EDUCATION COURSE CATALOG 2019
ACCELERATE YOUR SUCCESS WITH THE LATEST TRAINING IN ENTERPRISE ANALYTICS, MOBILITY, AND IDENTITY INTELLIGENCE.
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## WELCOME

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## JUMP START: YOUR MICROSTRATEGY EDUCATION FOR FREE

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## OUR COMPREHENSIVE CATALOG OF CLASSES

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## MICROSTRATEGY 10 CERTIFICATIONS

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## TRAIN A SUCCESSFUL INTELLIGENCE CENTER

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## FAQ AND CATALOG SUMMARY

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## MICROSTRATEGY EDUCATION TEAM

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Harness the Power of Microstrategy 2019 with MicroStrategy Education!

Dear MicroStrategy loyalists,

What better way to start a new year than with a new MicroStrategy release and a refreshed MicroStrategy Education catalog to help make the transition to our latest and greatest platform a fun and enriching learning experience! Whether you are on version 10.X or on our 2019 product, our courses and certifications have been updated to support the functionality and features across both platforms.

So, I’m extremely excited to support all our customers in 2019 by providing relevant quality content and multiple learning methodologies to help you leverage the power of MicroStrategy 2019! Let’s take a look at how we can help you:

• If you’re new to MicroStrategy, start with our free Jump Start program, designed to get you started with MicroStrategy 2019 in just a few hours. These free instructor-led classes introduce Business Intelligence concepts and the basics of the MicroStrategy Enterprise platform, from business analytics to Mobile apps and platform configuration. Empower your users to build the next generation of business analytics and drive success across the enterprise. Each day in the program is structured to stand on its own, allowing you to attend any or all of the five days.

• Maybe you already have some familiarity with MicroStrategy or maybe we got you so excited about MicroStrategy with our Jump Start program, you want to dive deeper into more advanced MicroStrategy 2019 topics. Learn how to drive data literacy and adoption with HyperIntelligence. Explore Platform Analytics, the next generation telemetry tool that leverages real-time data from across the MicroStrategy platform into easily accessed and actionable information. Some of the key benefits of our “Pay For Access” content:

  • Our learning tracks are designed to guide you and your organization to the courses most relevant to your roles, skill sets and certification needs.
  • We continuously update our content throughout the year. On an annual basis at least 50% of our content is refreshed and updated to reflect feedback from our customers and changing BI trends.
  • Choose the training delivery method that works best with your busy schedule. Take a class with a live instructor or view a recording; join an online class or an in-person class at a local MicroStrategy office.
  • Build a team of trusted MicroStrategy Intelligence Center Advisors, who have been taught and certified on their role’s competencies and best practices. These project-based certifications are designed to test your theoretical knowledge in practical hands on workshops. With 15 different certifications to support different roles within the Intelligent Enterprise, get certified in your areas of expertise and wear our MicroStrategy Certification as a badge of honor within your organization.
• Increase the usage of MicroStrategy throughout your organization with our **self-paced eLearning.** These modules contain instructional videos, multimedia content, simulations on the platform, and quizzes. These self-paced modules follow the same content as instructor-led courses but enable learning on your schedule.

• Access our library of content in nine different languages: *English, Chinese, Japanese, Korean, Portuguese, Spanish, German, Italian & French.*

I certainly hope I’ve given you enough compelling reasons to go beyond this page to read through our catalog and figure out how to make MicroStrategy work for you! I look forward to hearing from all of you throughout the year as you take advantage of what we have to offer.

Thanks,

**Rohit Amba**  
EVP, Education and Service Operations  
MicroStrategy
JUMP START: YOUR MICROSTRATEGY EDUCATION FOR FREE
11.117 Jump Start: Dashboarding Data with Dossiers (1 day)

Course description
This free course introduces you to MicroStrategy’s software and the Education catalog of courses. Import data into MicroStrategy Web to create visually appealing dossiers, MicroStrategy’s next generation business intelligence dashboards. Turn your data into visualizations that enable you to quickly and easily analyze trends and key performance indicators. Analyze your visualizations by applying thresholds, drilling, and filters. Add the dossier to Library to share your analysis with others, collaborate with comments, and view your data on the go.

Covers versions 10 through 11.

Skills you gain
• Cleaning and wrangling data to create dossiers
• Creating interactive visualizations for most effective business analysis
• Analyzing data effectively for a given graph type
• Sharing and collaborating on dossiers through MicroStrategy Library

MicroStrategy products covered
• MicroStrategy Web
• MicroStrategy Library

Right for you if
You want to create a visually appealing interactive dossier to improve your business analysis, while also learning about MicroStrategy’s product offerings and Education course catalog.

Suitable for all user roles and personas.

Topics
1. MicroStrategy: Data-driven intelligence
   - Dashboarding foundations
   - Prepare and import data
   - Leverage HyperIntelligence
2. Create a first-class dossier
   - Leverage data visualizations
3. Layering, filtering, sorting, and thresholding
   - Layer related data: Chapters and pages
   - Narrow data: Filters
   - Easily identify trends
   - Dig deeper into your data: Drilling
   - Highlight important changes to your data: Thresholds
   - Create a metric based on existing metrics: Derived metrics
   - Add dossier details: Text and images
4. Share and collaborate with MicroStrategy Library
   - Dossier cover images
   - Certified dossiers
   - Personalize and manage your Library
   - Collaboration and communication
5. Unified authoring and administration: Workstation
   - Design and distribute dossiers
   - Connect to your MicroStrategy environment
   - Upload and prepare data
   - User and group management
6. Workshop: Port Analysis dossier
   - Create and analyze a dossier with Geospatial Service maps
**11.118 Jump Start: Advanced Reporting (1 day)**

**Course description**
This free course introduces you to MicroStrategy’s software and the Education catalog of courses. Create metrics, attributes, filters, and prompts to design business queries that display the report results that users need. Build perfectly formatted documents commonly used for financial statements, performance scorecards, and executive reporting applications.

Covers versions 10 through 11.

**Skills you gain**
- Using basic analytical reporting objects
- Creating simple reports
- Boardroom-quality document creation
- Advanced metrics

**MicroStrategy products covered**
- MicroStrategy Web
- MicroStrategy Report Services

**Right for you if**
You want to create reports and documents while also learning about MicroStrategy’s product offerings and Education course catalog.
Suitable for all user roles and personas.

**Topics**
1. Viewing and creating reports
   - Reports in MicroStrategy Web
   - Building a report: Report objects
   - Calculating business data: Metrics
   - Business context on a report: Attributes
   - Creating a report
   - Creating a report from scratch
   - Report types
   - Building reports based on pre-designed reports and templates
   - Report Services documents
2. Creating metrics and filters
   - Building metrics to calculate data
   - Building filters to filter data on reports
3. Advanced reporting
   - Add smart totals to compound metrics: Smart metrics
   - Specify the attribute to use in the metric calculation: Level metrics
   - Make time-based comparisons: Transformation metrics
   - Grouping attribute elements: Custom groups
   - Dynamically modify the contents of a report: Prompts
4. Report Services documents
   - Formatted data displays: Basic documents
   - Creating a document: Document Editor
   - Building your document: Document objects
   - Organizing the document: Document sections
5. Interactive documents
   - Adding interactivity to a document
11.119 Jump Start: Enterprise Applications (1 day)

Course description
This free course introduces you to MicroStrategy’s software and the Education catalog of courses. Build a basic analytics application through hands-on exercises, starting with the basic building components of an analytics architecture. Touches on the fundamentals of enterprise analytics and builds the knowledge base necessary to tackle the more advanced courses offered for analysts, developers, and administrators.

Covers versions 10 through 11.

Skills you gain
- Understanding a BI enterprise platform and its products and tools
- Creating of reports and documents
- Planning simple data warehouse and reporting object mapping
- Understanding the project life cycle

MicroStrategy products covered
- MicroStrategy Analytics
- MicroStrategy Mobile
- MicroStrategy Web

Right for you if
You want a comprehensive overview of MicroStrategy’s BI, mobility, and security products, while also learning about MicroStrategy’s product offerings and Education course catalog.

Suitable for all user roles and personas.

Topics
1. MicroStrategy Enterprise platform overview
   - Interact with your business data: User interfaces
   - Grid reports: Basic data analysis
   - Create an interactive document: Visualize and interact with your data

2. Data: The foundation of Business Intelligence
   - Analyze data with MicroStrategy
   - Using a data warehouse: MicroStrategy metadata
   - MicroStrategy architecture

3. Build and store your objects: MicroStrategy projects
   - Project life cycle
   - Create a physical data warehouse schema
   - Create a project
   - Create application objects
11.123 Jump Start: Enterprise Mobility (1 day)

Course description
This free course introduces you to MicroStrategy’s software and the Education catalog of courses. Build basic enterprise mobile applications using MicroStrategy tools. Learn the fundamentals of enterprise mobility and touch on topics necessary to tackle the more advanced courses offered for analysts, developers, and administrators. Includes a hands-on workshop; you will perform basic mobile application design, development, and deployment.

Covers versions 10 through 11.

Skills you gain
- Design principles and best practices for app creation
- Using documents to create a mobile app
- Adding interactive app functionality
- Creating and deploying a mobile app to your mobile device

MicroStrategy products covered
- MicroStrategy Mobile
- MicroStrategy Web
- MicroStrategy Library

Right for you if
You want to create Mobile apps while also learning about MicroStrategy’s product offerings and Education course catalog.
Suitable for all user roles and personas.

Best class experience if you
Bring a supported mobile device to class.

Topics
1. Plan and design a Mobile app
- Open a mobile app and explore mobile capabilities for business analysis
- User-centered design
- Select the platforms to support your app
- Graphic design considerations
- Create, develop, and test your app

2. Create a Mobile app
- Business scenario
- App components
- MicroStrategy links
- Build an app template with a home page
- Create the documents
- Add interactive elements to the app

3. MicroStrategy Library App
- Optimize for mobile consumption
- Use the Library App to analyze dossiers

4. Extend Mobile capabilities
- Perform database write-back with Transaction Services
- Introduction to Mobile SDK for customizing

5. Administration and app deployment
- The Mobile client
- Mobile architecture
- Mobile configuration
- Mobile app deployment
- Additional Mobile features
11.133 Jump Start: Digital Identity (1 day)

Course description
This free course introduces you to MicroStrategy's software and Education catalog of courses. Gain the practical knowledge needed to build and deploy an enterprise security network to secure the enterprise's processes, people, and assets. Learn the fundamental concepts of securing an enterprise and the critical requirements of a modern security solution. In this hands-on course, MicroStrategy Identity is used to create and deploy security networks. Covers versions 10 through 11.

