Teradata Education Course Catalog

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About this Catalog

We've included our most popular course offerings in this catalog—please visit **Teradata.com/University/Overview** for a complete listing of all courses available.

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Overview

Teradata Education Services

Strengthen your skills, your career, and your value with world class training and certification

Teradata Education designs, develops and delivers education that builds skills and capabilities to enable your company to maximize and expand its Teradata investment. Through both our free and cost-effective training, you have access to our highly experienced instructors and a world-class collection of online content that:

- Builds the know-how of technical staff to keep systems running smoothly and efficiently

- Teaches developers how to quickly and effectively implement applications that meets the needs of the business

- Helps business users discover ways to unlock the power of data, increasing your organization's ROI

- Ensure that technical capabilities are recognized through **Teradata Certification** and badging programs.

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Benefits of Teradata Education

Blended Learning Approach

Teradata offers a variety of formats to suit your needs. The combination of on-demand courses through Teradata University, along with hands-on instructor-led training, gives each user level a wide range of opportunities to gain knowledge and expand skills. Our flexible education options build upon and complement one another for a robust offering. Covering a broad range of subjects, our training programs present the essential knowledge to achieve swift and smooth information technology utilization at every organizational level.

Teradata University

Instructor-led classes may be taught at your location, and we can customize your training event by combining selected topics from our standard course offerings for technical and business users. Teradata University is a global online learning platform that offers on demand courses and the ability to register for any public class.

	Flexible Delivery Options	Teradata offers a variety of training options—self-paced, classroom, and virtual instructor-led
	Expert Assessment of Training Requirements Based on Job Roles	Teradata Education Consultants work with your organization to design a training program based on your specific needs
	Decreased Ramp-Up Time	Training enables you to come up to speed on the new technology quickly and efficiently
	Teradata Certification and Badging	Certifications and digital badges covering the features and functionality of the Advanced SQL Engine for all audiences
	Quality You Can Count On	Teradata is the only authorized provider of Teradata training—we offer a 100% satisfaction guarantee

Policies

Confirmed students in any public instructor led, virtual instructor led, or live webinar event who cancel or reschedule fourteen (14) or fewer business days prior to the class start date will be charged the full training fee. Student substitutions may be made at any time without penalty.

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Teradata University

Expand your Teradata knowledge at your own pace, on your own schedule

View and access the most recent and popular on-demand and instructor-led classes in one comprehensive site. Instructor Led Training (ILT) offers live instruction with hands-on labs and an opportunity to interact with one of our professional instructors. The classes are available to the public, please see the latest schedule **here**. At this time classes are presented virtually, in half day sessions. We also offer dedicated classes that can be geared to your organizational interests. Join us to grow your skills and meet other Teradata professionals.

On-Demand Courses

Web-based courses are formal, self-paced training delivered via Teradata University. Many of our popular instructor-led courses are also offered in web-based formats, allowing you to save on travel costs and maximize your time.

Webcasts are structured, one to two hour presentations, available in Teradata University. Over 150 webcasts are available and delivered by Teradata's product managers, subject matter experts, and product evangelists.

Subscriptions

Teradata University subscriptions provide either unlimited or tailored access to our on-demand courses. Several options are available to meet your ongoing technical and business user training needs. Teradata Education Consultants will work with your organization to determine the right subscription options required to meet your learning objectives. Expand your Teradata knowledge and fully utilize your Teradata systems with a Teradata University subscription.

The Right Partner for You

Teradata Education looks forward to bringing you the most advanced and exciting online education experience. To learn how to put the next generation of Teradata education to use, contact your Teradata representative or visit **Teradata.com/University/Overview**.

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Subscription Overview

Unlimited Subscription

Access to All On-Demand Training

A library of more than 300 on-demand, self-paced courses, including hands-on practice.

Enjoy more than 700 hours of training on subjects from data science principles through database management.

Enterprise Unlimited subscriptions include:

- 24 Teradata Certification Exam Vouchers
- 24 Annual Office Hours with our Technical Experts

Courses available include these and many more:

- Exploring the Analytic Functions of Teradata Vantage
- Teradata Advanced SQL
- Teradata SQL for Business Users
- Introduction to the Teradata Database
- Introduction to Data Modeling

Unlimited Subscriptions are available at the individual or Enterprise level. Tiered pricing is offered for multiple individual subscriptions.

Job Role-Based Subscriptions

Access to On-Demand Training

Tailored to your job role, these subscription options focus on the top courses that help build skills critical to excelling in your role. Each contains the most relevant content to help you unlock the power of data.

