful data science
- How data science relates to other related disciplines
- Practical data science process lifecycle steps
- Common data science tools, techniques, and modeling categories
- Recommended data science approaches, methods, and processes
- The data science process
- Critical success factors for data science
- Why organizational culture and data literacy must be managed

### This course is geared toward:

- Business & technology managers and executives
- Data science and data engineering team members
- Business analysts, statisticians, and modelers
- Process managers and decision-makers
- Business measurement and performance analysts
- IT analysts and developers
- Data management analysts
- Technology and business architects
- Analytics, BI, data science, and data engineering program leaders
- Anyone with an interest in understanding the capabilities, opportunities, and challenges offered by data science

## **Data Stewardship Fundamentals**

Instructors: **Maria C Villar and Dave Wells**

Duration: **5 hours, 15 minutes**

Data stewards are important leaders within a company's information management program. As companies tackle data governance initiatives brought on by regulatory demands and the business need for higher confidence and transparency of data, the role of data steward becomes increasingly more important. Data stewards are accountable for the data strategy, definition, requirements, and quality of data.

The objective of this online training course is to build a foundation of knowledge for data stewards. It covers the fundamentals of data stewardship: who are the data stewards, what they do, what are their responsibilities, and what are the key principles and practices of data stewardship. It also provides foundational knowledge of information management.

### **You will learn:**

- Why data stewards are important
- Different types of data stewards
- Roles and responsibilities of data stewards
- Best practices of data stewardship
- Types of data, databases, and data stores
- Common uses of data and business data flow
- Types of data management processes
- About the "what," "why," and "who" of each of the 14 IM disciplines
- About the relationships, roles, goals, competencies, and knowledge required for data stewardship success

### **This course is geared toward:**

- Data stewards
- Data governance professionals and practitioners
- Business or IT professionals who want to become data stewards
- Business or IT counterparts working with data stewards
- Information management professionals who want to learn about data stewardship



## **Data Understanding and Preparation for Analytics & Data Science**

Instructors: **Deanne Larson**

Duration: **3 hours**

One challenge in the data science lifecycle is understanding the problem or the opportunity, and the next challenge is acquiring, understanding, and preparing data for the modeling phase. This step in the data science process is estimated to take up to 50% of the time allotted for a data science project.

This course addresses how to translate the problem statement into data sources, explore the data for relationships and recognize patterns, identify the starting inputs for the model, prepare data, and validate it for the model fitting process.

### **You will learn to:**

- Review the data science project methodology
- Understand data source identification
- Evaluate data findings to determine and validate modeling techniques
- Review feature selection techniques
- Understand data preparation techniques
- Plan for data pipelines
- Understand data visualization techniques for data understanding and data preparation

### **This course is geared toward:**

- Reviewing the data science project methodology
- Understanding data source identification
- Evaluating data findings to determine and validate modeling techniques
- Reviewing feature selection techniques
- Understanding data preparation techniques
- Planning for data pipelines
- Understanding data visualization techniques for data understanding and data preparation

## Data Visualization and Storytelling

Instructor: **Mark Peco**

Duration: **3 hours, 30 minutes**

Communication is the final stretch of a data analysis journey. Analysis, discovery, insight, forecasting, prediction...none of these have any real impact until the results are communicated and understood. Data visualization is an important part of analytics and the foundation for communicating with data. The effectiveness and value of analytics and data science depend on three types of communication capabilities: the ability to create, read, and explain data visualization.

Explaining data visualization draws on the art of storytelling, and data storytellers have a central role in communicating with data. Data storytelling adds narrative to interpret and explain data visualization. At a minimum, narrative enriches visualizations, describes conclusions, increases understanding, and avoids misunderstanding and miscommunication. At its best, storytelling goes beyond explanation to engage, energize, excite, inspire, and motivate people.

### You will learn:

- Ten key concepts of data visualization
- “Quick read” and “critical read” techniques for reading data visualizations
- How to see trends, patterns, ambiguity, distortion, and bias in visualizations
- Data visualization techniques for data analysis
- Data visualization techniques for business intelligence
- Data visualization techniques for data exploration
- How to interpret data visualizations and find stories within the data
- How to compose captivating and compelling data stories

### This course is geared toward:

- Business managers, decision-makers, business analysts, and others who routinely view charts and graphs
- Analytics professionals who create dashboards & scorecards for the business
- Data analysts & data scientists who create informational data visualizations
- Data scientists, data engineers, and data scientists who explore data to gain the necessary knowledge for data preparation and analysis
- Anyone who needs to explain data visualizations to others, ranging from business managers presenting performance data to data scientists presenting predictions and recommendations
- Data journalists and others with an interest in using data to enhance their communication skills

## Data Warehousing Fundamentals

Instructor: **Mark Peco**

Duration: **4 hours, 30 minutes**

For over twenty years, data warehouses have served organizations in the areas of data integration, provisioning, management, and information delivery. Use cases ranging from basic reporting to advanced analytics have been successfully implemented across a variety of industries by companies of many sizes.

Due to the rapid growth of nontraditional data sources, the availability of new technologies, and the growing expectations of managers to compete on analytics, the traditional data warehouse is redefined 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 redefines the scope of the “modern” data warehouse. The need for planning and the role of architecture is described and clarified, followed by a discussion of the challenges related to gathering useful information requirements. This is followed by a discussion of design approaches, development, testing, and quality management techniques.

The course material presents a full lifecycle of the data warehouse, including business context, scope, requirements, design, implementation, and operations.

### **You will learn:**

- About the components that define a data warehouse platform
- What trends are impacting the modern data warehouse
- How to position the data warehouse platform in the big data era
- About architectural options and considerations
- About development options and approaches
- About the requirements gathering process
- About the necessary design activities
- How operations and service processes enable business capabilities

### **This course is geared toward:**

- Data warehousing program and project managers, and architects
- Data scientists and analytics professionals
- Big data practitioners
- Data warehouse designers and developers

## Deciphering Data Architectures

Instructor: **James Serra**

Duration: **4 hours**

Data fabric, data lakehouse, and data mesh have emerged as viable alternatives to the modern data warehouse. These more recent architecture frameworks have solid benefits, but they're also surrounded by a lot of hyperbole and confusion. This course provides a guided tour of each architecture to help data professionals understand the pros and cons.

The course begins with a review of common data architecture concepts and the traditional data warehouse including its evolution into the modern data warehouse. Then we'll take a detailed look at the rise of data fabrics for seamless data integration and access. Next, we will cover the data lakehouse architecture that combines the best features of data lakes and data warehouses. Lastly, we will study the data mesh, a decentralized data architecture that treats data as a product.

We will delve into the fundamentals of each of these architectures, discussing their structure, use-cases, benefits, and challenges. We will explore how they fit into different business scenarios, their suitability for diverse data types, and the strategies used for their implementation and management. By the end of the course, students will have a clear understanding of which data architecture frameworks are best suited for specific business needs and how to implement them effectively to ensure data integrity, availability, and usability.

### You will learn:

- Concepts that provide working understanding of several data architectures
- The pros and cons of each approach
- How to distinguish data architecture theory from reality
- How to pick the best architecture for your use case
- The differences between data warehouses and data lakes
- Common data architecture concepts to help you build better solutions
- The historical evolution and characteristics of data architectures

### This course is geared toward:

- Practicing and aspiring data architects
- CDOs, CIOs, and other executives with a role in defining data strategy
- Enterprise, analytics, and technology architects who work with data architects
- Data engineers, application designers and developers, data system designers and developers, and others who apply data architecture
- Anyone who needs to collaborate with data architects, and everyone with an interest in data architecture

## Designing and Implementing Analytics Data Architecture

Instructor: **Dave Wells, and Jed Summerton**

Duration: **4 hours, 30 minutes**

Today's business environment requires the use of data and analytics to compete effectively. With continuous advances in data and analytics technologies and capabilities, organizations often struggle to keep up with the changes and to manage data for maximum value and impact. Nearly every organization today is facing the need to rethink and refresh data architecture, yet most continue to work with turn-of-the-century architecture from the BI era. Patching new components onto the surface of legacy architecture—a band aid and duct tape approach—is not sustainable and does a poor job of supporting modern analytics use cases.