Skills you gain
- Setting up a simple user badge in MicroStrategy Identity
- Setting up a network of users in an Identity network
- Designing a simple security network of logical and physical assets
- Analyzing common corporate data collecting, compliance, and mobile device use policies
- Setting up MicroStrategy Identity as two-factor authentication on a system

MicroStrategy products covered
- Enterprise Security platform with MicroStrategy Identity

Right for you if
You want to secure your enterprise processes, people, and assets while also learning about MicroStrategy's product offerings and Education course catalog. Suitable for all user roles and personas.

Topics
1. Introduction to enterprise security
   - MicroStrategy Identity Mobile Identity platform
3. Designing the security network architecture
   - Security analysis of logical and physical assets and VPNs/firewalls
   - Design and implementation planning
   - Connect MicroStrategy Web to MicroStrategy Identity
OUR COMPREHENSIVE CATALOG OF CLASSES

CLASSES TO BUILD SKILLS AND CERTIFICATIONS
11.000 What’s New in MicroStrategy (2 days)

Roles/personas: Platform Administrators | System Administrators | Analysts

Course description
Upgrade your knowledge from MicroStrategy 9 or 10 to version 11. Focuses on new capabilities for the analyst, developer, and administrator roles. Learn about enhanced reporting and visualizations capabilities in Web and Mobile. Discover expanded feature sets to help tackle big data, improve performance, and comprehensively monitor the enterprise.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Using new features and workflows
- Training others in your organization on new features and workflows
- Using new visualization and dashboarding capabilities
- Presenting interactive boardroom data
- Updating your security standards using Identity biometrics, configuration, and FastBadge
- Drilling to details, sorting data, and applying filters

MicroStrategy products covered
- MicroStrategy Analytics Platform
- MicroStrategy Mobile Platform
- MicroStrategy Identity Platform

Right for you if
You are upgrading MicroStrategy, or you have an interest in learning about new features in MicroStrategy regardless of your role.

Best class experience if you have
Familiarity with MicroStrategy concepts and terminology.

Topics
1. Data Discovery
   - Dossier clients: Desktop and Web
   - Creating a dossier
   - Accessing a dossier everywhere: Library
2. Data Governance
   - Publishing to the enterprise environment
   - Workstation: Unified authoring and administration platform
   - Creating new applications (projects)
   - MicroStrategy administration
   - Data value management
   - Designing and distributing dossiers
3. Dashboarding and Visualizations
   - Data management
   - Analytical capabilities
   - Dossier analysis and design
   - Visualization capabilities
   - Dossier sharing
   - Hierarchy reporting
4. MicroStrategy Web
   - Reports and Report Services documents
   - Web SDK
5. MicroStrategy Mobile
   - iOS enhancements
   - Android enhancements
6. MicroStrategy Distribution Services
7. MicroStrategy Intelligence Server
   - Platform installation and deployment
   - Logging and authentication
   - In-memory analytics and gateways
8. Monitoring System Activity
   - Platform Analytics
9. MicroStrategy Identity
   - Security features
   - Platform Analytics and MicroStrategy Communicator
11.111 Overview of Enterprise Analytics (2 days)

Roles/personas: Business Users | Executives

Course description
Build a basic analytics application through hands-on exercises. Start with the components of an analytics architecture, then learn about development, deployment, and simple administrative features. Covers the fundamentals of enterprise analytics and builds the knowledge base necessary for the more advanced courses offered for analysts, developers, and administrators.
Covers versions 10 through 2019 (v.11).

Skills you gain
• Using business intelligence product offerings
• Creating simple reporting objects
• Planning data warehouse and reporting object mapping
• Creating basic reports, documents, and dossiers
• Understanding the project life cycle
• Creating objects on the fly (derived objects)
• Deploying a simple app to a mobile device
• Viewing a document on a mobile device
• Understanding where data comes from and what you can do with it

MicroStrategy products covered
• MicroStrategy Developer
• MicroStrategy Web
• MicroStrategy Mobile
• Various project design and administration tools

Right for you if
You are an analyst, SDK developer, or administrator who has an interest in learning about MicroStrategy business intelligence products.

Topics
1. MicroStrategy Intelligence Platform
   • Interact with your business data
   • Grid reports: Basic data analysis
   • Create an interactive document: Visualize and interact with your data
2. Data: The foundation of business intelligence
   • Analyze data with MicroStrategy
   • Using a data warehouse: MicroStrategy metadata
   • MicroStrategy architecture
3. Build and store your objects: MicroStrategy projects
   • Introduction to MicroStrategy projects
   • Project life cycle
4. Advanced reports and documents
   • Limiting data on the report: Filters
   • Calculating data on the report: Metrics
   • Grouping attribute elements: Custom groups
   • Interacting with your data: Interactive documents
5. MicroStrategy Mobile
6. SDK overview
7. MicroStrategy Identity
   • Identity platform
   • Platform analytics
8. MicroStrategy administration
   • MicroStrategy Web administration
   • Security
   • Monitoring
   • Automation with Command Manager and System Manager
11.112 Introduction to Analytics Reporting (2 days)

Roles/personas: Business Users | Analysts

Course description
Create reports and the objects used on reports (filters, metrics, and prompts) with hands-on exercises. Transform datasets into appealing, insightful dossiers. Exercises use the MicroStrategy Web interface.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Analyzing organizational data to make effective business decisions
- Creating business reports
- Identifying appropriate business concepts to evaluate calculations
- Using calculations and measures to determine actionable business decisions
- Logically planning subsets of data for analysis using filtering techniques
- Designing business reports for other users with self-service features
- Sharing reports using export, print, or by subscribing to report deliveries
- Identifying and analyzing trends, anomalies, and other important meaning in your data

MicroStrategy products covered
- MicroStrategy Web

Topics
1. Foundation for creating reports
   - The Intelligence Center
   - Calculating business data: Metrics
   - Business context on a report: Attributes
2. Creating reports
   - Building reports based on pre-designed reports
   - Building reports using templates
   - Building reports from scratch
3. Filtering reports
   - Building filters to filter data on reports
   - Building prompts to allow user input
4. Calculating data on reports
   - Building metrics to calculate data
   - Building metrics within reports: derived metrics
5. Delivering and sharing reports
   - Exporting reports
   - Subscribing to reports for automatic delivery
   - Sending reports to other users
   - Bursting large reports into smaller files
   - Sharing a link URL reflecting latest changes and prompt answers with other users
6. Dossiers and visualizations
   - Adding data to your dossier
   - Displaying data as a visualization
   - Creating a grid visualization
   - Creating a bubble chart visualization
   - Filtering data on a dossier
   - Creating separate chapters and Filter panel filters
   - Sharing a dossier everywhere: Library on web and mobile devices
   - Creating separate chapters and Filter panel filters
   - Sharing a dossier everywhere: Library on web and mobile devices

Right for you if
You are a beginning analyst who needs an introduction to basic report and object creation and wants an overview of dossiers and visualizations.
11.114 Visual Data Discovery: MicroStrategy Desktop (1 day)

Roles/personas: Business Users | Executives

Course description
Import data into MicroStrategy Desktop to create visually appealing interactive dossiers. Turn your data into visualizations that enable you to quickly and easily analyze trends and key performance indicators. Analyze your visualization by applying thresholds, drilling, and filters. Connect Desktop to your environment to easily share and collaborate on your dossiers in MicroStrategy Library.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Importing and refining data to create dossiers
- Displaying data within appropriate interactive visualizations for the most effective business analysis
- Analyzing data effectively
- Building high-performing vector maps with Geospatial Services

MicroStrategy products covered
- MicroStrategy Desktop
- MicroStrategy Library

Right for you if
You want to learn how to create visually appealing interactive dossiers to improve your business analysis.

Topics
1. Import data
   - Dossier foundations
   - Explore a sample dossier
   - Import data

2. Create a dossier with data visualizations
   - Desktop interface
   - Types of visualizations

3. Analyze visualizations
   - Group related data objects: Layer data
   - Limit data to specific values: Filters
   - Easily identify trends
   - Dig deeper into your data: Drilling
   - Highlight important changes to your data: Thresholds
   - Create a metric based on existing metrics: Derived metrics
   - Enhance your dashboard: Adding text and images

4. Share and collaborate
   - Connect Desktop to an environment
   - Add a dossier to an environment and MicroStrategy Library
   - Export a dossier
   - Export a visualization
   - Further analyze your data

5. Workshop: Build the Geospatial Services Earthquake dossier
11.116 Introduction to Dossiers: Storytelling and Collaborating (1 day)

Roles/personas: Business Users | Executives | Analysts

Course description

An introduction to dossiers, MicroStrategy Library, and MicroStrategy Workstation, this class develops the skills to leverage MicroStrategy’s next-generation data discovery. Create interactive dossiers that display your data in visualizations to quickly and easily analyze trends and key performance indicators. Learn best practice design principles, how to collaborate on your insights across the enterprise through MicroStrategy Library, and how to deploy responsive mobile dossiers. Covers versions 10.9 through 2019 (v.11).

Skills you gain

- Creating an analytical book of business
- Business intelligence design best practices
- Sharing dossiers with colleagues
- Optimizing your business intelligence library of dossiers
- Collaboration methods through comments and custom filters
- Optimizing business intelligence for mobile devices

MicroStrategy products covered

- MicroStrategy Web
- MicroStrategy Library
- MicroStrategy Mobile
- MicroStrategy Workstation

Right for you if

You want to tell compelling stories with your analytical business intelligence and collaborate with colleagues across the enterprise. You are interested in learning about MicroStrategy’s dossier and Library tools.
11.121 Overview of Enterprise Mobility (2 days)

Roles/personas: Business Users | Executives | Application Architects | Mobile Architects

Course description Build basic enterprise mobile applications using MicroStrategy tools. Covers the fundamentals of enterprise mobility and builds the knowledge base necessary to tackle the more advanced courses offered for analysts, developers, and administrators. The majority of this course will be hands-on, performing basic mobile application design, development, and deployment.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Design principles for mobile apps
- Creating documents with interactive graphs
- Creating mobile configurations
- Adding mobile-specific features to a document
- Creating and deploying a mobile app to a mobile device
- Understanding of the mobile app development lifecycle
- Storyboarding
- Mobile architecture basics
- Optimizing dossiers for mobile platforms

MicroStrategy products covered
- MicroStrategy Mobile platform

Right for you if
You are an analyst who needs to create mobile apps to provide documents on mobile devices.