- **Business Analyst**
- **Developer**

- **Database Administrator**
- **Data Engineer**

Job Role-Based Subscriptions are available for individuals on an annual or multi-year level and each includes a Teradata Certification exam voucher. Tiered pricing is offered for multiple subscriptions.

Premier Education Package (complimentary)

Access to Introductory On-Demand Training

A carefully curated selection of more than 75 online courses totaling more than 115 hours of content, with additional courses added regularly, all at no charge for customers. Through the Premier Education Package any number of individuals at *all* Teradata customers have access to on-demand courses at no cost.

The process to access your Premier Education Package is simple. Sign up at **Teradata.com/University/Overview**.

Share this exciting offer with your colleagues and encourage them to sign up today.

Your access will allow you to take valuable courses such as Introduction to:

- Teradata Vantage
- Teradata Data Stream Architecture
- Time Series Analytics
- Big Data Concepts

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Job Role-based Subscriptions

Courses	Duration (hh:mm)	Business Analyst	Developer	Database Administrator	Data Engineer
Introduction to the Teradata Database	10:00		●	●	●
Teradata Advanced SQL Engine 17.10	2:00	●	●	●	●
Introduction to Teradata Vantage 2.3	2:00	●	●	●	●
Teradata SQL	29:00		●	●	●
Teradata Advanced SQL	32:00		●	●	●
Teradata SQL Extensions	12:00		●	●	●
Teradata SQL for Applications Development	39:00		●		
Teradata Parallel Transporter	24:00		●	●	●
Teradata Application Utilities	24:00		●	●	●
Introduction to ANSI Temporal Tables	4:00		●	●	
Introduction to Teradata Vantage Analytic Node – Part 1: Architecture	0:30			●	●
Introduction to Teradata Vantage Analytic Node – Part 2: Analytic Functions	0:45			●	●
In-Database Analytics and Physical Database Design	1:00			●	●
Teradata SQL for Business Users	24:00	●			
Exploring the Analytic Functions of Teradata Vantage	10:15	●			
Time Series Analytics	1:30	●	●		
Big Data Concepts	3:30	●	●	●	●
Getting Started with Teradata Studio	1:00	●	●	●	●
Teradata QueryGrid 2.0 Technical Overview	1:15	●	●	●	●
Teradata Data Stream Architecture (DSA)	3:00			●	●
Teradata Unity Director and Loader	3:00			●	●

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Courses	Duration (hh:mm)	Business Analyst	Developer	Database Administrator	Data Engineer
Creating Data Mover Jobs	1:00			●	●
Teradata AppCenter Foundations	2:00		●	●	●
Teradata AppCenter Visualizations Overview	0:15		●		●
Simplify User Management using Roles and Profiles	1:00			●	
Are You Losing Control? Managing Workloads on Teradata Vantage!	0:30			●	●
Row Partitioning: Getting Started	1:00		●	●	●
Tables without a Primary Index – How does it work?	1:00		●	●	●
Using Teradata Columnar	0:45	●	●	●	●
Advanced EXPLAIN Tuning	1:30	●	●	●	●
Analytics Curriculum	14:00	●			

Business Analyst	12 months	plus 1 certification voucher	Tailored for you, the Business Analyst subscription includes 10 courses totaling over 48 hours of on-demand content that will help you build your skills to unlock the power of data.
Developer	12 months	plus 1 certification voucher	Tailored for you, the Developer subscription includes 20 courses totaling 191 hours of on-demand content that will help you build your skills to unlock the power of data.
Database Administrator	12 months	plus 1 certification voucher	Tailored for you, the Database Administrator subscription includes 25 courses totaling 161 hours of on-demand content that will help you build your skills to unlock the power of data.
Data Engineer	12 months	plus 1 certification voucher	Tailored for you, the Data Engineer subscription includes 24 courses totaling 156 hours of on-demand content that will help you build your skills to unlock the power of data.

For more information contact us: **Teradata.com/University/Contact**

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Instructor Led Training: Learning Paths by Job Roles

Courses	Database Administrator	Data Architect/ Engineer	ETL/ Application Developer	Business Analyst	Data Scientist
Introduction to the Teradata Database – lecture only	●	●	●		
Teradata SQL	●	●	●		
Advanced SQL	●	●	●		
Teradata SQL Differences – lecture only	(●)	(●)	(●)		
Teradata SQL for Business Users				●	
Teradata Parallel Transporter: Vantage Advanced SQL Engine	●	●	●		
Vantage: Advanced SQL Engine Physical Implementation	●	●			
Teradata Database Administration: Vantage Advanced SQL Engine	●				
Teradata Viewpoint	●				
Teradata Vantage Analytics Workshop				●	●
Advanced Courses					
Vantage: Optimizing Advanced SQL Engine through Physical Design		●			
Vantage: Optimizing Advanced SQL Engine through Workload Management	●				
Teradata SQL Performance Tuning Workshop (adapted to the user group)	●	●	●	●	
Hands-On with Native Object Store (NOS)	●			●	