Still, many avoid stepping up to modern data architecture because it is complex and difficult. The challenge is two-fold: to clearly define needed business and data capabilities and to determine how best to weave new capabilities into existing data management practices. This course explores modern data management challenges, describes modern practices and data architecture design patterns, and describes a step-by-step process to get from business requirements to a modern data management architecture that is sustainable and adaptable to the future changes that are sure to come.

### **You will learn:**

- The reasons that legacy data architectures need to be modernized
- The multitude of requirements for effective analytics data management
- The similarities and differences of Data Lake, Data Fabric, and Data Mesh architectures
- Techniques to identify analytics business capabilities and requirements
- Techniques to identify analytics data capabilities and requirements
- How to apply architectural design patterns and frameworks
- How to adapt reference architectures
- The path from requirements to a well-designed architecture
- Six techniques for architecture implementation

### **This course is geared toward:**

- Practicing and aspiring data architects
- CDOs, CIOs, and other executives responsible to provide data management leadership
- Enterprise, analytics, and technology architects who work with data architects
- Data engineers and systems engineers
- Designers and developers of data management and analytics systems
- Anyone who needs to collaborate with data architects

## Diagnostic Analytics Using Statistical Process Control

Instructor: **Mark Peco**

Duration: **3 hours, 50 minutes**

SPC includes a set of analytical techniques that measure and detect abnormal changes in the behavior of a managed process. SPC helps managers respond to unexpected changes in critical variables and take corrective action as necessary to maintain the desired levels of product quality and process performance over time.

SPC is based on the application of statistical techniques implemented in the form of control charts used to monitor the variation of important process variables or attributes.

This online training course provides an introduction to the concepts, techniques, and applications of SPC within the context of information management practices and processes. The theory of SPC is introduced and the design of control charts is discussed as a basis for describing how a diverse range of data and process quality management challenges can be addressed.

### **You will learn:**

- Methods for detecting defects/abnormal conditions
- To define and describe some common process building blocks
- The concepts and theory behind “statistical control”
- How statistical methods are used to measure and estimate process variation
- To identify and categorize the major causes of process variation
- How process variation is directly related to product quality
- The principles of control charts used to detect and generate process alarms
- To present the basic concepts of quality management initiatives
- How to apply solutions to address process, data, and related challenges
- To provide the context necessary to implement effective solutions

### **This course is geared toward:**

- Data quality analysts
- Data integration specialists
- Process improvement analysts
- Business analysts
- Data warehousing team members
- BI program managers and team members
- Functional business managers

## DW and BI Data Modeling

Instructor: **Rick Sherman**

Duration: **4 hours, 15 minutes**

A well-designed data model is a cornerstone for building business intelligence and data warehouse applications that provide significant business value.

Effective data modeling results in transforming data into an enterprise information asset that is consistent, comprehensive, and current. Data is transformed from operational or source systems into a data warehouse and often data marts or OLAP cubes for analysis. This course provides the fundamental techniques for designing the data warehouse, data marts, or cubes that enable business intelligence reporting and analytics.

This online training course discusses the two logical data modeling approaches of entity-relationship (ER) and dimensional modeling. ER modeling is used to establish the baseline data model while dimensional modeling is a cornerstone for business intelligence (BI) and data warehousing (DW) applications. These modeling techniques have expanded and matured as best practices have emerged from years of experience in data modeling within enterprises of all sizes and industries. These techniques improve the business value of the data, enhance project productivity, and reduce the time to develop applications.

This course includes a mix of concepts, applications, and practical examples.

### **You will learn:**

- The basics of entity-relationship (ER) and dimensional modeling
- The benefits and applicability of dimensional data modeling
- How to create dimensional data models for BI and DW applications
- How to gain more knowledge about data modeling

### **This course is geared toward:**

- Beginning data modelers
- Business analysts and architects
- Database administrators and analysts
- Information technology managers and project managers
- Application development project team members
- People involved in the design and maintenance of data warehousing and business intelligence applications
- People involved in data quality or data governance processes, as well as the capabilities, opportunities and challenges of data warehousing

## Ensuring Data Quality in Data Integration

Instructor: **Arkady Maydanchik**

Duration: **5 hours**

The corporate data universe consists of numerous databases connected by countless real-time and batch data interfaces. The data continuously moves about and changes. 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 spreads 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:**

- 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
- About the 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 toward:**

- Data integration practitioners
- Data quality practitioners
- Data warehousing practitioners
- MDM practitioners
- Others in the trenches involved in the design, development, and maintenance of data integration systems



## **Framing and Planning Analytics & Data Science Projects That Drive Business Impact**

Instructor: **Deanne Larson**

Duration: **3 hours**

Data science projects often fail due to unclear scope, lack of project planning, and lack of clear alignment to business objectives. This 3-hour online course addresses how to scope, plan, and choose a project approach for analytics project success and clearly identify the problem and opportunities to be analyzed. Framing and planning drives all the other phases of data science projects. Based on the CRISP-DM analytics lifecycle, this course describes the purpose, activities, and deliverables for the first phase of that lifecycle.

### **You will learn to:**

- Clearly define a problem statement or a question of interest
- Define an analytic project, including a scope and methodology approach
- Create a project plan to manage the analytics project
- Establish stakeholder management and expectations

### **This course is geared toward:**

- Data scientists, data analysts, and business analysts who need to frame analytics problems and choose the most effective ways to solve them
- Aspiring data scientists and data analysts
- Business and technical managers who need to understand the nature of analytics and data science work
- Data engineers and analytics developers who work with data scientists

## Fundamentals of Business Intelligence

**Instructor: Mark Peco**

**Duration: 5 hours, 40 minutes**

The term “business intelligence” is not well understood within the industry and is used inconsistently by many IT and business professionals. Although the term was defined in the mid-90s, the meaning of business intelligence continues to evolve as practitioners learn more about its capabilities and challenges.

This online training course introduces a “holistic” view of BI and presents it as a complex system composed of many sub-systems that must be aligned and work together to produce the desired business results.

The real success of BI within an organization can only be achieved if a holistic understanding is developed that shapes how the various components are designed and implemented.

### **You will learn:**

- Business intelligence concepts and terminology
- The purpose and capabilities of successful business intelligence and how value is actually generated within organizations
- How people, information, technology, and business objectives are all critical components of BI success
- The common challenges and risks encountered in BI implementations
- How to utilize systems thinking concepts to describe business intelligence holistically and how it depends on the integration of many different types of components that must work together

### **This course is geared toward:**

- Business/IT managers & executives
- Business analysts
- Business measurement and performance analysts
- IT analysts and developers
- Data management analysts
- Technology and business architects
- BI program managers and team members

## Fundamentals of Machine Learning

Instructor: **Asha Saxena**

Duration: **3 hours**

Machine learning is an application of artificial intelligence (AI) that provides systems with the ability to automatically learn and improve from experience without being explicitly programmed. It is pervasive today in everyday life, ranging from recommendation engines to practical speech recognition and web searches to advanced GPS systems. Businesses are taking advantage of machine learning by creating advanced solutions to serve their customer segments.