Best class experience if you have
10.111 Overview of Enterprise Analytics
10.141 Introduction to Documents
A supported mobile device.

Topics
1. Plan and design a MicroStrategy Mobile app
   - User-centered design
   - Select the platforms to support your app
   - Graphic design considerations
   - Design best practices for tablets
   - Design best practices for smartphones
   - Create, develop, and test your app
2. Create a Mobile app
   - The business scenario
   - App components
   - MicroStrategy links
   - Building the Sales Performance app
   - Creating the documents: Adding objects
   - Adding interactive elements to the app
   - Layering and grouping data in the app
3. MicroStrategy Library Mobile App
   - Create dossiers and optimize them for mobile devices
4. Extend Mobile capabilities
   - Transaction Services
   - Mobile SDK
5. Administration and app deployment
   - The Mobile client
   - Mobile architecture
   - Mobile configuration
   - Mobile app deployment
   - Additional Mobile features
11.131 Overview of Enterprise Security (1 day)

**Roles/personas:** Business Users | Executives | Application Architects | Identity Architects

**Course description**
Gain the practical knowledge needed to build and deploy an entire enterprise security network to secure the enterprise’s processes, people, and assets. Learn the fundamental concepts of securing an enterprise and the critical requirements of a modern security solution. In this hands-on course, MicroStrategy Identity is used to create and deploy security networks.

Covers versions 10 through 2019 (v.11).

**Skills you gain**
- Leverage MicroStrategy Identity and the Badge app
- Badge networks
- Security network of logical and physical assets
- Analyze common corporate data collecting, compliance
- Analyze mobile device use policies
- Two-factor authentication

**MicroStrategy products covered**
- MicroStrategy Identity
- Badge app
- MicroStrategy Communicator
- MicroStrategy Web

**Right for you if**
You are a business analyst or security professional who wants to learn the fundamentals of the Identity platform.

**Best class experience if you have**
Overview of Enterprise Analytics

**Topics**
1. Introduction to Enterprise Security
   - Identity platform and badges
2. Mobile Badge app and badge creation
3. Designing the Identity security network architecture
   - Security analysis
   - Design and implementation planning
   - Connect to MicroStrategy Web with Badge
4. Project
   - Project tasks
   - Project solutions
11.132 Enterprise Security Analytics (1 day)

Roles/personas: Business Users | Analysts | Application Architects | Identity Architects

Course description
Master the skills necessary to design and build enterprise security analytics enriched with data from various corporate resources. Includes hands-on exercises to build out enterprise security analytics. Covers versions 10 through 2019 (v.11.1).

Skills you gain
- Using Platform Analytics reporting objects
- Monitor access to buildings and doors
- Monitor logical access to software systems

MicroStrategy products covered
- MicroStrategy Identity
- Platform Analytics
- MicroStrategy Web
- MicroStrategy Mobile

Right for you if
You are a business analyst or security professional who needs to start setting up security and monitoring user identity and activity in your environment.

Best class experience if you have
Overview of Enterprise Analytics
Overview of Enterprise Security

Topics
1. Introduction to Identity Analytics
   - Overview of MicroStrategy Identity
   - MicroStrategy Identity architecture fundamentals
   - Overview of Identity Analytics
   - Analyzing Identity network utilization
   - Installing the MicroStrategy Badge app
2. Reporting in Platform Analytics
   - Installing and configuring Platform Analytics
   - Accessing the Platform Analytics project
   - Custom reporting
   - MicroStrategy object categories
   - Viewing and distributing reports
   - Building reports
   - Creating documents
   - Creating dossiers
   - Viewing documents in MicroStrategy Web
   - Analyzing reports in a mobile environment
11.141 Introduction to Documents (2 days)

Roles/personas: Business Users | Analysts | Application Architects

Course description

Create Report Services documents to satisfy sophisticated information requirements. Display grids, graphs, text, and images. Transform data into an appealing, insightful presentation for financial reports, budgets, and invoices. Hands-on exercises to create a basic document, then build on the basics to create a grouped document to fine-tune information display, to create a logical workflow to make business decisions.

Covers versions 10 through 2019 (v.11).

Skills you gain

• Creating boardroom-quality business documents
• Analyzing organizational data to make effective business decisions
• Identifying appropriate business concepts to evaluate calculations
• Logically planning subsets of data for analysis using grouping and custom sections
• Designing business reports for other users
• Adding data from a MicroStrategy report or an external data source
• Sharing documents using collaborative notes

MicroStrategy products covered

• MicroStrategy Web
• MicroStrategy Report Services

Right for you if

You are a beginning analyst who needs an introduction to document design.

Best class experience if you have

Overview of Enterprise Analytics or Introduction to Analytics Reporting

Topics

1. Overview of documents
   • Creating a simple document
   • When to use each view: Summary
2. Adding data to documents: Datasets
   • Importing from an external data source
3. Displaying data and text on documents
   • Labeling your data: Static text
   • Displaying dataset objects: Dynamic text
   • Organizing and designing your document: Document sections
   • Displaying: Auto text
   • Adding sections to the document
   • Displaying images
   • Delineating areas: Lines and rectangles
   • Arranging and formatting objects
4. Displaying reports on documents
   • Displaying data as a report
   • Using report title bars
   • Editing the report data
   • Formatting reports
5. Grouping documents: Creating custom sections
   • Organizing and sorting documents by grouping
   • Grouping: Creating custom sections
   • Changing how groups are displayed
   • Disabling group selection
6. Collaborating: Sharing insights
   • Sharing comments using the Notes pane
   • Subscribing for automatic delivery
   • Sharing documents with other users
11.142 Dashboarding and Visualizations (2 days)

Roles/personas: Business Users | Analysts | Application Architects | Analytics Architects | Mobile Architects

Course description
Import and refine data to create visually compelling, interactive data representations (visualizations). Format, analyze, filter, and layer the visualizations to create appealing, insightful dashboard-style dossiers through the MicroStrategy Web interface. Share your dossiers to collaborate with other users and access the dossiers on web and mobile devices.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Graphing techniques to identify and analyze trends, anomalies, and other important meaning in data
- Selecting the appropriate interactive graph to display data for a specific business analysis
- Converting raw data into a clean visual display to view quality and consistent information
- Organizing data in layers to connect similar information
- Creating logical patterns in data using filtering techniques
- Tagging colleagues and commenting

MicroStrategy products covered
- MicroStrategy Web
- MicroStrategy Library
- Library App on mobile devices

Right for you if
You are interested in learning about the basics of MicroStrategy dashboarding.

Topics
1. Getting started: Dashboarding and visualizations
   - Adding data to your dossier
   - Displaying data as a visualization
   - Filtering data on a dossier
   - When to use a dossier vs. a document
2. Importing data
   - Improving quality of data's structure
   - Data wrangling
   - Importing data from different data sources
3. Visualizing your data
   - Creating visualizations
   - Heat maps
   - Maps: Displaying geographic data
   - Network visualizations
   - Pie charts
4. Filtering and layering data
   - Layers of data that are filtered differently: Chapters
   - Layers of data that are filtered the same: Pages
   - Using one visualization to filter the data in another visualization
   - Filtering on a dataset object: Object filters
   - Linking pages with visualizations: Page-to-page filters
5. Sharing dossiers everywhere
   - MicroStrategy Library on Web and mobile devices
   - Certifying dossiers
   - Staying connected to your data: Dossiers on mobile devices
11.212 Portal Integration using SDK (1 day)

Roles/personas: Developers | Services Architects

Course description
Integrate MicroStrategy Web into portals such as Microsoft SharePoint, IBM WebSphere, and Oracle WebLogic using the Web SDK. Learn how to extend single sign-on within portals to create a seamless user experience.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Portal architecture and design
- Portlet-to-portlet functionalities
- Customizing single sign-on authentication for portal and portlets
- Credential mapping
- Basic URL API to customize software behavior

MicroStrategy products covered
- MicroStrategy Web
- Portal integration features

Right for you if
You want to integrate MicroStrategy Web with portal systems.

Best class experience if you have
Overview of Enterprise Analytics
SDK for Customizing Analytical Applications
Familiarity with web standards such as XML

Topics
1. Introduction to MicroStrategy portal integration
   - Portal servers
   - Portlets
2. MicroStrategy portal architecture
   - Portlet life cycle and architecture
   - MicroStrategy out-of-the-box portlets
   - Configuration templates
3. Portal-to-portlet communication
   - Portlet-to-portlet functionality
   - Enabling portlet-to-portlet communication
4. Portal SDK customizations
   - Customizing MicroStrategy content in portals
   - Customization approaches
   - Customizing single sign-on (SSO) authentication
5. Portlet URL communication
   - Introduction to URL API
   - Single sign-on with portals using URL API
6. Using other portlets with MicroStrategy portlets
7. Embedding dossiers in portals
11.213 SDK for Customizing Analytical Applications (2 days)

Roles/personas: Developers | Services Architects

Course description
Learn how to take advantage of MicroStrategy Web APIs and SDKs to change Web behavior and look-and-feel. Learn how to embed dossiers in web pages and customize MicroStrategy Library.
Covers versions 10 through 2019 (v.11).

Skills you gain
- Plan customizations for MicroStrategy Web
- Eclipse Integrated Development Environment
- Web Customization Editor
- Create custom pages and links
- Create custom plug-ins and Web beans
- CSS
- Embedding SDK
- Library SDK

MicroStrategy products covered
- MicroStrategy SDK
- MicroStrategy Web
- MicroStrategy Workstation
- MicroStrategy Library

Right for you if
You are a software developer or technically-inclined business analyst who wants to customize the MicroStrategy Web interface and add extra functionality.

Best class experience if you have
10.111 Overview of Enterprise Analytics
Introductory Java development
Some exposure to Eclipse

Topics
1. SDK: Extend, Integrate, and Embed
   - Target scenarios for the MicroStrategy SDK
   - Levels of customization
2. My First Plug-in
   - Plug-in architecture
   - Introducing Eclipse
   - Introducing the Web Customization Editor
   - Plug-ins best practices
3. Customizing menus
   - Contextual menus
   - Finding information about an event
   - Ribbons, menus, and toolbars
4. Embedding a dossier in a HTML page
   - How to embed a dossier
   - Location of the Embeddinglib library
5. Customizing Pages
   - MicroStrategy Web code
   - MicroStrategy Web architecture
   - Adding a new page
   - Page templates and sections
   - Page configuration
   - Page shortcuts
6. Blocks of Data: Web Beans
   - Beans folder and bean properties
   - Styles and beans
   - Adding and removing beans
7. Formatting Display: Cascading Style Sheets
   - Types of CSS
   - Customizing CSS files
8. Branding MicroStrategy Library
   - Reviewing the base plug-in
   - What you can customize
   - Design considerations
   - Using custom fonts with MicroStrategy Library
11.214 Introduction to Coding with MicroStrategy SDK (1 day)

Roles/personas: Developers

Course description
Learn about HTML and CSS to prepare you to dive into other MicroStrategy SDK classes. Discover or just refresh your knowledge on the technologies behind MicroStrategy SDKs. Review key programming concepts and how the Web works.