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Instructor Led Course Catalog

Course Title	Duration
OVERVIEW COURSES	
Introduction to the Teradata Database – lecture only	1 day
Teradata New Features X	1-2 days
APPLICATION DESIGN AND DEVELOPMENT COURSES	
Teradata SQL	4 days
Teradata Advanced SQL	4 days
Teradata SQL Differences – lecture only	1 day
Teradata SQL for Business Users	5 days
Teradata Parallel Transporter: Vantage Advanced SQL Engine	2 days
DATABASE DESIGN COURSES	
Vantage: Advanced SQL Engine Physical Implementation	5 days
DATABASE ADMINISTRATION	
Teradata Database Administration: Vantage Advanced SQL Engine	3 days
Teradata Viewpoint	2 days
OPTIMIZATION / PERFORMANCE	
Vantage: Optimizing Advanced SQL Engine through Physical Design	4,5 days
Vantage: Optimizing Advanced SQL Engine through Workload Management	4 days
Teradata SQL Performance Tuning Workshop	3 days
SAS and Teradata Integration Skills Training	3 days

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Course Title	Duration
ANALYTICS	
Teradata Vantage Analytics Workshop	4 days
Hands-On with Native Object Store (NOS)	1 day
CLOUD	
Vantage on Azure – Fundamental	2 days
Vantage on AWS – Fundamental	2 days
Vantage on Google Cloud – Fundamental	2 days
CUSTOMIZED ONLY	
Logical Data Modeling	different
VCX	different
Teradata Customer Interaction Manager Getting Started	3 days
Customer Interaction Manager Administration & Development	2+2 days
Global Control Framework	3 days

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INDUSTRY DATA MODELING	**Audience: Data Modelers, Data Architects, DBAs**

Teradata Data Model Custom Training is composed of a series of modules that may be selected to build a tailored course that fits your exact business requirements and goals. Comprised of three main tracks plus an industry-specific workshop, Teradata data modeling subject matter experts will help you select the appropriate modules.

Data Architecture & Modeling Theory – Integration Layer Track

Data Architecture	2 hrs
Data Modeling Concepts	2 hrs
Normalization	1 hr

Implementing the Teradata Industry Data Model – Logical Track

Industry Data Model Design Principles, Patterns, and Standards	2 hrs
Teradata Delivery Approaches	2 hrs
ERwin Techniques	4 hrs
Introduction to Access Layer Modeling	2 hrs
Model Mapping Approaches	2 hrs
Customizing the Industry Data Model	2 hrs

Implementing the Teradata Industry Data Model – Physical Track

Physical Design and Implementation Concepts	4 hrs
History, Time Variance, and Temporal	4 hrs
Alternate Code and Reference Structures	2 hrs
Generating DDL out of ERWin Using Industry Data Model Accelerators	2 hrs

Vertical Industry Data Model Workshop

Industry Data Model Overview and Deep Dive	1-3 days

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TERADATA UNIVERSITY TRAINING CURRICULA	
Analytics Curriculum	
Target audience: business analysts, financial analysts, reporting analysts, QA analysts, marketing analysts, research analysts, industry consultants, business consultants	
Architecture (TDVAN2)	• Given a scenario including the need to connect to an external data source, identify the SQL code snippet that should be used.
Association (TDVAN2)	• Interpret the meaning of the CFilter function result set. • Interpret the meaning of the LIFT metric that is output by the CFilter function.
Data Preparation Basics (TDVAN2)	• Given a data set and a SQL code snippet, identify the output. • Given a data set that was transformed and the data transformation function that was used, identify the original data set. • Given a scenario including a task, identify the CASE WHEN statement that should be used to accomplish the task. • Given two views of a data set, one before and one after a data transformation function was applied, identify the function that was used.
Path Analytics (TDVAN2)	• Given an npath statement, identify how the function will operate. • Given an output, identify the npath statement that created the output. • Identify how the TimeOut parameter affects the Sessionize function.
Text Analytics (TDVAN2)	• Given a sentence before and after a function was applied, identify the function syntax that was used. • Given a task, identify the syntax in Named Entity Recognition (NER) that should be used to accomplish the task. • Given a text mining task, identify the function that should be used to complete the task. • Identify the available options the Sentiment extractor offers.
Time Series (TDVAN2)	• Given a data set and a result set, identify the SQL code snippet that performed the aggregation. • Identify the characteristics of traditional and Time Series aggregations. • Identify the purpose of a Time Series table.
Data Preparation Advanced (TDVAN2)	• Given a description of a quality issue, identify the SQL statement that could be used to correct the problem.
Exploration Basics (TDVAN2)	• Given a graphic or a set of numbers, identify data quality issues • Given a graphic representation of data, identify a description of the distribution, skew, and outliers. • Given a table from various univariate statistics functions in a normal distribution, identify assumptions about the population.
Performance (TDVAN2)	• Given a connection, identify the appropriate configuration settings and/or SQL functions that leads to optimal performance. • Given a data set, identify the higher performing SQL statement to create a table. • Given the output from EXPLAIN, identify query performance issues.
Visualization (TDVAN2)	• Given a graphic, identify the visualization issue. • Given an analytic output, identify the visualization type that should be used to most effectively represent the meaning. • Match a graphic of a visualization type with its name. • Given a histogram or scatter plot, identify the type of graph and the correlation.
Exploration Advanced (TDVAN2)	• Given multiple result sets created from univariate statistics, identify the measures of standard deviation, spread, or dispersion.