In this course, students will learn about machine learning and the data preparation workflow. The course begins with a portfolio of case studies to provide an overview of what can be accomplished with machine learning. Then, the fundamental machine learning tasks and algorithms are covered. The machine learning tasks and algorithms covered include multivariate nonlinear, nonparametric regression, supervised classification, unsupervised classification, and deep learning. For these machine learning tasks, it will be shown how to assess the quality of the machine learning models and perform error estimation and feature engineering.

### **You will learn:**

- To articulate the basic concepts and functioning of machine learning, as well as its deployment in the business context
- A broad introduction to machine learning, data mining, and statistical pattern recognition
- Machine learning tasks and algorithms that will be covered include multivariate nonlinear, nonparametric regression, supervised classification, unsupervised classification, and deep learning
- Best practices in machine learning
- About applying machine learning

### **This course is geared toward:**

- Chief data officers
- Chief analytics officers
- VPs, directors, and managers of data and analytics
- Data engineers
- Data architects
- Programmers

## Fundamentals of Predictive Analytics

Instructors: **Eric Siegel**

Duration: **5 hours**

Business metrics do a great job of summarizing the past. But if you want to predict how customers will respond in the future, there is only one place to turn—predictive analytics. By learning from your abundant historical data, predictive analytics deliver something beyond standard business reports and sales forecasts: actionable predictions for each customer. These predictions encompass all channels, both online and off, foreseeing which customers will buy, click, respond, convert, or cancel. If you can predict it, you own it.

The customer predictions generated by predictive analytics deliver more relevant content to each customer, improving response rates, click rates, buying behavior, retention, and overall profit. For online applications such as e-marketing and customer care recommendations, predictive analytics act in real-time, dynamically selecting the ad, web content, or cross-sell product each visitor is most likely to click on or respond to, according to that visitor's profile.

### You will learn:

- How predictive analytics solves business, marketing, and web problems
- To strategically position deploy predictive analytics and data mining
- How to bridge the prevalent gap between technical understanding and practical use
- How a predictive model works, is created, and what it looks like
- How well a predictive model works and how much revenue it generates
- About detailed case studies that demonstrate predictive analytics in action and make the concepts concrete
- How predictive analytics really works through two tool demonstrations

### This course is geared toward:

- **Managers.** project leaders, directors, CXOs, vice presidents, investors, and decision-makers of all kinds who are involved with analytics, direct marketing, or online marketing activities.
- **Marketers.** personnel running or supporting direct marketing, response modeling, or online marketing who wish to improve response rates and increase campaign ROI for retention, upselling, and cross-selling.
- **Technology experts.** analysts, data scientists, BI directors, developers, DBAs, data warehousing professionals, web analysts, and consultants who wish to extend their expertise to predictive analytics.

## How to Deploy Data Governance

### Part 1: Engage Your Organization and Develop a Data Governance Strategy

Instructor: **John Ladley**

Duration: **3 hours, 45 minutes**

Data governance, the exercise of control and authority over data, is an essential business capability. Many organizations want to start to deploy data or have tried to do it at least once (or twice.) There are many possible paths to and styles of data governance, but all of them have some essential activities required to become successful. It is key that you create an approach to data governance that works for your organization.

This course provides the insights and methods necessary to develop your approach and to start or reenergize your data governance program. It is intended for business management, who are challenged by data issues, or data leaders who are tasked with managing a data strategy.

Build upon the concepts learned in this course in How to Deploy Data Governance: Part 2 and gain insight into how a data governance program works and operates.

#### **You will learn:**

- How to identify the essential building blocks of a data governance strategy
- How to define the various elements required to design and deploy and cooperate a data governance capability
- How to build the team and approach along with the solid engagement of stakeholders

#### **This course is geared toward:**

- Chief data officers and other executives responsible for shaping data culture
- Compliance and risk officers
- Business managers and leaders challenged with data issues
- Data and technical leaders tasked with managing data strategy
- Anyone with roles, responsibilities, or an interest in launching or reenergizing a data governance program

## How to Deploy Data Governance

### Part 2: Design, Deploy, and Operate a Data Governance Program

Instructor: **John Ladley**

Duration: **4 hours**

Data governance, the exercise of control and authority over data, is an essential business capability. Many organizations have struggled with how data governance has been designed and operated. There are many possible paths to and styles of data governance, but all of them have some essential activities required to become successful. It is key that you identify the capabilities and operating models that work for your organization.

This course provides the insights and methods to design how the program will work and operate. It can be used if you are just getting started or if you are restarting and refreshing an existing program. It covers the requirements, interests, and responsibilities of business management challenged by data issues, data leaders who are tasked with managing a data strategy, and active participants in the day-to-day activities of data governance.

This course continues the data governance deployment training introduced in How to Deploy Data Governance: Part 1 by providing the methods and examples that will allow you to develop solid capabilities and operate a sustainable program.

#### **You will learn to:**

- Make the transition from determining strategy to designing the way in which all the elements of data governance will work together
- Define how you will operate and sustain data governance
- Define and design your required data governance capabilities
- Designate and start to use the key artifacts and roles within the data governance program
- Develop responses to common obstacles

#### **This course is geared toward:**

- Business management confronted with challenges where data quality, access to information, content regulations, or similar situations appear to be at the root cause of the issues
- Information management leaders who are tasked with implementing an effective data governance program
- Data stewards and data governance and data quality professionals

## Information Management Fundamentals

Instructor: **David Wells**

Duration: **5 hours**

Information Management (IM) is a broad and diverse field that encompasses many different disciplines. The overlaps and relationships among multiple disciplines make IM a complex field that is rich with opportunities. Ever increasing business dependency on data and information makes IM an essential competency for business success. Frequent innovations and technological advances drive continuous learning and growth. To understand the full scope of IM you need to know something about topics ranging from databases to data science. Every data and information professional from novice to highly-experienced becomes a better collaborator and more valuable team member when they have broad knowledge of the roles, responsibilities, and contributions of other IM professionals.

This 5-hour online course provides an overview across the entire scope of information management. It describes each of 18 IM disciplines and the relationships among them, and explains the purpose and processes of each discipline.

### **You will learn:**

- Scope and many disciplines of information management
- The importance of knowing the data, and how data knowledge is managed
- The goals, purposes, and practices of data governance
- The complexities, dimensions, and disciplines of data resource management
- The purpose, processes, and practices of business intelligence and analytics
- The concepts and business applications of data science

### **This course is geared toward:**

- Wants to increase data literacy by understanding the many dimensions of information management
- Is interested to learn the basics of information management
- Works in a specific area of information management and needs to learn about related IM disciplines and practices
- Is preparing for in-depth study in one or more areas of IM
- Needs to understand IM to be more effective in business or IT management

## Introduction to Graph Databases

Instructor: **John Singer**

Duration: **4 hours**

Entity relationship modeling and relational databases have dominated the IT scene since the '80s, becoming the de facto standard approach for data persistence. However, the ubiquitous relational database has waned with the advent of NoSQL and big data technologies. Today's data architect must master a new database technology—graph database—that has emerged with a solid set of use cases based on mathematical graph theory and graph algorithms.

This online course will provide an overview of property graph database technology and teach the student how to translate business requirements into a property graph database design that can be implemented in any modern property graph database.