Skills you gain
- Programming overview
- Programming attitude
- Programming Concepts
- Object oriented principles
- Write HTML
- Write CSS rules

MicroStrategy products covered
- MicroStrategy Web

Right for you if
You are a junior or aspiring software developer who wants to learn the underlying technologies of MicroStrategy SDKs.

Best class experience if you have
Overview of Enterprise Analytics

Topics
1. You are a developer
   - Inside a developer’s toolbox
   - Coding 101
2. Programming concepts
   - Expressions and statements
   - Perform a single action: Simple statement
   - Which statement is executed: Decision statement
   - Performing actions multiple times: Repetition statement
   - Combining statements: Procedures and functions
   - Object oriented programming basics
   - Algorithms
   - REST: Dialog between systems
3. How the Web works
   - How web pages work and its four pillars
   - Client-side vs server side
   - MicroStrategy Web processing a request
4. HTML
   - Defining web page structure: Tags
   - Base page
   - Levels of content: Headings
   - Links to content outside your page
   - Sections of a page: Div tags
   - iFrame and tables
5. CSS
   - Walk-through: Multiple styles, one HTML content
   - Locations of styles
   - Order of evaluation
   - Selectors
11.215 Embedding Analytics with MicroStrategy REST API (1 day)

Roles/personas: Developers

Course description
Learn to leverage different APIs offered by MicroStrategy through REST end points. Embed dossiers in web pages with the Embedding API library, manipulate data objects from a custom application, and push your data into a data cube using your custom code with Push API.

Skills you gain
- MicroStrategy REST API Explorer
- JavaScript code
- JSON format
- cURL
- WinSCP and VNC

MicroStrategy products covered
- MicroStrategy REST API Explorer
- MicroStrategy Web
- MicroStrategy Library
- Push API
- Embedding API

Right for you if
You are a software developer who wants to learn how to use REST API end points in custom applications.

Best class experience if you have
- Overview of Enterprise Analytics
- SDK for Customizing Analytical Applications
- JavaScript experience

Topics
1. Fundamentals in REST API
   - Developing in an intelligent enterprise
   - API 101
   - JSON as a communication format
   - Web services and REST
   - MicroStrategy RESTful APIs
2. Tools of the Trade
   - MicroStrategy REST API Explorer
   - cURL
3. Certify a Dossier
   - Certifying a dossier through REST
4. Embedding a Dossier in an HTML Page
   - Embedding SDK
   - How to embed a dossier
5. Creating Data using Push API
   - Push API
   - Using REST API to create a cube
   - Code walk-through
11.221 SDK for Customizing Mobile Applications (2 days)

Roles/personas: Developers | Mobile Architects | Services Architects

Course description

Develop a deep understanding of MicroStrategy Mobile APIs & SDKs. Learn to create custom mobile applications and mobilize any existing business application. Covers versions 10 through 2019 (v.11).

Skills you gain

- Using Apple's Xcode development environment
- Planning customizations for MicroStrategy Mobile SDK
- Mobile architecture design and components
- Rebranding a mobile app
- Associating appropriate frameworks and libraries
- Creating a plug-in using Eclipse IDE
- Creating mobile configurations for different devices
- Deploying mobile configurations as a URL or embedded in the app

MicroStrategy products covered

- MicroStrategy Mobile
- MicroStrategy SDK
- MicroStrategy Web

Right for you if

You are interested in customizing the Mobile app and adding functionality on both the client and server sides.

Best class experience if you have

SDK for Customizing Analytical Applications

Overview of Enterprise Mobility

Familiarity with iOS environment, Objective-C, Swift, and Java

Topics

1. Discovering and installing MicroStrategy Mobile SDK
   - What is MicroStrategy SDK?
   - Target scenarios behind the MicroStrategy SDK
   - Meet the family
   - MicroStrategy Mobile overview
   - Mobile SDK
   - What can I do? Levels of customization
2. Using Xcode to configure the base MicroStrategy Mobile app
   - Xcode overview
   - Walk-through: My first Xcode Swift application
   - MicroStrategy Mobile architecture
3. Customizing mobile configurations, icons, and splash screen
   - Pre-configuring the mobile app
   - Adding credentials to the configuration
   - Changing the application icons
   - Replacing the splash screen
4. Customizing animation, help system, and fonts
   - Adding an animation to the app
   - Creating a custom help system
   - Using custom fonts
5. Security and authentication
   - Adding a parameter to the login screen
   - Managing the extra parameter in code
11.231 SDK for Customizing Enterprise Security (1 day)

Roles/personas: Developers | Identity Architects | Services Architects

Course description
Inject security into every enterprise system, application, business process, and transaction. Use hands-on exercises to gain an understanding of the MicroStrategy Identity APIs and SDKs and extend the core enterprise security network to every corner of the enterprise.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Security certificate generation and management
- Identity network creation and management
- Identity API calls
- Introductory SAML
- Introductory authorization and authentication workflows

MicroStrategy products covered
- MicroStrategy Identity
- Identity SDK

Right for you if
You are a software developer or technically-inclined business analyst with a desire to customize your MicroStrategy Identity system.

Best class experience if you have
Overview of Enterprise Security
SDK for Customizing Analytical Applications

Topics
1. Pre-Course setup
2. Preparing your Identity Network
   - MicroStrategy Identity as an identity platform
   - Identity SDK
   - Identity platform main components
   - Creating an Identity network and badge
3. Creating a certificate for your application
   - Creating a private key and CSR file
   - Registering your application in Identity Manager
   - Creating the PKCS 12 file
4. Securing your application using Identity
   - Enabling client certificate support
   - Installing an application in Eclipse
   - Configuring Tomcat context for an application
   - Application configuration file
   - Custom code to interact with MicroStrategy Identity
5. Securing an application using SAML
   - Setting up Identity for SAML
   - Configuring the application for SAML and MicroStrategy Identity
6. Creating an opt-in page for Identity
   - GDPR and data privacy
   - An opt in page solution
11.311 Administration for Enterprise Analytics (3 days)

Roles/personas: Application Architects | Analytics Architects | Mobile Architects | Platform Administrators | System Administrators | Database Architects

Course description
Deploy, manage, and secure a MicroStrategy Enterprise Analytics environment. Optimize and automate common administrator tasks, and monitor the MicroStrategy environment using various administration tools and features. Includes hands-on exercises in an enterprise analytics Cloud environment.

Covers versions 10 through 2019 (v.11).

Skills you gain
- System tuning based on business requirements
- Project lifecycle management and cross-environment object migration planning
- Automated script development
- Security planning based on corporate security requirements
- Implementing user credential and authentication rules
- Versioning and object change auditing

MicroStrategy products covered
- MicroStrategy Developer
- MicroStrategy Workstation
- MicroStrategy administration tools

Right for you if
You are an administrator who wants to fully administrate a complete MicroStrategy environment.

Best class experience if you have
Overview of Enterprise Analytics

Topics
1. MicroStrategy Analytics Platform overview
2. Installing MicroStrategy
   - MicroStrategy deployment options
   - Intelligence Server installation and activation
3. MicroStrategy Workstation
   - Managing environments and objects
   - User security
4. Connectivity
   - Analytics architecture
   - Two-tier, three-tier, and four-tier environments
5. Configuring the analytics environment
   - Managing system resources
   - Monitoring and governing projects
6. Optimizing system performance
   - Caching and Intelligent Cubes
   - Scheduling and subscriptions
7. Managing user authentication
   - Configuring Identity authentication
   - Account security policy
8. Managing user security and access
   - Groups, users, and security roles
   - Managing access to data and objects
   - Connection mapping
   - Security filters and Access Control Lists
9. Managing the project life cycle
   - Migrating objects across environments
   - Object Manager migration methods
10. Managing data integrity
11. Automating administrative tasks
    - Automating tasks with Command Manager scripts
    - System Manager workflows
12. Tracking changes with change journaling
11.312 Administration for MicroStrategy on AWS (2 days)

Roles/personas: Platform Administrators | System Administrators

Course description

Learn the tasks involved in administering the MicroStrategy platform in the MicroStrategy on AWS environment, using the self-service as well as the fully-managed deployment options. You will learn how to manage user security, establish connectivity, monitor project activity, and configure the environment for optimal performance and security.

Covers versions 10 through 2019 (v.11).

Skills you gain

- Cloud architecture
- Provisioning and managing MicroStrategy on AWS cloud environments
- Security in a cloud environment
- System performance optimization
- Scheduling administration tasks in a cloud environment
- User authentication
- System monitoring

MicroStrategy products covered

- MicroStrategy on AWS, including MicroStrategy Developer, Workstation and MicroStrategy Web

Right for you if

You are an administrator who wants to administer your MicroStrategy system in a cloud environment.

Best class experience if you have

Overview of Enterprise Analytics

Topics

1. Introduction to MicroStrategy Platform
   - Platform overview, components, tools, and deployment options

2. MicroStrategy on AWS
   - Configuration options
   - Deploying and managing AWS environments
   - Security in AWS environment

3. MicroStrategy Workstation
   - Managing environments and objects
   - Configuring user security

4. Managed AWS environment
   - MicroStrategy on AWS services
   - Cloud team and customer responsibilities
   - Environment management

5. Connectivity
   - Four-tier analytics architecture

6. Managing user security and access
   - Groups and users
   - Managing access to data and objects
   - Connection mapping
   - Security filters and roles
   - Access Control Lists

7. Managing system performance
   - Caching and Intelligent Cubes
   - Scheduling and subscriptions

8. Monitoring system activity
   - Enterprise Manager workflow and architecture
   - Enterprise Manager configuration and best practices

9. Migrating to Cloud
11.313 Introduction to Big Data (1 day)

Roles/personas: Application Architects | Analysts

Course description

Understand big data from the ground up, including structured, unstructured, and semi-structured data attributes of big data, as well as use cases. Get specific experience with Hadoop’s ecosystem, as well as MicroStrategy data integration, federation, modeling, preparation, and certification support. Provides details to integrate MicroStrategy with Hadoop, as well as self-service and integration with SalesForce.