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Hypothesis Test (TDVAN2)	• Given a p-value, identify the effects on the results of the hypothesis tests. • Given the outcome of a model, the p-values, and coefficients, identify the statistical significance.
Predictive Modeling (TDVAN2)	• Given a model and its coefficient outputs, identify the relationships between the independent variables and the dependent variable.
Evaluation (TDVAN2)	• Given a ROC chart, interpret the results. • Identify the characteristics of ROC, AUC, and GINI values. • Match the definition of specificity, sensitivity, prevalence, and precision with their name.

Data Science Curriculum

Learn to interpret, analyze, and find patterns in data so you can develop solutions to benefit your organization. The Data Science Curriculum will help you learn how to find data everywhere.

Evaluation (TDVAN3)	• Given a complex graphic, interpret the results. • Given a model output or data, identify the business value in terms that can be interpreted by business leaders. • Identify the characteristics of Type I and Type II errors. • Identify why crossvalidation is used.
Cluster Analysis (TDVAN3)	• Match the cluster topics including KMeans, Gaussian Mixture Models (GMM), Canopy, MinHash with their definitions, uses or characteristics. • Given a data set and independent data variable types, identify the model that should be used.
Exploration Advanced (TDVAN3)	• Given a data set, identify how an outlier affects the modeling approach that should be used. • Identify the definition of heteroscedasticity and describe its effects. • Identify the expected behavior from a model if outliers are not removed.
Hypothesis Test (TDVAN3)	• Given multiple distributions, identify the appropriate hypothesis test method.
PCA (TDVAN3)	• Identify the relationship between PCA and multicollinearity. • Identify the use for PCA and identify the analytics workflow that uses PCA. • Identify the difference between LARs and PCA.
Predictive Modeling (TDVAN3)	• Given a data set that has a nonlinear relationship, identify the data manipulation function that allows linear modeling. • Given a model output, identify the interpretation of GLM coefficients. • Given a model's goodness of fit test statistics, identify the interpretation of the results. • Given a target variable type, identify the approaches that should be used to model it. • Identify the definition of monotonicity and why it is important. • Identify the risks associated with assuming linearity. • Identify the benefits of using ADABoost on a classification problem relative to alternate methods. • Given a SQL code snippet, identify the proper syntax to use a training output table in a given scoring function.
Time Series (TDVAN3)	• Given a SQL snippet using the ARIMA function, identify the parameters. • Identify how the VARMAX model extends the ARIMA model. • Identify how to use Interpolator to process missing time series data. • Identify the function of ChangePointDetection. • Identify the functions that can be performed on Period Data Types. • Identify the usage of a Period data type. • Identify the purpose of SAX. • Given a data set and independent data variable types, identify the model that should be used.
Visualization (TDVAN3)	• Given a purpose, identify the visualization that should be used. • Given a scatter plot matrix, identify the level of correlation of the elements • Given an output from a data function, identify the visualizations that can be created in Teradata AppCenter.