### **You will learn:**

- The fundamental concepts and practices of business intelligence
- The fundamental concepts and practices of business analytics
- The concepts and principles of predictive analytics
- The concepts and principles of data mining
- The concepts and principles of data science
- The roles of data analytics in a data-driven organization

### **This course is geared toward:**

- Data architects who need to understand how a graph database fits into the overall persistence architecture
- DBAs and data modelers expanding into graph database
- Data science and data analysts interacting with graph databases
- Big data managers and decision-makers



## Introduction to NoSQL

Instructor: **William McKnight**

Duration: **3 hours, 30 minutes**

In this informative class, you will learn about the emerging class of NoSQL technologies for managing operational big data. This includes key-value, column stores, document stores, and graph databases. You will learn about the ideal workloads for NoSQL within enterprises and where NoSQL adds value to an enterprise information strategy. You will learn how to get projects started or drop the “not in production” label.

This “code-lite” session addresses the NoSQL community, as well as the key user community, providing guidance on how NoSQL technologies work and how to penetrate the enterprise. This practical session will help you to take a significant class of technologies into consideration to ensure information remains an unparalleled corporate asset.

NoSQL is poised to expand dramatically in the next few years as the nature of important operational data expands dramatically. Add NoSQL to your list of enterprise data possibilities.

### **You will learn:**

- Big data basics
- Enablers for NoSQL
- NoSQL data models: key-value, document, and graph
- NoSQL usage patterns
- NoSQL database architectures
- Graph database modeling and architecture

### **This course is geared toward:**

- Big data basics
- Enablers for NoSQL
- NoSQL data models: key-value, document, and graph
- NoSQL usage patterns
- NoSQL database architectures
- Graph database modeling and architecture

# Knowledge Graph Architecture for the Enterprise: Fundamentals for Digital Transformation

Instructor: **Dean Allemang**

Duration: **4 hours, 30 minutes**

Businesses today need to have comprehensive control of and an understanding of the data both within the enterprise and from the outside. Regulatory pressure in many industries requires that an enterprise be able to find all relevant data about customers, products, business relations, and, in fact, any aspect of the business quickly and accurately. Advances in data analytics have shown that the more meaningful data an enterprise can bring to bear, the more accurately business drivers can be predicted. For this reason, many businesses are migrating from viewing their enterprise information as a collection of data to viewing it as an ongoing graph of meaningful knowledge.

## You will learn:

- What a knowledge graph is, what its uses are, and how it provides business value
- Different approaches to knowledge graphs and when to use them
- Knowledge graph standards and their importance in governance and application sustainability
- The categories of tools for building, deploying, and maintaining knowledge graphs and how they fit together into a knowledge graph deployment
- The relationship between knowledge and data in a knowledge graph and how to manage them both
- Best practices for data publication, use, and reuse

## This course is geared toward:

- Data integration architects, designers, and developers
- Data and technology architects
- Chief data officers

## MDM for Data Stewards

Instructors: **William McKnight and Kathy Hunter**

Duration: **4 hours, 45 minutes**

Master data management (MDM) is complex and challenging, but it pays great dividends when done well. The complexities of managing identities, managing hierarchies, and resolving conflicts among disparate data sources make MDM an ambitious undertaking. Added to these complexities, the multifaceted nature of MDM—with human, organizational, architectural, and technological implications—it becomes clear that knowledge is an essential component of MDM success.

Since Data Stewards play a critical role in master data management, each steward requires a foundation of concepts, principles, terminology, and methodology for this important information management discipline. This online training course provides an overview of the field of master data management with the goal of building strong fundamental knowledge.

### **You will learn:**

- What master data is and how and why it must be managed
- The styles and architectures used for MDM projects
- The challenges and best practices in MDM, including several real-world case studies
- The fundamentals of data parsing, standardization, matching, and deduplication
- The challenges of working with global data and the ways to overcome these challenges

### **This course is geared toward:**

- Data stewards
- Business or IT professionals who want to become data stewards
- Business or IT counterparts working with data stewards
- Information management professionals who want to learn about MDM

## **MDM Fundamentals: Architecture and Implementation**

Instructor: **William McKnight**

Duration: **4 hours, 30 minutes**

A proliferation of heterogeneous systems creates a pressing need for data sharing and data consistency. When many different systems collect data about master entities—customers, products, suppliers, employees, accounts, etc.—you can be certain you’ll encounter inconsistencies, conflicts, and confusion. At best, conflict and confusion lead to waste and inefficiency in business processes. More severe consequences include damaged credibility and reputation when errors and inconsistencies are visible to customers, suppliers, and employees. Today’s complex business and information systems must synchronize master data. That is the role and purpose of master data management (MDM) systems.

This course provides a comprehensive look at the elements of an MDM program and the key success factors for MDM.

### **You will learn:**

- The “what” and “why” of master data management
- A variety of architectural approaches to MDM and how to determine which is the best fit for your MDM program
- The human dimension of MDM, including the roles and responsibilities of sponsors, managers, analysts, architects, designers, and developers
- The state of MDM technologies, along with techniques and guidelines for tool selection
- The process dimension of MDM, including impacts upon business processes and information management processes
- The project perspective of MDM, including organizing and executing the activities of planning, requirements analysis, design, development, testing, data migration, and implementation

### **This course is geared toward:**

- MDM program and project managers
- MDM analysts, designers, and developers
- Business data owners, data stewards, and data consumers
- Data architects
- Information systems project managers
- Data integration program and project managers
- Data stewards, data governance professionals, and data quality practitioners

## Metadata Management for Data Stewards

Instructors: **Dave Wells, Mike Brackett, and Arkady Maydanchik**

Duration: **4 hours**

You can't manage information effectively without understanding the data's meaning, constraints, and relationships. Metadata management and data modeling disciplines provide the essential tools to collect, record, and organize such knowledge. Understanding these disciplines is essential to the success of data stewards. This online training course is designed to provide foundational knowledge about the most commonly used metadata management, data modeling, and data profiling techniques.

### **You will learn:**

- The core elements of describing data: meaning, constraints, and relationships
- Common metadata purposes: classification, description, guidance, and control
- Common metadata processes, practices, and standards
- The basics of entity-relationship and dimensional data modeling
- The fundamentals of data profiling

### **This course is geared toward:**

- Data stewards
- Business or IT professionals who want to become data stewards
- Business or IT counterparts working with data stewards
- Information management professionals who want to learn about data modeling and metadata management

## Metadata Management Fundamentals

Instructor: **Dave Wells and Arkady Maydanchik**

Duration: **4 hours**

Deriving value from data depends extensively on understanding the data and sharing knowledge amongst everyone who works with that data. Sharing data knowledge is the core purpose of metadata. The common definition of metadata is “data about data.” But that definition doesn’t adequately describe the essential roles of metadata for data management, business intelligence, analytics, and data science. A more meaningful definition states that metadata is “the data and information that is needed by an organization to effectively and efficiently manage its data and information resources.” Just as you need financial data to manage financial resources, you need metadata to manage data resources. In today’s data-driven world, the importance of managing data is certainly on a par with that of managing finances.

This online training course provides the foundational metadata knowledge necessary for anyone with data management roles and responsibilities. It covers metadata basics such as the types and purposes of metadata and explores data modeling, data profiling, and data cataloging.

### **You will learn:**

- The scope and complexities of metadata management
- The roles of data models as metadata and the basics of data modeling
- The role of data profiling in metadata management and the basics of data profiling methods
- The roles of data catalogs in metadata management and the fundamentals of data curation and data cataloging
- The metadata dependencies of business processes, IT projects, data governance, data quality, business intelligence, self-service data, business analytics, and data science

### **This course is geared toward:**

- Anyone with data management roles and responsibilities
- Data stewards and data governance practitioners and participants
- Data curators and data catalog administrators
- Data and database analysts and designers
- Data quality professionals and practitioners
- Aspiring data modelers who need to start with the basics
- Anyone with a role in information management who needs to understand data or help others to understand data

## Modernizing Data Governance

Instructor: **Dave Wells**

Duration: **3 hours**

The world of data management has changed substantially in recent years, but data governance hasn't kept pace. New governance practices and organizations are necessary to become compatible with agile, big data, cloud, and self-service. Moving from control to community, enforcement to prevention controls to services, and committees to communities are at the core of the data governance evolution.