Covers versions 10 through 2019 (v.11).

Skills you gain

- Big data ecosystem
- Data retrieval from Hadoop
- Web Services integration using XQuery
- Reporting in a big data environment
- Data retrieval from Apache Spark, Hive, and Drill
- Data retrieval from Presto
- SQL on Hadoop

MicroStrategy products covered

- MicroStrategy Developer

Right for you if

You are a business intelligence professional interested in learning about big data and leveraging MicroStrategy for a comprehensive big data solution.

Best class experience if you have

Overview of Enterprise Analytics

Topics

1. Overview of big data and Hadoop
2. Working with Hadoop and MicroStrategy
   - Working with Hadoop distributions
   - MicroStrategy-Hadoop connectivity options
   - SQL on Hadoop
   - Connecting MicroStrategy to HDFS: Hadoop Gateway
   - Web services integration
3. Working with Spark Processing Engine and MicroStrategy
   - Spark overview
   - Spark architecture
   - Connect MicroStrategy to Spark
11.314 Working with MicroStrategy in Linux (1 day)

Roles/personas: Platform Administrators | System Administrators

Course description

This class touches on the basics of Linux, then covers deployment of the MicroStrategy Analytics platform in a Linux environment to learn the directory structure, location of MicroStrategy utilities, and how to take advantage of them. Learn the various tools and features available for managing, performance tuning, and troubleshooting your Linux environment.

Covers versions 10 through 2019 (v.11).

Skills you gain

- Understanding the deployment process, best practices, and directory structure in a Linux environment
- Using the best tools to establish platform connectivity and manage your Linux environment
- Sharing resources in a clustered Linux environment
- Using call stacks, log files, and tracing for troubleshooting

MicroStrategy products covered

- MicroStrategy Intelligence Server Universal
- MicroStrategy Web Universal
- MicroStrategy Mobile

Right for you if

You are a MicroStrategy administrator who wants to manage the MicroStrategy Analytics platform in a Linux environment.

Best class experience if you have

Administration for Enterprise Analytics

Topics

1. MicroStrategy Analytics Platform for Linux
   - Overview of MicroStrategy Analytics platform
   - Linux basics and tools
2. Installation in a Linux environment
   - Installation process
   - Directory structure
   - Multiple installations
   - Deploying .war files and Web servers
   - Installation best practices
   - Configuring analytics environment
   - MicroStrategy tools for Linux
3. Administering MicroStrategy
   - Managing Intelligence Server
   - Monitoring project activity
   - Governing
   - Job prioritization
   - Clustering in Linux environment
   - Administering MicroStrategy Web Universal
   - Administering MicroStrategy Mobile
4. Performance tuning and troubleshooting
   - Tuning Linux
   - Tuning MicroStrategy Web and application servers
   - Tuning Intelligence Server
   - Troubleshooting
11.321 Administration for Enterprise Mobility (1 day)

Roles/personas: Mobile Architects | System Administrators

Course description
Gain practical knowledge necessary to deploy, configure, manage and optimize the performance of mobile applications either on-premise or via MicroStrategy on AWS.
Covers versions 10 through 2019 (v.11).

Skills you gain
- SSO authentication configuration in a mobile environment
- Mobile app deployment options
- Mobile architecture
- Error handling in a mobile environment
- Security in a mobile environment
- Mobile subscription creation
- Mobile performance improvement strategies
- Troubleshooting mobile issues

MicroStrategy products covered
- MicroStrategy Mobile
- MicroStrategy Mobile Administrator

Right for you if
You are an administrator who wants to optimize, secure, and manage a MicroStrategy Mobile environment.

Best class experience if you have
Overview of Enterprise Mobile supported mobile device

Topics
1. Introduction to Mobile administration
   - Architecture
   - Clients
   - Deploying apps
   - Server installation
   - Generating a configuration link
   - Privileges and permissions
   - Enabling single sign-on authentication
2. Subscriptions
   - Scheduling and subscriptions
   - Creating schedules
   - Alerting
   - Subscription Creation Wizard
   - Subscription Manager
   - Subscription information and governors
   - Error handling
3. Mobile security
   - Mobile device, data, and app security
   - Authentication
   - Analytics platform security
   - Groups and users
   - Privileges and security roles
   - Project level security
   - Managing access to MicroStrategy objects
4. Mobile performance and troubleshooting
   - Mobile performance improvement strategies
   - Troubleshooting
   - Diagnostic logs
   - Configuring diagnostics
11.331 Administration for Enterprise Security (1 day)

Roles/personas: Identity Architects | System Administrators

Course description
Learn how to deploy and manage enterprise security networks for securing the enterprise’s processes, people, and assets. Set up user badges and other security measures, to allow security analysts to track and monitor physical and logical (software) system use.

Covers versions 10 through 2019 (v.11.1).

Skills you gain
- Deploy user badges
- Security architecture and components
- Create an Identity network of users
- Set up restrictions on a badge, including passcode, location, and time-based
- Synchronize user network with identity management systems (IDMS)

MicroStrategy products covered
- MicroStrategy Identity

Right for you if
You are an administrator or security professional who wants to set up and manage the MicroStrategy Identity platform.

Best class experience if you have
Overview of Enterprise Analytics
Overview of Enterprise Security

Topics
1. Introduction to enterprise security
   - Traditional security methods
   - Enhancing the security of traditional measures
   - Software-based security measures
   - MicroStrategy Identity use cases
   - Responsibilities of a MicroStrategy Identity administrator

2. MicroStrategy Identity architecture and deployment
   - MicroStrategy Identity workflows
   - MicroStrategy Identity deployment
   - MicroStrategy Identity implementation scenarios

3. MicroStrategy Identity administration
   - Creating an Identity network and badge
   - Managing network properties
   - Adding, editing, and removing users and administrators
   - Managing badge properties
   - Badge setup and recovery
   - Configuring VPN connections to integrate MicroStrategy Identity
   - Deleting an Identity network
   - Gateway configuration

4. Security
   - Security in the MicroStrategy Identity platform
   - Client-level security
   - Data transmission-level security
   - MicroStrategy Identity server-level security
   - MicroStrategy Identity gateway-level security
11.411 Project Architecting (3 days)

**Roles/personas:** Analytics Architects  |  Application Architects  |  Analysts  |  Mobile Architects  |  Identity Architects  
Platform Administrators  |  Database Administrators

**Course description**

Create and maintain the foundation of an enterprise analytics application by developing a physical schema and logical model from single, multiple, or heterogeneous data sources. Develop core objects of the reporting infrastructure such as attributes, facts, hierarchies, and mappings to data warehouse tables. Leverage advanced options to build the infrastructure for efficiency and performance.

Covers versions 10 through 2019 (v.11).

**Skills you gain**

- Logical data modeling
- Data warehouse schema development
- Project life cycle management
- Schema management
- Aggregate table development
- Multisource report development
- Partitioning
- Business intelligence project design

**MicroStrategy products covered**

- MicroStrategy Architect

**Right for you if**

You are a project designer or advanced analyst who wants to learn the process of creating a project foundation.

**Best class experience if you have**

Overview of Enterprise Analytics

**Topics**

1. Architecting the MicroStrategy schema
   - MicroStrategy project life cycle
   - Creating a logical data model
   - Data warehouse physical schema design
   - Creating a MicroStrategy schema
2. Managing the MicroStrategy schema
   - Modifying facts
   - Aggregate tables
3. MicroStrategy Multisource Option
   - Primary and secondary database instances
   - Support for duplicate tables
   - SQL generation for multisource reports
   - Supported use cases
4. Advanced design features
   - Fact level extension
   - Partitioning
   - Data importing
   - Logical view creation
   - Attribute role configuration
11.412 Advanced Analytics Reporting (2 days)

Roles/personas: Analysts | Data Scientists | Analytics Architects | Application Architects | Mobile Architects | Identity Architects

Course description
Develop advanced report objects (metrics, filters, derived attributes, custom groups, and consolidations) to create complex analytical reports. The majority of this course is hands on using MicroStrategy Developer and Web in a Cloud environment.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Creating non-aggregatable metrics
- Creating level metrics to compare contributions
- Creating transformation metrics to offset values
- Using advanced mathematical functions in metric calculations
- Combining elements from different attributes to filter data
- Using dynamic dates to filter data
- Using pass-through functions to filter data
- Creating attributes and metrics on the fly
- Optimizing performance with Intelligent Cubes
- Determining the order of calculation
- Determining how data source tables are joined to produce specific results

MicroStrategy products covered
- MicroStrategy Developer and Web

Right for you if
You are an advanced analyst who needs to support complex reporting needs.

Best class experience if you have
Introduction to Analytics Reporting
Overview of Enterprise Analytics

Topics
1. Introduction to advanced analytics
   - Metadata objects and dependencies
2. Base formulas and advanced subtotals
3. Advanced metrics
   - Conditional metrics
   - Transformation metrics
   - Count metrics
   - Advanced functions
   - Dynamic aggregation
4. Level and inventory metrics
   - Level metrics
   - Interacting with the context of reports: Report level
   - Non-aggregatable metrics
   - Nested metrics
5. Advanced filters
   - Filtering data on reports
   - Comparing two attributes: Attribute-to-attribute filtering
   - Filtering with dynamic dates
   - Combining elements from different attributes: Joint element list
   - Importing filter elements
   - Pass-through functions
   - Set qualifications
   - Relationship filters
6. Advanced attributes
   - Derived attributes and elements
   - Consolidations and custom groups
7. Intelligent Cubes
8. Advanced reporting options
   - Report data options
11.413 Advanced Documents: Interactivity and Joining Datasets (2 days)

Roles/personas: Analysts | Mobile Architects

Course description
Create documents to combine data from multiple sources in a pixel-perfect format. Allow end users to interact with documents using selectors, panels, and widgets. The majority of this course is hands on using MicroStrategy Web in a Cloud environment.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Creating a document with pixel-perfect formatting
- Adding interactivity to documents
- Combining data from multiple sources in a single document and specifying data joins
- Layering data and multiple documents
- Linking documents to other documents, reports, and web pages
- Designing documents for multiple users
- Combining metrics from multiple datasets

MicroStrategy products covered
- MicroStrategy Report Services in MicroStrategy Web

Right for you if
You are an advanced analyst who needs to create documents to combine data from multiple sources, provide interactivity, and control formatting down to the pixel.