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Architecture (TDVAN3)	• Identify how Kubernetes and Docker are used in the Teradata Vantage architecture. • Identify how QueryGrid enables ecosystem architecture with Teradata Vantage. • Identify key characteristics for model management. • Identify the principles of scalability with data science in the Teradata Vantage platform.
Data Preparation Advanced (TDVAN3)	• Given a data set with a specific distribution, identify the sampling strategy that should be used. • Given a description of a complex quality issue, identify the SQL code snippet that should be used to correct the problem. • Given a scenario with missing data, identify the correct metric to remediate the missing data issue. • Identify the characteristics of random sampling and stratified sampling.
Data Preparation Basics (TDVAN3)	• Given a complex scenario, identify the CASE WHEN statement that should be used to accomplish the task. • Identify when aggregate windowing functions should be used.
Exploration Basics (TDVAN3)	• Given a graphic or a set of numbers, identify complex data quality issues. • Given a graphic representation of data, identify supporting statistical evidence of the distribution, skew, and outliers. • Given a Moments table from the UnivariateStatistics function, identify assumptions about the population.
Packages (TDVAN3)	• Given a data set and Teradata's R and Python packages, identify the appropriate loading statement. • Identify the characteristics, benefits, and uses of TDPLYR and TeradataML.
Text Analytics (TDVAN3)	• Given a complex text mining task, identify the combination of functions that should be used to complete the task. • Given a NaiveBayes model text classification output, interpret the probability of document classification. • Identify the meaning of TD-IDF and its utility. • Identify the purpose of LDA and when it should be used. • Identify the steps to implement a custom dictionary. • Identify uses for Parts of Speech (POS) Tagger and lemmatization. • Given a text analytic task, identify the correct sequence of preprocessing functions to prepare the data to accomplish the task.
Association (TDVAN3)	• Identify the meaning of metrics in the CFilter function.
Geospatial (TDVAN3)	• Given a scenario, identify the geospatial function that should be used. • Identify the calculations that can be performed with geospatial data types.
Graph Analysis (TDVAN3)	• Identify the characteristics of the PageRank function. • Match graph centrality functions with their definitions, uses or characteristics.
Path Analytics (TDVAN3)	• Given a complex npath statement, identify how the function will operate. • Given a complex output, identify the npath statement that created the output. • Given a complex scenario, identify the sessionize statement that created the output. • Identify how Shapley values are used as inputs to attribution functions. • Identify the usage and characteristics of supervised and unsupervised Hidden Markov Models (HMM). • Identify the various model inputs to the attribution functions that affect the outputs.
Survival Analysis (TDVAN3)	• Given a survival analysis scenario, identify how to order the COX functions for a viable solution. • Given two survival distributions, identify a description of survival probabilities for the two populations.

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TECHBYTES	4 to 18 minutes
Analytics	

Get more than eight bits of information in our Techbytes. Scroll through the list of recorded trainings and start learning today. Techbytes are free of charge for Teradata customers.

Analytics 123 – **1. Overview**	In this first episode in Analytics123 TechBytes series, you will get an overview of Analytics 123 at high-level. Dr. Chris Hillman walks through 3 phases of Analytics 123 – Prepare Data, Train Model, and Deploy Model – by introducing key components and terminologies that make up the strategy. Find out why and how decoupling the machine learning and AI processes into 3 separate phases with equal wight and focus will enable real-world, business-critical enterprise analytics that can transform organizations
Analytics 123 – **2. Digging Deeper on** **Analytics 123**	In this second episode in Analytics123 TechBytes series, Dr. Chris Hillman follows up his Overview episode with more details. Get detailed explanation of a key enabler within each of the 3 phases of Analytics 123 – Enterprise Feature Store, Bring Your Own Model (BYOM), and AnalyticOps.
Analytics 123 – **3. Connecting to Vantage** **and GUI Options**	In this third episode in Analytics123 TechBytes series, Yannis Marigo demonstrates Teradata and Teradata partners' data visualization and Graphic User Interface (GUI) capabilities aligned with the strategy. Showcased technology include Teradata Studio; Editor, Path and Workflow within Vantage Console; Tableau and Jupyter Notebook.
Analytics 123 – **4. Advanced Feature** **Engineering with Vantage**	In this 4th episode in Analytics123 TechBytes series, Pranay Dave demonstrates how to use Teradata Vantage for data preparation. Using Teradata Package for Python (teradataml) in a Jupyter notebook, he will walk through a churn prediction use case for a bank, with a specific focus in data preparation and feature engineering.
Vantage Advanced Analytic **Functions Overview – Part 3**	This TechBytes recording provides a high-level overview of the advanced analytic functions available in Teradata Vantage 1.3's Machine Learning Engine. Through this video, you will: • Know which functions are available as of Vantage 1.3 Machine Learning Engine • Know what each function does at high level • Know typical use cases and examples of each function
Vantage – Sessionization **Function**	This TechBytes recording introduces Sessionization function in Teradata Vantage. Through this video, you will: • Know what Sessionization function does at high level • Know its typical use cases • Learn how the Sessionization works – SQL syntax, inputs and outputs
Vantage – Group by Time **Function**	This TechBytes recording describes time-aware aggregation function, Group by Time, which makes time-based arithmetic extremely easy and agile. Through this video, you will: • Learn what Group by Time is • Learn its typical use cases • Learn how it's used through a brief demo
Analytics Library – **Part 1. Overview**	Analytics Library feature in Vantage enhances Vantage's powerful in-database analytics capability by adding a set of analytic functions in the areas of descriptive statistics, data transformation, hypothesis test, and predictive modeling / scoring. In this part 1 of a 4-part series on Analytics Library, you will get an overview of the Analytics Library feature as well as an introduction to the whole set of analytics functions available.