Traditional data governance practices need to adapt to the realities of today's data management practices. We need to start with the ABCs of modern governance – agile, big data, and cloud. Each of these has been in the mainstream for several years, yet most data governance organizations cling to the practices of the past. More recently, self-service analytics and self-service data preparation have challenged the old governance methods. Traditional data governance focuses on the enforcement of policies and rules using rigorous controls and gates. While controls and enforcement continue to be necessary, they must be complemented with support for the autonomy and agility of the self-service world.

### **You will learn:**

- Where governance fits into modern data ecosystems, from point of ingestion to reporting and analysis
- How various technologies support governance through the ecosystem
- The process challenges for governing self-service, supplementing controls with collaboration and crowdsourcing
- The engagement models for governing self-service
- The organizational challenges for governing self-service moving from data stewards to stewardship, curation, and coaching
- The operational challenges for governing self-service, implementing a combination of gates, guardrails, and guides

### **This course is geared toward:**

- Data governance professionals, data stewards and data curators
- Business / technical leaders who manage self-service data and analytics
- Business / technical leaders who see data governance as a barrier to agility
- Chief data officers and other executives responsible for data culture
- Anyone with a role in modernizing data governance or an interest in knowing how and why data governance must change

## Organizing for Data Quality

Instructor: **Tom Redman**

Duration: **3 hours, 20 minutes**

Much like any other important endeavor, success in data quality depends on having the right people in the right jobs. But who, specifically, are these people, and what are they supposed to do? The question is especially crucial nowadays because virtually everyone touches data in some way or another and, therefore, could compromise its quality.

This online training course walks through the roles and responsibilities in three case studies while teasing out the principles necessary to create successful data quality organizations.

### **You will learn:**

- The politics of data quality management
- The key principles in building data quality organizations
- The various roles and responsibilities in data quality management
- The various data quality organization models, including:
  - a departmental level model
  - a data provider model
  - a fully functioning enterprise group led by a Chief Data Officer

### **This course is geared toward:**

- Data quality professionals and practitioners
- Data governance professionals
- Senior leaders who want to understand "where data fits" and "why data quality matters"
- Business managers who lead departments or teams heavily dependent upon data
- IT managers and project managers involved in data quality management



## Operational Data Architecture

### Part 1: The Operational Data Landscape

Instructor: **Angelo Bobak**

Duration: **5 hours, 22 minutes**

Over the past 20 to 30 years the practices of architectural data management have focused primarily on analytical data – architecture for data warehousing and data lakes. Throughout those years, Operational Data Architecture has been largely neglected while the scope, variety, and complexity of operational systems and operational data have expanded substantial.

The operational data landscape – once composed predominantly of transactional systems – now includes automation and IoT systems, as well as, transactional applications. Transactional systems of the past were primarily developed internally with some attention to consistency and connectedness among systems. Today's operational data landscape includes legacy, ERP, SaaS, and custom applications. Operational data platforms encompass mainframe, on-premises servers, cloud, multi-cloud, and mobile devices.

This 5-hour, 22-minute course focuses on understanding today's operational data landscape – an essential first step toward modernizing operational data architecture and operational data management.

#### **You will learn:**

- History and evolution of operational systems
- The variety of operational systems and the roles of each
- The similarities and differences of Data Lake, Data Fabric, and Data Mesh architectures
- The variety of operational data platforms and the characteristics of each
- The variety of data created and managed by operational systems
- Implications of global data variations and mobile data variations
- The roles of MDM and RDM in operational data management

#### **This course is geared toward:**

- Current and aspiring data architects
- Data scientists and data engineers
- Data warehousing and data lake designers and developers
- Data and information systems program and project managers

## **Operational Data Architecture**

### **Part 1: Architectural Data Management**

Instructor: **Angelo Bobak**

Duration: **4 hours, 14 minutes**

For several decades, data architecture has focused almost exclusively on the management of analytical data. Most data architecture teams have given little attention to operational data while the scope, variety, and complexity of operational systems and operational data has expanded substantially.

As the operational data landscape has evolved and expanded, data architecture processes and practices have lagged behind. Data sprawl and data disparity increase the cost and complexity of operational data management. These data management challenges inhibit data integration, system interoperability, and business agility. Rethinking operational data architecture is an essential step to overcoming these barriers.

This 4-hour, 14-minute course describes concepts and considerations for rethinking and modernizing operational data architecture. It focuses on positive and proactive data management practices for operational data, and the underlying architectural processes and patterns to enable and reinforce those practices.

#### **You will learn:**

- Architectural concepts, constructs, and techniques to manage data sprawl and data disparity
- Concepts and management practices for distributed data, homogeneous data, and heterogeneous data
- Concepts and management practices for data conflicts including semantic and schema conflicts
- Master data management (MDM) and reference data management (RDM) principles and practices
- Operational data architecture patterns including operational data store (ODS), data hubs, data brokers, and more
- Design techniques for adaptable and sustainable architecture

#### **This course is geared toward:**

- Current and aspiring data architects
- Data scientists and data engineers
- Data warehousing and data lake designers and developers
- Data and information systems program and project managers

## Prescriptive Analytics Using Simulation Models

Instructor: **Mark Peco**

Duration: **4 hours, 10 minutes**

Prescriptive analytics enables managers to explore different scenarios and evaluate new business opportunities by playing the “what-if” game. It enables the evaluation and comparison of different options as part of the decision-making process. This leads to a deeper understanding about how to define and achieve business and operational goals.

This online training course provides an introduction to prescriptive analytics using simulation models applied to areas that are relevant to business analysts, operations planners, decision-makers, functional managers, and BI team members. The basic concepts are introduced, and a framework is provided that positions simulation analytics within a broader BI program. Categories of models are described that provide an overview of the breadth of potential opportunities for prescriptive analytics within diverse organizations.

### **You will learn:**

- The basic capabilities of simulation
- The categories of models and modeling techniques
- The domains of applicability
- How to build and implement simulation models
- The data management requirements for simulation
- How business problems can be defined and solved
- The role of experimental design
- How insights can be generated
- How to explore and discover possible routes to successful outcomes
- How business intelligence, analytics, and simulation are related disciplines

### **This course is geared toward:**

- BI program leaders
- BI architects and project managers
- Business analytics team members
- Business managers and decision-makers
- Functional analysts
- Operations managers
- Process improvement specialists

## Putting the Science in Data Science: Fundamentals of Research Methods

Instructors: **Jennifer Leo**

Duration: **3 hours**

Drawing on business analytics, this course will use a scientific approach to introduce the concepts, tools, and skills critical to designing and executing experiments to solve business problems. The process of using research methods to ask questions, design experiments to test a hypothesis, identify data collection methods and techniques, and analyze the results to discover business solutions will lead to more informed decision-making. Using the scientific method, this process involves gathering data, determining how to utilize it, and deciding how to visualize and illustrate what you have learned.

This course provides an overview of the scientific method within the context of solving business problems with the goal of introducing key concepts, tools, and skills for practice. It also introduces critical human aspects, including team composition and soft skills that will help you communicate findings and publish your results. To apply the concepts learned, examples will be introduced throughout, and a case study will be used to summarize the course.