Best class experience if you have
- Introduction to Analytics Reporting
- Overview of Enterprise Analytics
- Introduction to Documents

Topics
1. Introduction to documents
   - Interactive documents
   - Creating a simple document
2. Creating a document
   - Document Editor
   - Document objects
   - Arranging and formatting objects
   - Designing with document sections
   - Creating a document
3. Advanced document options
   - Using templates
   - Adding MicroStrategy reports
   - Creating metrics in a document
   - Creating layers of documents: Multi-layer documents
   - Opening documents, reports, and web pages from a document: Linking
   - Highlighting data that meets thresholds: Conditional formatting
   - Tooltips: Providing additional information
4. Adding data to documents: Datasets
   - Providing the data displayed on documents
   - Using multiple datasets
   - Reports that use multiple datasets
   - Calculated expressions: Combining metrics from multiple datasets
5. Interactive documents
   - Dashboard design techniques and tips
   - Document objects to provide interactivity
   - Creating an interactive document
11.421 Advanced Mobile Applications (2 days)

Roles/personas: Analytics Architects | Analysts | Mobile Architects

Course description

In hands-on exercises, create two interactive documents and a dossier, and link them together to create a mobile app. Use a variety of Mobile widgets and interactive document components. Learn about advanced mobile application features such as docked panel selectors, navigation templates, and cutting-edge Mobile widgets. Create custom, code-free home pages. Learn applicable tasks for Mobile administrators to help you design a powerful and effective mobile app.

Covers versions 10 through 2019 (v.11).

Skills you gain

• Adding complex interactive analysis to a Mobile app
• Configuring an app with code-free customizations
• Robust app navigation functionality
• Making personal design decisions for app creation
• Applying design principles for a polished app
• Understanding of app performance analysis tools

MicroStrategy products covered

• MicroStrategy Web
• MicroStrategy Mobile
• MicroStrategy Report Services

Right for you if

You are a document or dashboard designer or mobile app designer who wants to utilize advanced Mobile features.

Best class experience if you have

Dashboarding and Visualizations
Overview of Enterprise Mobility
Introduction to Documents
Advanced Documents

Topics

1. Create a robust app
   • Enhance your Mobile app with images
   • Design for multiple mobile devices: Multiple views
   • Further analyzing your data: Drilling
   • Provide additional information to users: Information windows
   • Add interactivity with Mobile widgets
   • Advanced app navigation

2. Enhance your app with a dossier and Transaction Services
   • Dossiers
   • Transaction Services

3. Code-free customizations
   • Customize your app without using code
   • Let users customize displayed data with prompts
   • Configure the home screen for a mobile device
   • Enable My Reports folder

4. Understand the impact of Mobile administration
   • User notifications, subscriptions, and alerts
   • Enterprise Mobility Management
   • Improve the user experience by understanding Mobile statistics
   • Prepare content for offline mode
   • Deploy a MicroStrategy Mobile app
11.422 Database Write-back: Mobile Transactions (2 days)

Roles/personas: Analysts | Mobile Architects | Services Architects

Course description
Create mobile applications with write-back enabled functionality (transactions) for extended business value. Learn how to save and store business decisions and initiate transactions in your mobile apps. Build workflows with stored procedures, input-dependent text, and transactional SQL.
Covers versions 10 through 2019 (v.11).

Skills you gain
- Creating freeform SQL queries
- XQuery coding to submit transactions through web services
- Creating transaction reports
- Creating data tables in a data warehouse that can have data written back to them
- Creating documents
- Configuring database write-back transactions
- Creating transaction-enabled mobile apps
- Configuring transactions for offline functionality

MicroStrategy products covered
- MicroStrategy Transaction Services
- MicroStrategy Mobile
- MicroStrategy Web
- MicroStrategy Report Services

Right for you if
You are an advanced mobile app designer creating apps that utilize write-back transactions.

Best class experience if you have
Overview of Enterprise Mobility
Project Architecting
A supported mobile device

Topics
1. Introduction to MicroStrategy Transaction Services
   - Building blocks of Transaction Services: Freeform SQL and Freeform XQuery
   - Transaction Services terminology
   - Use scenarios
2. Create query reports using Freeform SQL
   - Benefits and limitations of Freeform SQL reports
   - Creating a Freeform SQL report
3. Transaction Services reports
   - Create a Transaction Services report
4. Transaction Services documents
   - Create a Transaction Services-enabled document
   - Add transactions to a grid report
5. Interact with Transaction Services on mobile devices
   - Transaction tables
   - Mobile transaction controls
   - Photo Uploader widget
   - Image Viewer widget
   - Survey widget
   - Offline Mode
6. Create transaction reports with XQuery
   - Overview of Web services
   - About XQuery
   - Define a Freeform XQuery report
   - Create transactional documents
**11.431 Advanced Enterprise Security Analytics (1 day)**

**Roles/personas:** Analysts | Identity Architects

**Course description**
Learn about identity intelligence, and how to gather and use telemetry services to understand your user behavior and actions. Take advantage of MicroStrategy Communicator mobile app to monitor and communicate with teams, including push notifications. Get hands-on experience creating custom analytics that help you deconstruct data silos and understand the truth in your organization. Covers versions 10 through 2019 (v.11).

**Skills you gain**
- Install MicroStrategy Badge and MicroStrategy Communicator apps
- Create a network of users
- Monitor user activity
- Analyze resource use, transactions, and other enterprise activity
- Understand a detailed analytics project architecture
- Understand Apache Kafka
- Track user activity and emergency response

**MicroStrategy products covered**
- MicroStrategy Identity

**Right for you if**
You are an advanced analyst, administrator, or security professional who wants to create custom or complex analytics and fully utilize Platform Analytics and MicroStrategy Communicator features.

**Best class experience if you have**
Overview of Enterprise Security
Enterprise Security Analytics

**Topics**
1. Identity Intelligence
   - MicroStrategy Identity platform
   - Identity Intelligence
   - Identity Intelligence via the MicroStrategy Identity platform
   - MicroStrategy Identity deployment options
   - Configuring Platform Analytics and MicroStrategy Communicator
2. MicroStrategy Communicator
   - MicroStrategy Communicator app
   - Managing user access
   - Photo policy assessment
   - MicroStrategy Communicator Analyst role
3. Security analytics
   - Platform Analytics
   - Improving MicroStrategy Identity data quality
   - Real time reporting with Platform Analytics
   - Location tracking
   - Viewing gateway badge statistics
   - Viewing members who use your badges
11.511 Advanced SDK for Customizing Visualizations (2 days)

Roles/personas: Developers | Services Architects

Course description
Learn how to adapt D3 and other graphs so they are compatible with MicroStrategy and then integrate them into a dossier. Create a new visualization from scratch, or use a visualization from the Internet. Incorporate advanced features like metric thresholds, customized drop zones, and custom properties. Explore complex real-world visualizations to appropriately and easily implement these features, and deploy them to other environments. Provides advanced customization techniques, including coding.
Covers versions 10 through 2019 (v.11).

Skills you gain
- Analyzing and writing code in JavaScript
- Modifying XML files, HTML, and CSS
- Using the Visualization SDK API
- Introductory D3 and SVG
- Creating a D3 visualization and a plug-in
- Converting a D3 visualization to consume MicroStrategy data
- Defining custom properties in a visualization

MicroStrategy products covered
- MicroStrategy SDK
- MicroStrategy Web
- MicroStrategy Desktop

Right for you if
You are an advanced SDK developer who wants to adapt visualizations and create new ones.

Best class experience if you have
Overview of Enterprise Analytics
SDK for Customizing Analytical Applications
JavaScript experience

Topics
1. Introduction to visualizations
   - MicroStrategy SDK, Visualization SDK, and Visualization Builder
   - Data visualization
   - D3.js for visualizations
2. Convert D3 visualizations
   - Data-driven documents
   - Sources of D3.js visualizations
   - Map data to MicroStrategy constructs in code
3. Create D3 visualizations
   - Use a basic template
   - Scalar Vector Graphics (SVG) primer
   - Creating a visualization
4. Exploit advanced visualization features
   - Use a visualization as a selector
   - Change the number of metrics and attributes
   - Change an icon
   - Define drop zones
   - Define custom properties
   - Use metric thresholds
5. Create advanced D3 visualizations
6. Explore complex visualizations
   - Testing the visualization
   - Custom Bar chart visualization
   - Custom Line chart visualization
7. Deploy D3 visualizations
11.512 Advanced SDK for Customizing Branding (2 days)

Roles/personas: Developers | Services Architects

Course description

Learn how to create your own URL for custom navigation using the URL API. Create a page, a series of pages, your own prompt type, and a custom object, among other customization skills you will gain in this class. Design custom logic such as workflows. Learn how to customize services to achieve organizational efficiency and communication goals. Use beans, tasks, and events to modify the core behavior of MicroStrategy Web.

Covers versions 10 through 2019 (v.11).

Skills you gain

- Eclipse IDE and the Web Customization Editor
- Writing Java classes
- XML configuration files
- URL API and CSS
- Transforms, styles, new events, and add-ons
- Service-Oriented Architecture (SOA)
- Using tasks in plug-ins and create plug-ins

MicroStrategy products covered

- MicroStrategy SDK
- MicroStrategy Web

Right for you if

You are an advanced software developer who wants to fine-tune page and functionality customization.

Best class experience if you have

Overview of Enterprise Analytics
SDK for Customizing Analytical Applications
Java experience

Topics

1. MicroStrategy SDK overview
   - MicroStrategy SDK
   - MicroStrategy Web architecture
   - D3.js for visualizations
   - Visualization Builder

2. Report execution and URLs
   - MicroStrategy Web page
   - Navigation (URL API)

3. Rendering and presentation of data
   - Beans
   - Transforms
   - Styles

4. Customizing specific features
   - Events
   - Add-ons

5. Task infrastructure and Service-Oriented Architecture (SOA)
   - Creating a task
   - Using a task
11.513 Advanced SDK for Integration and Single Sign-on (2 days)

Roles/personas: Developers | Services Architects

Course description
Explore single sign-on (SSO) and its challenges in the enterprise. Allow users to submit credentials to authenticate and access MicroStrategy Web without entering additional credentials. Learn different approaches to implementing these methods in your organization. Covers External Security Modules, external debugging tools, and third-party portals to integrate MicroStrategy Web using the SSO methodologies learned.

Covers versions 10 through 2019 (v.11).