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Analytics Library – **Part 2. Data Exploration** **using Analytics Library and** **teradataml**	Analytics Library feature in Vantage enhances Vantage's powerful in-database analytics capability by adding a set of analytic functions in the areas of descriptive statistics, data transformation, hypothesis test, and predictive modeling / scoring. In this part 2 of a 4-part series on Analytics Library, you will see a demo on how Analytics Library along with Teradata Package for Python (teradataml) make your data exploration processes much easier, while using your preferred language (Python) and tool (Jupyter notebook). You will get a brief peek at Values, Statistics, Frequency, and Histogram functions as well as data visualization of the results.
Analytics Library – **Part 3. Data Transformation** **and Matrix Building with** **Analytics Library and** **teradataml**	Analytics Library feature in Vantage enhances Vantage's powerful in-database analytics capability by adding a set of analytic functions in the areas of descriptive statistics, data transformation, hypothesis test, and predictive modeling / scoring. In this part 3 of a 4-part series on Analytics Library, you will see a demo that shows powerful but flexible data transformation options provided by Analytics Library and Teradata Package for Python (teradataml) using Jupyter. You will get a brief peek at how you can do transformations like binning, one hot encoding, and NULL value replacement. It also includes a demo on Analytics Library matrix function for correlation and covariance.
Analytics Library – **Part 4. Predictive Modeling** **using Analytics Library and** **teradataml**	Analytics Library feature in Vantage enhances Vantage's powerful in-database analytics capability by adding a set of analytic functions in the areas of descriptive statistics, data transformation, hypothesis test, and predictive modeling & scoring. In this final part of a 4-part series on Analytics Library, you will see a demo on how to perform at-scale, in-database predictive modeling, model evaluation, and scoring using your preferred language (Python) and tool (Jupyter notebook), all enabled by Analytics Library and Teradata Package for Python (teradataml).
Scalability / Performance	
Vantage – Row-based **Tables**	This video talks about two physical implementation options for row-based tables, in addition to Columnar tables? Learn the basics of the row-based tables and their implementation considerations. Also find out how Vantage distributes data to achieve Massively Parallel Processing (MPP) using hash-based data distribution.
Vantage – Columnar Tables	This TechBytes recording explains characteristics, considerations, and definition for row-based tables in Teradata Vantage. Through this video, you will: • Know what column-partitioned table with No Primary Index (CP-NoPI) is • Know what column-partitioned table with Primary Index (CP-PI) is • What column-partitioned table with Primary AMP (CP-PA) is • Know pro and cons of using CP-NoPI, CP-PI, and CP-PA tables
Vantage – In-Memory **Optimizations**	This TechBytes recording provides you a quick overview of the In-Memory Optimizations (IMO) feature of Vantage. This feature was originally added in Teradata Database 15.10. Through this video, you will: • Know what capabilities are included • Know how the IMO capabilities work