### You will learn:

- The key features of the scientific method
- How to design an experiment & examine the results
- Criteria for selecting data collection methods
- Strategies to analyze experimental results
- How to launch and execute an experiment, including key factors to consider
- Approaches to visualize findings and communicate results
- To apply the scientific method within a business context

### This course is geared toward:

- Data science team members
- Business intelligence & analytics professionals
- Business analysts
- Process improvement professionals
- Functional business managers
- Business transformation leaders
- Data management professionals
- Data governance team members
- Operational and strategic planners

## Root Cause Analysis

Instructor: **Dave Wells**

Duration: **3 hours, 45 minutes**

Understanding why things happen is a fundamental management skill. For anyone who is challenged with managing data quality, business processes, or people and organizations, discovering root causes is an essential skill. Understanding “why” is the key to knowing what to do—the core of sound decision-making. But cause and effect relationships are elusive. Real causes are often difficult to discover so we settle for easy answers. This leads to fixing symptoms rather than solving problems and little or no gain where opportunity is abundant.

Root cause analysis is the alternative to easy answers. Looking beyond the apparent and obvious to discover genuine causes brings insight and sows the seeds of foresight. In this online training course you will discover the art and science of knowing “why.” Learn to apply linear thinking, lateral thinking, systems thinking, and critical thinking—independently and in combination—to get to the core of even the most vexing problems.

### **You will learn to:**

- Recognize and avoid logical fallacies
- Identify and distinguish between correlation, coincidence, and cause
- Perform quick and light causal analysis using the “5 whys” technique
- Explore linear cause and effect chains with fishbone diagramming
- Describe complex cause-effect networks with causal loop models
- Challenge and refine linear and loop models with lateral and critical thinking techniques
- Apply root cause analysis to effectively manage quality, processes, and organizations

### **This course is geared toward:**

- Data quality professionals and practitioners
- Quality management and quality improvement professionals
- Business analysts and business analytics professionals
- Managers and problem-solvers seeking insight into and confidence in decision-making
- Anyone responsible for managing data, information, people, processes, or technology

## Streaming Data: Concepts, Applications, and Technologies

Instructors: **Dave Wells and Kevin Petrie**

Duration: **3 hours**

The analytics opportunities with IoT and application data streams are abundant, but the value of streaming technology is not limited to native data streams. In today's fast-paced business world, the need for fast data is pervasive, and tacit acceptance of high-latency data is rapidly diminishing. Streaming as an alternative to batch ETL is a practical way to meet the demand for fast data.

Change data capture (CDC) is a category of technology that captures data about changes made to a database—inserts, updates, and deletes—and makes that data available to downstream processing such as data pipelines that flow to data warehouses and data lakes. CDC can be combined with streaming to accelerate data flow and reduce data latency.

You'll need to know about the actions and responsibilities of data producers and data consumers, as well as the capabilities for cluster management, data connections, and APIs. Integrating Kafka or other streaming technologies into your data ecosystem is an important consideration.

### **You will learn:**

- The business and technical drivers for streaming data adoption
- Data pipeline processing patterns Use case patterns and a variety of use cases for streaming data
- Five kinds of change data capture (CDC)
- The concept and applications of streaming first architecture
- Kafka architecture and its essential components
- Kafka data and process flow
- The roles & functions of Kafka broker, data producers, and data consumers
- Cluster management, data connections, and APIs with Kafka
- About integrating streaming into the data ecosystem

### **This course is geared toward:**

- Data and analytics architects, managers, and leaders
- Data scientists & engineers
- Data governance professionals who need to understand the opportunities and implications of streaming data
- Anyone with a desire to know about how streaming is changing the data management landscape

## Web Analytics

Instructor: **Jake Dolezal**

Duration: **3 hours**

The web analytics practice has evolved rapidly as the landscape of internet usage and devices continues to broaden. Today, businesses collect an unprecedented amount of data about customers to seek deeper, more actionable insights. Many companies are integrating their web analytics data with data from other sources and performing analytics to understand customer behavior and enable highly individualized marketing.

This 3-hour online training course provides an overview of web analytics, as well as for analytics techniques and applications that are suitable in the context of web data. Theory and practice are illustrated by several real-life cases and demonstrations.

### **You will learn to:**

- Gain a deeper understanding of web analytics, as well as data about online customer interactions with your organization
- Identify and interpret conventional and emerging web analytics measurements
- Understand web data collection and integration techniques and their potential applications and limitations
- Distinguish useful data from "noise"
- Gain actionable insights for online marketing efforts with visitor-centric techniques, such as profiles, patterns, goals, and outcomes
- Identify what tools are needed for a web analytics workbench

### **This course is geared toward:**

- BI professionals or data analysts with experience in other areas of customer data who are in the process of incorporating web data into their warehouses or models, or developing custom BI for web analytics
- CRM, marketing, sales, and other business leaders who want to improve their understanding of web analytics data and how actionable insights can be gleaned from it
- Technology and information leaders, managers, and professionals who want to learn more about current trends and broaden their understanding of web analytics

# Instructors

## Dean Allemang

Dean Allemang has over 20 years of experience with research and deployment of semantic solutions, including expert systems, knowledge management systems, and rule-based systems. Throughout most of his career, he has been interested in how knowledge can be formalized and used to improve the ways in which people carry out their work.

## Diana L. Ascher, Ph.D., MBA

Diana Ascher works at the intersection of information practice and policy. She is the director of the IS Lab at UCLA and founder of the Information Ethics & Equity Institute, which bridges information studies research and praxis through accredited programming for data and information workers.

## Natasha Balac

Natasha Balac received her master's and Ph.D. in computer science from Vanderbilt University with an emphasis on machine learning from large data sets. She has been with the University of San Diego since 2003, leading multiple collaborations across a wide range of organizations in the industry sector, government, and academia. She is currently directing the Interdisciplinary Center for Data Science at Calit2/Qualcomm Institute, as well as performing lectures in the area of big data and data science.

## Angelo Bobak

Angelo Bobak is a seasoned data architecture professional and published author with over 20 years of 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.

## John Bottega

John Bottega is a senior strategy and data management executive with more than 30 years of experience in the industry. During his career, John has served as Chief Data Officer in both the private and public sectors, serving as CDO for Citi and Bank of America, as well as for the Federal Reserve Bank of New York.

## Mike Brackett

Mike Brackett has been in the data management field for over 40 years, during which he has developed many concepts and techniques for designing applications and managing data resources. He is the originator of the common data architecture concept, the data resource framework, the data naming taxonomy, the five-tier five-schema concept, the data rule concept, the BI value chain, the data resource data concept, and the architecture-driven data model concept, as well as new techniques for integrating disparate data.



## **Jake Dolezal**

Jake Dolezal has over 16-years of 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.

## **Colin Gibson**

Colin Gibson is a senior executive and consultant with 30 years of experience in financial services. He specializes in architecture, data governance, and data management, most recently as head of data architecture for the investment banking divisions of RBS and HSBC and as head of enterprise architecture for Willis Towers Watson.

## **David Haertzen**

David Haertzen is the chief instructor for First Place Learning, the webmaster for Infogoal.com, and has over 20 years of experience in the information technology field. David has provided training and consulting services to many organizations, including: 3M, The Mayo Clinic, Diversified Pharmaceuticals, Fluor Daniel, and Glaxo Welcome. Working with a wide range of businesses and government agencies has given David insights into the practical application of data modeling in many environments.

## **Steve Hoberman**

Steve Hoberman is a trainer, consultant, and writer in the field of data modeling. He taught his first data modeling class in 1992 and has taught over 10,000 people about data modeling and BI techniques. He has presented at over 50 international conferences, and has been selected to deliver keynote addresses at major industry conferences in North America and in Europe. Steve is a columnist and frequent contributor to industry publications and the author of several data modeling books.