Skills you gain
• Authentication and single sign-on workflow
• Web session management
• Identity External Security interface
• External Security Module (ESM)
• Intermediate Java skills
• Token validation and trusted authentication
• Implementing user mapping with a database
• SQL Server database
• SQL Management Studio
• HTML, JavaScript, and external libraries
• Debugging methods with browser add-ons
• Implementing a basic Liferay application portal

MicroStrategy products covered
• MicroStrategy SDK
• MicroStrategy Web

Topics
1. Single sign-on: Concepts and workflow
   • Overview of Web SDK and SSO
   • Supported authentication providers
   • Authentication modes and workflows
   • Session creation and management
   • MicroStrategy user credentials
   • MicroStrategy SSO workflow
   • SSO implementation considerations
2. Customizing authentication
   • Creating and mapping a custom ESM
   • Using a custom ESM for customizing authentication workflow
3. Validating users
   • SSO with authentication and validation
   • Customizing trusted authentication
4. Debugging your application or plug-ins
   • Analyzing your web applications
   • Web traffic analyzers
   • Introducing Tamper Data
5. SSO Implementation using a third-party portal
   • Using external portals
   • Customizing SSO with an out-of-the-box MicroStrategy portlet

MicroStrategy products covered
• MicroStrategy SDK
• MicroStrategy Web

Right for you if
You are an advanced SDK developer who wants to integrate MicroStrategy with other systems in your infrastructure.

Best class experience if you have
Overview of Enterprise Analytics
SDK for Customizing Analytical Applications
Java and HTML experience
11.521 Advanced Mobile Customizations with SDK (2 days)

Roles/personas: Developers | Services Architects

Course description
Customize a MicroStrategy Mobile app for organizational identity, image, and messaging. Learn techniques for customizing app response and behavior. Augment the potential of MicroStrategy Mobile by synchronizing changes to apps across devices, for example, to support a Command Center or Operations Center. Provides advanced customization techniques, including coding examples.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Xcode and debugging techniques
- Creating a mobile app and writing code in Swift
- Mobile configurations in Mobile Server
- URL API for mobile
- Creating a third-party app to generate branding assets
- Splash screen, intro animations, fonts
- Basic HTML, CSS, and JSON files
- Using custom fonts in a mobile application
- XML documents
- Creating a new Swift class with binding
- Installing a toolchain in Xcode and using a toolchain to compile applications
- Using custom appDelegate for a mobile app
- Using extensions to add functionality to a class

MicroStrategy products covered
- MicroStrategy SDK
- MicroStrategy Mobile

Right for you if
You are an advanced software developer who wants to use the Mobile platform to its fullest potential.

Best class experience if you have
Overview of Enterprise Mobility
SDK for Customizing Analytical Applications
SDK for Customizing Mobile Applications
Swift experience
Two mobile devices (iPhone and/or iPad)

Topics
1. Introduction
   - Xcode overview
2. Basic branding
   - Customizing MicroStrategy Mobile
   - Pre-configuring the mobile app
   - Adding credentials to the configuration
   - Changing app icons and splash screen
3. Advanced branding
   - Adding an animation to the app
   - Creating a custom help system
   - Using custom fonts
4. Using a custom AppDelegate
   - MicroStrategy Mobile’s appDelegate
   - Creating a custom appDelegate
   - Adding functionality to the appDelegate
   - Using an embedded or hosted JSON file for content
5. Using Command Center for mobile
   - Use cases
   - Setting up Command Center
   - Command Center scope
   - Using Command Center: Starting, joining, and leaving a conference
11.531 Advanced SDK for Enterprise Security (2 days)

Roles/personas: Developers | Services Architects

Course description
Customize your applications to incorporate MicroStrategy Identity’s security features using MicroStrategy Identity’s API. Learn about Physical Access Control Systems (PACS) and leverage this type of system in common implementations. Explore beacons and how they can be deployed in your enterprise. Discover how PACS and beacons are combined for better integration with your applications and security structure. Learn to build a virtual dashboard that responds to your presence. Provides advanced customization techniques, including coding examples.

Covers versions 10 through 2019 (v.11).

Skills you gain
- QR authentication workflow
- OpenSSL to generate security certificates
- JavaScript, basic HTML, and CSS
- Implement a custom PACS adaptor and the MicroStrategy Identity PACS API
- Use JSON file format
- Install and configure a basic MySQL setup
- Create basic databases using SQL scripts
- Use the MySQL database
- Configure beacons and associate with PACS

MicroStrategy products covered
- Identity SDK
- MicroStrategy Identity

Right for you if
You are an advanced SDK developer who wants to use MicroStrategy Identity to its fullest potential.

Best class experience if you have
Overview of Enterprise Security
SDK for Customizing Analytical Applications
SDK for Customizing Enterprise Security
Java experience
Two mobile devices (phone and tablet, iOS or Android)

Topics
1. Introduction and overview of Identity SDK
   - Identity platform architecture overview
2. Connecting MicroStrategy Identity to custom applications
   - QR code authentication workflow
   - Customizing authentication using Identity
   - Application flow
3. Connecting Identity to a Physical Access Control System (PACS)
   - Custom PACS adapter for Identity
   - Physical access key
   - Building a PACS adapter
   - MicroStrategy Identity PACS API
   - Implementing a custom PACS
   - Using a more robust PACS: UsherPACS
   - Categorizing the resources that are integrated with Identity
4. Connecting Identity to beacons
   - Using beacons with PACS
5. Custom applications for beacons
   - Base project
11.611 Analytics Performance Tuning (2 days)

Roles/personas: Analysts | Identity Architects | Platform Administrators | System Administrators

Course description
Learn how to tune the MicroStrategy Enterprise Analytics environment for high performance. Understand caching, Intelligent Cubes, system configuration, and other options available to optimize data transfer, data rendering, data warehouse access, and mobile performance.

Covers versions 10 through 2019 (v.11).

Skills you gain
• Improving system performance using techniques such as caching and SQL optimization
• Creating high-performance documents for end users
• Implementing mobile performance improvement strategies
• Configuring high-performance networks using techniques such as HTTP compression

MicroStrategy products covered
• MicroStrategy administrative tools
• MicroStrategy Developer
• MicroStrategy Web
• MicroStrategy Mobile

Right for you if
You are an administrator who wants to optimize the performance of your MicroStrategy environment.

Best class experience if you have
Administration for Enterprise Analytics

Topics
1. Components of high performance
2. Caching
   • Optimizing system performance
   • Report and document caching
   • Object caching
   • Element caching
3. Intelligent Cubes
   • Intelligent Cubes overview
   • Incremental cube refresh
   • Report execution against cubes
4. System architecture and configuration
   • Server specifications
   • Intelligence Server configuration
   • Web server configuration
5. Data transfer
   • Introduction to network performance
   • Key network concepts
   • Network recommendations for high performance
   • Distribution Services performance
6. Data rendering
   • Report execution workflow
   • High performance documents
7. Data warehouse access
   • Database query performance
   • Report and schema design optimizations
   • SQL generation optimizations
   • Data architecture optimizations
   • Optimizing MultiSource reports
   • ODBC optimizations
8. Mobile performance
   • Document execution workflow in the Mobile environment
   • Mobile performance improvement strategies
11.612 Advanced Big Data Administration (1 day)

Roles/personas: Analysts | Database Architects | Platform Administrators | System Administrators

Course description
Learn how MicroStrategy masters the challenges of big data for organizations. Understand methods to maximize value and speed while ensuring veracity of data. Provides hands-on experience connecting to and configuring sample big data sources, understanding real-time processing, specific big data security challenges, and learn how to fine-tune performance.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Data retrieval from NoSQL sources
- Security in a big data environment
- Tuning Cloudera Impala
- Implementing real-time big data processing

MicroStrategy products covered
- MicroStrategy Developer

Right for you if
You are an administrator, project designer, data quality expert, or security specialist who wants to access big data sources, optimize their performance, and ensure adherence to security requirements.

Best class experience if you have
Introduction to Big Data

Topics
1. Overview of big data
   - Attributes of big data
   - Hadoop overview
2. Working with NoSQL sources
   - NoSQL and NoSQL sources
   - MicroStrategy-NoSQL database connectivity options
3. Real-time analytics
   - Streaming
   - Real-time processing architecture
   - Framework and industry adoption
   - Using MicroStrategy with Storm and Spark Streaming
4. Security in a big data environment
   - Security in Hadoop
   - Other security options
   - MicroStrategy’s security model
5. Performance optimization for big data access
   - Emerging technologies for addressing big data challenges
   - Generalized big data analytics workflow
   - Best practices for performance optimizations
11.613 Automating Administration (1 day)

Roles/personas: Platform Administrators

Course description
Learn to use MicroStrategy automation tools for speeding up and streamlining common administrator tasks to manage your system. Create scripts and workflows to standardize tasks such as object management across test and production environments, managing changes related to system upgrades, new project deployment, and ensuring that data remains consistent and reliable throughout these processes.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Application life cycle management
- Routine administrative task automation
- Object integrity testing
- Object migration management
- Multiple project management
- Automating object conflict resolution
- Automated workflow configuration

MicroStrategy products covered
- MicroStrategy Developer
- MicroStrategy Object Manager
- MicroStrategy Project Merge
- MicroStrategy Command Manager
- MicroStrategy System Manager
- MicroStrategy Integrity Manager

Right for you if
You are a MicroStrategy administrator who wants to speed up your regular tasks and automate frequently repeated actions.

Best class experience if you have
Administration for Enterprise Analytics

Topics
1. Object Manager
   - Application life cycle management overview
   - Object Manager
   - Duplicating projects and objects
   - Managing objects with Object Manager
   - Update packages
   - MicroStrategy Project Merge Wizard
2. Command Manager
   - Command Manager interfaces
   - Command Manager procedures
   - Connection modes
3. System Manager
   - Creating a workflow
   - Using parameters
   - Executing a workflow
4. Integrity Manager
   - Integrity Manager tests
   - Prompt resolution
   - Integrity Manager test analysis
11.621 Advanced Administration for Enterprise Mobility (1 day)

Roles/personas: Mobile Architects | Platform Administrators | System Administrators

Course description

Optimize the Mobile server installation and deployment with advanced solutions for performance. Cluster your servers to improve performance, increase scalability, balance the load, and provide failover support for a mobile environment. You also get experience customizing apps, and enabling D3 visualizations, and push notifications in a mobile environment. Learn how to diagnose issues using mobile statistics.

Covers versions 10 through 2019 (v.11).