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High Availability	
Vantage MAPS – Part 1. Increasing the System Availability	This TechBytes recording provides a quick overview of Teradata Vantage's MAPS feature, which was originally added in Teradata Database 16.10. Through this video, you will: • Know what Teradata MAPS feature is in the context of the system expansion scenario • Know how the feature dramatically increases the system availability time when it's expanded • Know key benefits of Teradata MAPS
Vantage MAPS – Part 2. Small Tables in Sparse Maps	This TechBytes recording provides a quick overview of Teradata Vantage's MAPS feature, which was originally added in Teradata Database 16.10. Through this video, you will: • Know what sparse maps in the Teradata MAPS feature is • Know how a sparse map works and how it provides improved query performance consistency on small tables • Know key benefits of sparse maps
Vantage MAPS – Part 3. Query Behavior	This TechBytes recording provides a quick overview of the Teradata Vantage's MAPS feature, which was originally added in Teradata Database 16.10. Through this video, you will: • Know what how the Optimizer works immediately after a system is expanded with MAPS • Know how the Optimizer works when there are multiple maps in the system • Know key best practices to achieve best query performance with Teradata MAPS
Vantage – Snapshot Master Index	Teradata Vantage's Snapshot Master Index or Master Index Mirroring feature reduces restart times on a system with large amounts of permanent data and improves data protections. See how this feature works and increases your Vantage system's availability at the time of restarts.
Industry Compatibility	
Vantage – Secure Zones	This recording provides you a quick overview of Teradata Vantage's Secure Zones, a feature originally added to Teradata Database 15.10. Through this video, you will: • Know what Teradata Secure Zones is • Know typical use cases • Know high-level implementation steps, including DDL examples • Know implementation considerations
Vantage – Query Re-Write	This TechBytes recording provides a quick overview of Query Re-Writes capability of Vantage. This feature enhancement was originally added to Teradata Database 15.10. Through this video you will: • Know what Query Re-Writes feature is • Know type of enhancements in Query Re-Writes through SQL examples

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Workload Management	
Vantage – Flex Throttles in Teradata Active System Management (TASM)	This TechBytes recording provides you a quick overview of the Flex Throttles feature of Vantage, Teradata Active System Management (TASM). This feature was originally added in Teradata Database 16.00. Through this video, you will: • Know what Flex Throttles feature is • Know key capabilities and limitations • Know high-level workflow for setting up and monitoring the Flex Throttles feature
Vantage – Teradata Integrated Workload Management – Part 1	This TechBytes recording provides a quick overview of Teradata Integrated Workload Management. Through this video, you will: • Get an overview of what Teradata Integrated Workload Management (TIWM) is • Know what Classification Criteria are • Know what Filters and Throttles are • Know what Prioritized Throttle Delay Queue Option is NOTE: See Part 2 for the remaining topics.
Vantage – Teradata Integrated Workload Management – Part 2	This TechBytes recording is part 2 of a series which provides you a quick overview of Teradata Integrated Workload Management. Through this video, you will: • Know what Tactical Tier is • Know what Timeshare Priorities are • Know what States Matrix is • Know the differences between TIWM and TASM (Teradata Active System Mgmt)
Vantage – Workload Management for Enterprise and Teradata Active System Management (TASM)	This TechBytes provides a brief overview of one of Vantage's key differentiators, Workload Management, specifically within the context of enterprise analytic systems. It provides an overview of Teradata Active System Management (TASM). Through this video, you will: • Know how TASM is architected to meet the needs of Enterprise Platforms • Know how TASM manages workloads • Know how TASM manages concurrency and workload management settings
Using Python with Vantage Series – Part 1. Introduction and Connections	In this first episode in Using Python with Vantage TechBytes series, Alexander Kolovos provides an overview of teradataml, then demonstrates how to connect to Vantage with teradataml as well as some basic operations available.
**Using Python with Vantage Series – Part 2. Data Exploration and Transformations	Building an Analytic Data Set (ADS)**	In this second episode in Using Python with Vantage TechBytes series, Alexander Kolovos demonstrates how to use Vantage and teradataml for data exploration and transformations as well as to build an analytic data set (ADS).
Using Python with Vantage Series – Part 3. Analytic Functions Modeling and Model Cataloging	In this third episode in Using Python with Vantage TechBytes series, Alexander Kolovos demonstrates using teradataml to use Vantage in-database machine learning / modeling functions (XGBoost, Decision Forest, Confusion Matrix) as well as Model Cataloging feature.
Using Python with Vantage Series – Part 4a. In-Database scripting with SCRIPT Table Operator – Scoring with External Model	In this 4th episode in Using Python with Vantage TechBytes series, Alexander Kolovos demonstrates how to perform in-Database scripting with Vantage SCRIPT Table Operator (aka STO) database object, using direct calls to the SCRIPT Table Operator via teradataml. It also includes a demonstration of how to test a Python script using a Sandbox environment on the client.
Using Python with Vantage Series – Part 4b. In-Database scripting with SCRIPT Table Operator – Micromodeling (multiple model training and scoring) and Map Functions	In this 5th episode in Using Python with Vantage TechBytes series, Alexander Kolovos demonstrates how to train and score multiple models (micromodeling) in parallel and at scale using Vantage and its SCRIPT Table Operator. It also includes a demonstration for map_row() function for row-based operations and map_partition() function for partition-based operations.