## **Kathy Hunter**

Kathy's interest in data began when she was studying for her Summa Cum Laude Mathematics degree. Later she instituted an Information Quality Division at One2One where her team recovered £10 million in lost earnings. She went on to build a global data management solution set at Harte-Hanks which provided data management capabilities to multinational organizations with data from as many as 238 countries. A popular speaker at information quality events, Kathy is known for her pragmatic approach toward complicated topics.

### **Theresa Kushner**

Theresa Kushner is presently the Vice President of Enterprise Information Management for VMware, Palo Alto. She joined them in October 2012 to help the fast-growing software company develop a firm data foundation on which to build their future business. Before joining VMware, she was the Director of Customer Intelligence within the Strategic Marketing organization of Cisco Systems in San Jose. Ms. Kushner joined Cisco Systems in 2006 to create, for the world's leading internet company, a department that understood, managed, and applied customer information to marketing.

### **John Ladley**

John Ladley is a business technology thought leader with 30 years of experience in project management, improving IT organizations and the successful implementation of information systems. John is a widely-known data warehouse pioneer and a recognized authority in the use and implementation of business intelligence and enterprise information management. He is currently President of IMCue Solutions, a firm focused on improving clients' balance sheets and competitiveness through enterprise information management.

### **Deanne Larson**

Dr. Deanne Larson is an active practitioner and academic focusing on business intelligence and data warehousing with over 20 years of experience. She has completed her doctorate in management in information technology leadership. She holds project management professional (PMP) and certified business intelligence professional (CBIP) certifications.

### **Jennifer Leo**

Dr. Jennifer Leo is the Director of the Steadward Centre for Personal & Physical Achievement, a teaching and research center within the Faculty of Kinesiology, Sport, and Recreation at the University of Alberta, in Edmonton, Alberta, Canada. With over 15 years of experience conducting research and evaluation in community-based settings, Jennifer brings insight into what it means to conduct research beyond academia. Jennifer has been involved in adult education for 15 years, during which time she has developed and delivered a curriculum for in-person and online learning experiences.

### **Evan Levy**

Evan has spent his career leading both practitioners and executives in delivering a range of technology solutions, from software product development to industry-focused strategic consulting services to organization leadership sessions. He has led high-profile systems integration projects for Fortune 500 customers in the financial services, retail, telecommunications, health/life sciences, government, and insurance industries. He's also been retained as a strategic advisor to various software vendors in the areas of product planning, and continues to counsel the investment community in applying advanced technologies to key business initiatives.

## 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. In 1997, Arkady founded Arkidata Corporation, which was among one of the first companies dedicated solely to data quality management. Since 2004, Arkady has dedicated his efforts toward education and the creation of a mature data quality profession. He is a frequent speaker at various conferences and seminars, author of the best-selling *Data Quality Assessment* book, contributor to many journals and online publications, and a co-founder of eLearningCurve.

## Olga Maydanchik

Olga Maydanchik is an experienced practitioner and educator in the field of information management. As a part of the Chief Data Offices in Citi, AIG, Deutsche Bank, and Voya Financial, Olga was focused on designing and implementing the enterprise-wide Data Quality, Master Data Management, Metadata Management, and Analytics programs. Olga is a member of the Enterprise Data Management Council and actively participated in the Data Management Capability Assessment Model and Ontology design work streams.

## William McKnight

William McKnight is president of McKnight Consulting Group, which includes the service lines of master data management, IT assessment, data warehousing, and business intelligence. He functions as strategist, lead enterprise information architect, and program manager for sites worldwide. William is a former Information Technology Vice President for a Fortune 50 company, a former engineer of DB2 at IBM, and holds an MBA from Santa Clara University.

## Mark McQueen

Mark McQueen is a Managing Partner at Ortecha, a DCAM Authorized Partner data management consultancy. Mark is a former best practice and process management expert for the EDM Council. Mark is DCAM Foundations and Framework/Applied Accredited, Six Sigma Black Belt Certified, and Strategic Foresight Accredited—University of Houston.

## Mark Peco

Mark is an experienced consultant, educator, practitioner, and manager in the fields of BI and process improvement. He provides vision and leadership to projects, operating and creating solutions at the intersection of business and technology. Mark is involved with clients working in the areas of strategy development, process improvement, data management, and business intelligence.

## Kevin Petrie

Kevin is the VP of Research at BARC US, where he writes and speaks about the intersection of AI, analytics, and data management. For nearly three decades Kevin has deciphered what technology means to practitioners, as an industry analyst, services leader, instructor, marketer, and tech journalist.

As frequent public speaker and co-author of two books about data management, Kevin is passionate about helping practitioners, founders, and software executives capitalize on emerging technologies. Outside the tech world, Kevin most loves biking, kayaking, and coaching his three boys' sports teams.

## Tom Redman

Dr. Thomas C. Redman (the Data Doc) is an innovator, advisor, and teacher. He was the first to extend quality principles to data and information in the late 80s. Since then, he has crystallized a body of tools, techniques, roadmaps, and organizational insights that help organizations make order-of-magnitude improvements. He is a sought-after lecturer and the author of dozens of papers and four books.

## Asha Saxena

Asha Saxena is a strategic, innovative leader with a proven track record of building successful tech businesses for the last 25 years. With a strong academic background, creative problem-solving skills, and an effective management style, she has been instrumental in building business models for success. As a Board Advisor and an Adjunct Professor at Columbia University, she teaches graduate classes on management consulting, entrepreneurship, and big data analytics.

## James Serra

James Serra works at Microsoft as a big data and data warehousing solution architect where he has been for most of the last nine years. He is a thought leader in the use and application of Big Data and advanced analytics, including data architectures such as the modern data warehouse, data lakehouse, data fabric, and data mesh.

## Rick Sherman

Despite the risk of sounding like an old geezer, Rick Sherman will admit that he's been doing data warehousing since before it was even called data warehousing. Rick is the founder of Athena IT Solutions, a Boston area business intelligence and data warehousing consulting firm that provides solutions for customers of all sizes and types of industries. His hands-on experience includes a wide range of data integration tools. Rick also teaches data warehousing, data integration, and business intelligence for a master's degree program at Northeastern University's graduate school of engineering. He is a published author of more than a hundred articles.

## **Eric Siegel**

Eric Siegel, Ph.D., is a consultant in data mining and analytics, an acclaimed industry instructor, and an award-winning teacher of graduate-level courses in these areas. An expert in data mining and predictive analytics, Dr. Siegel served as a computer science professor at Columbia University, where he won the engineering school's award for teaching undergraduate and graduate courses. He has published over 20 papers and articles about data mining research & computer science education, and has served on 10 conference program committees.

## **John Singer**

John Singer has 4 decades of experience in a variety of data architecture-related roles. John's accomplishments include implementing metadata management solutions, data modeling processes and governance, master data management solutions, and an ITIL-based CMDB, combining architecture, business, and IT metadata in a comprehensive solution. John is currently focusing on property graph technologies and is the founder and CEO of NodeEra Software.

## **Henrik Sørensen**

Henrik Liliendahl Sørensen has over 30 years of experience 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.

## **Jed Summerton**

Jed Summerton is a senior practitioner of enterprise data strategy and improving business performance through data analytics. As a consultant he has served over 100 companies in 18 industries to develop and execute large-scale data programs and analytic ecosystems. His expertise is grounded in his deep experience as an internal technical executive of best practices in large organizations, including GE, NASA, Level 3 Communications (now Lumen) and DaVita Healthcare Partners.

## **Michele Valentini**

Michele Valentini is a highly accomplished professional and instructor specializing in the field of data management. Holding a Ph.D. in Mathematics and a CDMP Master-level certification in Data Management by DAMA International, Michele possesses a strong academic background and extensive expertise in the subject matter.

## **Maria C. Villar**

Maria Villar is a leader, consultant, and writer in the fields of enterprise information management, IT management, and software development. She has held senior executive positions in both the technology and financial sectors. Maria holds a bachelor's in computer science and graduate degrees in management information systems and business administration. Maria has guest lectured on the topic of IT and information management at leading universities, industry conferences, and Fortune 500 companies across the country.

## **David Wells**

Dave Wells is an advisory consultant, educator, and author dedicated to building meaningful connections throughout the path from data to business value. He works at the intersection of information management and business management, driving business impact through data literacy, data culture, data architecture, data analytics, and active data management. More than fifty years of data and business management experience provide unique perspectives about the connections among business, information, data, and technology.

Dave is both an instructor and the Education Director for eLearningCurve, an advisory consultant and contributing author at Eckerson Group, and an instructor and speaker with Dataversity.

eLearningCurve takes pride in presenting instructional material from some of the most sought-after names in the industry. If you have been to a big data conference or checked an information management bookshelf you will recognize many of these experts, corporate training gurus, and top consultants. With eLearningCurve you can benefit from their expertise without leaving your home or office.

If you are an instructor or expert in information management and would like to teach for eLearningCurve, please contact Dave Wells at [david.wells@elearningcurve.com](mailto:david.wells@elearningcurve.com)



# Our Customers

eLearningCurve's 3,000 students come from over 70 countries around the globe. Over 80% are enterprise customers—companies and government institutions who use our curriculum to educate their many employees.

They range from smaller clients, or project teams, who enroll a handful of employees to larger organizations that utilize our courses as the backbone for their internal educational programs for hundreds of employees. Our enterprise customers typically come from Fortune 500 and Global 1000 companies, as well as government institutions located in various countries. All major industries are represented— finance, insurance, oil, telecom, software development, consulting, government, industrial, etc.

Each pin on the below map represents a country where there are eLearningCurve students.



3000+ students from over 70 countries around the globe

80% are Enterprise customers

Fortune 500 and Global 1000 companies

All major industries represented including finance, insurance, oil, telecom, software, consulting, government, industrial, etc.

# Customer Stories

“I work for the UK Intellectual Property Office. I joined the data team two years ago as a trainee data steward. As part of these duties I was tasked to complete the Data Stewards Certification course which I completed and then went on to the second round of courses in line with my manager’s instructions. During the course I managed to get a full time data stewards role within the team. Starting off I struggled with the courses as being part of the business for 30 years it was a shock to the system. I found the modules very challenging and stretching. I found your SME’s very knowledgeable and helpful when going through each module and examination. During the process I had a 1-1 with Dave Wells which I found very useful. He gave me some very useful tips and the rest of our team have said during our feedback team meetings. Also the admin staff have been excellent when we have had technical issues with the system or needed advice with the results of an examination.

All in, I think eLearningCurve are doing a really good job and I would recommend using your services.”

**–Steve Adkins (UK IPO Data Steward), Certified Data Steward, CIMP Data Quality, Data Literacy Certification Expert, CIMP Data Governance**

“The data governance and data quality classes I took formalized and reinforced many of the concepts I had learned throughout the years as a data warehouse and business intelligence architect, and the accompanying CIMP certifications validated my commitment to the concepts, techniques, and practices within information management.

The courses within the eLearningCurve curricula are well-organized and are of great value to anyone who is engaged in the quickly maturing information management areas of data governance, data stewardship, and data quality. The instructors are industry-recognized experts who present the material with a balance that speaks to beginners and experienced professionals. Furthermore, the exams are well thought out to ensure those taking the test have the necessary level of knowledge to earn a passing grade, which promotes a level of integrity for CIMP certifications.”

**–Patrick DeKenipp, CIMP Ex–Data Governance, Data Quality**

“I recently received my CIMP certification in data governance from eLearning Curve. I found all the classes to be of high quality and loaded with plenty of content. I thought the material was well-presented, and I give high marks to all the instructors for their subject matter knowledge and delivery style.

Not having had any formal training in data governance, I feel the CIMP certification gives me the foundation I need to become highly successful in my current role. I look forward to utilizing what I have learned as I continue my career path as a data governance professional.

I would recommend eLearning Curve’s CIMP- Data Governance certification to anyone who wishes to learn more about data governance or wants to pursue a career in data governance.”



**–Steve DelBianco, CIMP–Data Governance**

“I recently completed six of the classes on eLearningCurve focusing on a Data Quality track, and I strongly recommend them to those professionals who are engaged in data management projects and programs.

The classes are very well organized and a must for learning the proper terminology and getting a solid foundation upon which to build with experience. The instructors are experienced, knowledgeable, well known in their fields, and extremely engaging. They always start off by presenting the basics and ensuring the course is suited for the least and the most experienced – this is not an easy task, and I must commend the team for a great accomplishment. The exams are serious: taking any class while multitasking and then taking the exam is a recipe for failure. And it should be. The levels of professionalism and integrity are up to the highest standards – passing the exams and getting CIMP certification is an accomplishment! “

**– Oana Garcia, CIMP–Data Quality**

“I was very impressed with the high quality of the CIMP data quality program. I gained extensive knowledge about data quality disciplines and their related areas and very much enjoyed my classes, which were taught by knowledgeable and professional instructors. Passing the exams required an in-depth understanding of the subject matter and was by no means “a walk in the park,” but definitely worth the effort. I was a data quality rookie when I started, but now have a solid foundation to build upon as a professional in the exciting field of data quality management.”

**– Helle Lindsted, CIMP–Data Quality, Data Governance**

“I have recently completed my certifications in data quality and master data management, along with the Certified Data Steward certificate program. Soon, I will have completed the Data Governance and Data Integration certifications. The certification courses at eLearning Curve are unlike any other online courses I have taken in my 30 years in IT. The courses are thorough and professionally presented by industry experts. If you are “serious” about obtaining new data administration skills and knowledge, then these courses are for you. My suggestion is to take one hour every day and sit through a topic, then print out the slides and take notes on them. This will help you with learning, retaining, and being successful on the exams. I always look forward to the email from Arkady giving me my exam results, usually in less than one day!”

**– Gary Deffendall, CDS, CIMP–Data Quality, MDM**



Designed by FreePeek

## Resellers

### **South Africa & Sub-Saharan Africa**

**Master Data**

**Contact:**

**Gary Allemann**

**+27 11 485 4856**

**[gary@masterdata.co.za](mailto:gary@masterdata.co.za)**

### **India**

**EDM Council India**

**Contact:**

**Preeti Singh**

**+91 95713 77333**

**[psingh@edmcouncil.org](mailto:psingh@edmcouncil.org)**

## Contact Us

**Director, Enterprise Solutions**  
**Arkady Maydanchik**  
**[Arkadym@elearningcurve.com](mailto:Arkadym@elearningcurve.com)**

**Director, Course Design & Production**  
**Michelle Johnson**  
**[Mjohnson@elearningcurve.com](mailto:Mjohnson@elearningcurve.com)**

**Director, Education**  
**Dave Wells**  
**[David.Wells@elearningcurve.com](mailto:David.Wells@elearningcurve.com)**

**Director, Technology**  
**Varya Belyaevskaya**  
**[Admin@elearningcurve.com](mailto:Admin@elearningcurve.com)**

**Director, Marketing**  
**Aleksandra Labuda**  
**[Alabuda@elearningcurve.com](mailto:Alabuda@elearningcurve.com)**

## Customer Support

**[Support@elearningcurve.com](mailto:Support@elearningcurve.com)**

**Phone: 1-630-242-1659**

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