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General	
Circle and Square – All You Need to Know about Data and Analytics in Two Pictures	In today's fast-changing data and analytics landscape, it is often difficult to determine which data to use and integrate in your analytics ecosystem as well as to decide what technology and analytics to drive actionable outcomes. In this brief and fun analogy, Rob Armstrong provides his thought-provoking perspective on how to effectively manage data and analytics using 2 simple shapes – circle and square.
Today's Teradata – Understanding Vantage – Part 1. Overview	Today's Teradata – Understanding Vantage is a 5-part series that provides a good understanding of Teradata's modern analytic offering, Vantage. Through this Part 1 Overview episode, you will: • Get a broad definition of Vantage • Understand the topics that will be covered in the rest of the series that include Vantage's analytics capability and cloud deployment options.
Today's Teradata – Understanding Vantage – Part 3. Vantage Differentiators	Teradata 101 series explains 7 key concepts which make Teradata unique. This recording, Teradata Design, explains each of the key concepts at high level. Through this recording, you will: • Know the seven key concepts that make Teradata unique • Know what shared-nothing is • Learn how to explain the key concepts at high-level NOTE: This video was created under the legacy Teradata Database naming and branding.
Today's Teradata – Understanding Vantage – Part 4. Vantage's Cloud, Hybrid Cloud, and Multi-Cloud Options	Today's Teradata – Understanding Vantage is a 5-part series that provides a good understanding of Teradata's modern analytic offering, Vantage. Through this part 4 recording, you will: • Know how Vantage stands out from the other could-only or on-premises analytics offerings • Know how Vantage provides robust set of capabilities, rich set of analytics, and experts with unmatched expertise to our customers
Today's Teradata – Understanding Vantage – Part 5. Driving Value for Our Customers	Today's Teradata – Understanding Vantage is a 5-part series that provides a good understanding of Teradata's modern analytic offering, Vantage. Through this part 5 and final recording, you will: • Know how our customers drive higher value from their analytic answers through integrated and reusable data in Vantage • Know Vantage's flexible cloud pricing options

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Teradata Certification

A Teradata Certification is a differentiator in today's quickly changing and competitive IT environment. Teradata certifications maximize your competitive advantage, demonstrating your dedication and growth to your career. Teradata certification is available globally to anyone interested in Teradata technology including customers, partners, associates, and students. Over 71,000 Teradata Certifications have been awarded and are recognized by major global organizations as an industry-standard measure of technical competence for IT professionals using Teradata technology, including Vantage.

All Teradata certifications can be taken at a Pearson Vue test center or remotely, at your home or office. Teradata is proud to announce that ALL who pass an exam and earn a Teradata Certification receive a digital badge. This is another great way to showcase your skills and knowledge!

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Vantage Certifications

Preparing for Teradata Certifications is easier than ever! Use these 5 easy steps:

1. Go to the Teradata Certification **exam page** and use the hamburger menu to choose the exam that you are interested in. Go to that exam page.

2. Scroll down and click on the "EXAM OBJECTIVES" tab. Read through the abbreviated exam objectives listed on this page and then download the PDF. This PDF will provide insights into the content of the exam. Review this document to see what you know and what you need to learn more about.

EXAM DETAILS   **EXAM OBJECTIVES**   EXAM PREP

For more details regarding specific exam objectives, download this PDF.

3. Click on the "EXAM PREP" tab. This tab will provide access to FREE exam practice questions! In addition, other learning resources that relate to the content are listed.

EXAM DETAILS   EXAM OBJECTIVES   **EXAM PREP**

4. Click on the "EXAM DETAILS" tab. Use this tab to learn how much experience an exam candidate is expected to have.

EXAM DETAILS   EXAM OBJECTIVES   EXAM PREP

5. Determine your learning needs and your exam approach based on this information, then register at **home.pearsonvue.com/teradata**.

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Recommended Certification Prep Courses

The recommended courses for each Teradata Certification are available via each exam page link below. Once you go to the link, scroll down, and click on the "Exam Prep" tab where the courses are detailed.

EXAM		Courses Available?	Sample Questions Available?
Associate 2.3		Free and available	Yes
Analytics		Free and available	Yes
Data Science		Free and available	Yes
Data Engineering		In development – 2Q22	Yes
Administration		To be developed	Expected 1Q22
Architecture (Exam not yet available)		To be developed	To be developed
Administrator	Exam available through 12/31/22	Available on webpage	Yes
Advanced Administrator	Exam available through 12/31/22	Available on webpage	Yes
Developer	Exam available through 12/31/22	Available on webpage	Yes
Advanced Developer	Exam available through 12/31/22	Available on webpage	Yes
System Architect	Exam available through 12/31/22	Available on webpage	Yes

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