Skills you gain

- Mobile server installation and configuration
- Mobile app deployment across different networks
- Clustering configuration in a mobile environment
- Mobile Server administration
- D3 visualization configuration in a mobile environment

MicroStrategy products covered

- MicroStrategy Mobile
- MicroStrategy Web
- MicroStrategy Developer

Right for you if

You are an administrator who wants advanced deployment and configuration solutions.

Best class experience if you have

Administration for Enterprise Analytics
Administration for Enterprise Mobility

Topics

1. Deploying MicroStrategy Mobile
   - MicroStrategy Mobile overview
   - Installation and configuration of the Mobile server
   - Deployment of the MicroStrategy Mobile app
   - Establishing connectivity to a Mobile server

2. Clustering in a mobile environment
   - Clustering overview
   - Benefits of clustering
   - Clustering in a MicroStrategy Mobile environment
   - Intelligence Server clustering
   - Mobile server-Intelligence Server clustering scenarios
   - Mobile configuration
   - Working with dissimilar hardware

3. MicroStrategy Mobile administration
   - MicroStrategy Mobile Administrator
   - Customizing MicroStrategy Mobile apps
   - Working with firewalls
   - D3 visualizations in Mobile
   - Diagnostics recommendations
11.631 Advanced Administration for Enterprise Security (1 day)

Roles/personas: Identity Architects | Services Architects | Platform Administrators | System Administrators

Course description
Learn techniques to install, configure, and deploy MicroStrategy Identity, manage user access with the Identity Manager, set up communication between MicroStrategy Identity Server and secured assets with MicroStrategy Identity gateways, provision badges to users, and connect MicroStrategy Identity to physical access such as doors, and logical systems such as software applications. Learn about common MicroStrategy Identity workflows you can use or build on in your environment.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Define user access in a network
- Secure physical access systems such as doors and logical systems such as web applications
- Configure user networks and identity badges
- Integrate with SAML-based applications such as Salesforce.com
- Diagnose administrator issues in user networks and iBeacons

MicroStrategy products covered
- MicroStrategy Identity

Right for you if
You are an administrator or security specialist who wants to implement the MicroStrategy Identity application per your organization’s requirements.

Best class experience if you have
Administration for Enterprise Security

Topics
1. MicroStrategy Identity installation and configuration
   - Identity platform components
   - Identity deployment options
   - MicroStrategy Cloud installation on AWS
   - On-premise installation
   - Configuring an Identity system
   - Recommended configurations
   - MicroStrategy Identity components and commonly used ports

2. Managing users and access: Identity Manager
   - Defining user access: Identity networks
   - Identity network functionality
   - Identity gateway creation and implementation processes
   - Managing gateways
   - Digital certificate expiration notifications

3. Connecting your environment to Identity
   - MicroStrategy Identity workflows
   - Connecting logical resources to Identity
   - Connecting physical access resources to Identity
   - Adding users to the system
   - Diagnostics recommendations
11.711 Data Mining and Predictive Analytics (2 days)

Roles/personas: Analysts | Data Scientists | Analytics Architects

Course description

Develop predictive models and reports by leveraging native algorithms or by importing models from third-party data mining vendors like R and PMML, in hands-on exercises using MicroStrategy Developer. Learn data mining best practices.

Covers versions 10 through 2019 (v.11).

Skills you gain

• Predictive modeling
• Forecasting
• Trend analysis
• Regression analysis
• Clustering and pattern analysis
• Market basket analysis
• R script integration
• Predictive Model Markup Language (PMML) integration
• Data classification
• Time series analysis
• Decision tree analysis

MicroStrategy products covered

• MicroStrategy Data Mining functionality in MicroStrategy Developer

Right for you if

You are an advanced analyst who needs to incorporate predictive and classification analysis into your metrics.

Best class experience if you have

Advanced Analytics Reporting

Topics

1. Data mining and predictive analytics overview
   • Purpose of data mining tools
   • Advantages of data mining
   • Introduction to MicroStrategy Data Mining Services

2. Data mining models and techniques
   • Basic data mining model
   • Data mining types and algorithms
   • Data mining with MicroStrategy
   • Creating a data mining dataset

3. Using data mining models with MicroStrategy
   • Using MicroStrategy predictive models
   • Using the training metric wizard to create a training metric
   • Developing models using PMML
   • Evaluating the predictive model
   • Developing models using R
   • Developing predictive metrics
   • Using the MicroStrategy predictive model viewer

4. Forecasting
   • Forecasting uses
   • Regression analysis
   • Linear and exponential regression
   • Tree regression analysis
   • Time series analysis

5. Classification
   • Decision tree analysis
   • Logistic regression analysis

6. Association
   • Association rules

7. Clustering
   • Cluster analysis
11.911 MicroStrategy Engines & SQL (2 days)

Roles/personas: Analysts | Analytics Architects | Database Architects | Application Architects

Course description
Understand how the MicroStrategy Engine develops Structured Query Language (SQL) to gather data in a variety of reporting scenarios. Learn methods for tuning and optimizing report performance using Very Large Database (VLDB) properties. Covers versions 10 through 2019 (v.11).

Skills you gain
- SQL analysis
- SQL optimization techniques
- Creating complex queries with SQL, using subqueries and intermediate tables
- Understanding SQL behavior based on different objects on a report
- Managing the report execution process in a BI environment

MicroStrategy products covered
- MicroStrategy Developer

Right for you if
You are an advanced project designer or administrator who wants to optimize complex report and document designs for best performance.

Best class experience if you have
Advanced Analytics Reporting
Project Architecting

Topics
1. Introduction to MicroStrategy engine
   - SQL generation process
2. Basic optimizations
   - Multi-SELECT statements
   - Composing optimized SQL
   - Attribute definitions and their impact on joins
   - Intermediate tables
3. Templates
   - Attributes
   - Hierarchies
   - Consolidations
   - Custom groups
4. Metrics
   - Non-aggregatable metrics
   - Conditional metrics
   - Transformation metrics
5. Filters
   - Attribute qualifications
   - Set qualifications
   - Metric qualifications
6. Analytical Engine
   - Role of the Analytical Engine
   - Processing a report limit
   - Subtotals
   - Compound metrics
   - Analytical functions
7. Introduction to VLDB properties
   - VLDB properties defined
   - VLDB Properties Editor
### 11.912 Advanced Data Warehousing (2 days)

**Roles/personas:** Analysts | Application Architects | Analytics Architects | Database Architects

**Course description**

Learn about advanced issues in data warehousing design and how to work with these complexities when implementing a MicroStrategy project. Understand how to model complex hierarchies and attribute relationships, implement role attributes and slowly changing dimensions, design the schema for optimal performance, use logical views to solve data modeling and schema design issues, and optimize query performance using both the database and MicroStrategy functionality.

Covers versions 10 through 2019 (v.11).

**Skills you gain**

- Creating data models
- Modeling complex hierarchies
- Implementing role attributes and slow-changing dimensions
- Designing schemas for optimal performance
- Creating logical views
- Optimizing query performance using database and application functionality

**MicroStrategy products covered**

- MicroStrategy Developer
- MicroStrategy Architect

**Right for you if**

You are an administrator, project architect, or a database administrator who has an interest in learning how to resolve complex data warehouse modeling and design issues to best support a MicroStrategy reporting environment.

**Best class experience if you have**

Project Architecting

**Topics**

1. Introduction to Advanced Data Warehousing
   - Data Warehouse design and reporting
   - Overview of Advanced Data Warehousing
2. Advanced Schema Design
   - Snowflake and star schemas
   - Recommended schema design
3. Logical views
   - Logical views in MicroStrategy Architect
   - Creating logical views
   - Using logical views to resolve data warehousing issues
4. Many-to-Many relationships
5. Attribute roles
6. Hierarchies
   - Ragged hierarchies
   - Split hierarchies
   - Recursive hierarchies
7. Slowly Changing Dimensions (SCDs)
   - Creating a life stamp
   - Using a hidden attribute
11.031 Application Architect (2 days training, 1 day certification)

Roles/personas: Application Architects

Course description
In this course, you will revisit foundation business intelligence application topics from a holistic approach of the Application Architect in an Intelligent Enterprise. The course focuses on the key competencies to help you succeed as an Application Architect. You will learn how to support your Intelligent Enterprise to produce best-in-class applications based on enterprise-level best practices.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Creating corporate application design requirements and guidelines
- Guiding application development with storyboards and prototypes
- Best practices for creating application objects and applications
- Certifying and publishing enterprise applications
- Supporting end users to resolve application issues and change requests
- Reviewing application objects to optimize application performance
- Identifying performance bottlenecks
- Optimizing application reliability and usability

MicroStrategy products covered
- MicroStrategy Web
- MicroStrategy Workstation

Right for you if
You want to become the Application Architect at your organization to standardize, optimize, and manage MicroStrategy applications at the enterprise level.

Best class experience if you have
Taken the foundation courses

Topics
1. The Intelligent Enterprise
   - The Intelligence Center, Application Architect, and application lifecycles
2. Standards for application design
   - Create enterprise application standards
   - Establish an enterprise caching strategy
3. Assess application requirements
   - Application planning with prototypes
4. Create and document the application
   - Standardize application object creation
   - Create the application
5. Publish applications and certify data
   - Certify applications for enterprise standards
   - Document applications
   - Publish applications to enterprise environment
   - Train and certify analysts
6. Operate and support applications and users
   - Monitor application statistics
   - Handle change requests
7. Optimize performance and stability
   - Review objects to optimize performance
   - Identify performance bottlenecks
   - Improve performance with caching strategy
   - Optimize application reliability, usability
   - Update enterprise application processes
11.032 Analytics Architect (2 days training, 1 day certification)

Roles/personas: Analytics Architects

Course description

In this course, you revisit foundation project architecture and design topics from the Analytics Architect role in an Intelligent Enterprise. The course focuses on key competencies to help you succeed as an Analytics Architect and support your Intelligent Enterprise to produce a best-in-class analytics solution based on enterprise-level best practices.

Covers versions 10 through 2019 (v.11).

Skills you gain

- Establishing enterprise standards and project documentation
- Implementing a project update tracking system
- Guide requirements gathering and data exploration
- Standardizing the dimensional modeling process
- Creating guidelines for schema object development
- Establishing dataset creation standards
- Developing dataset monitoring and troubleshooting protocols
- Instituting dataset performance optimization practices

MicroStrategy products covered

- MicroStrategy Developer and Web
- MicroStrategy Workstation
- MicroStrategy Enterprise Manager
- MicroStrategy Integrity Manager

Right for you if

You want to become the Analytics Architect at your organization to standardize the MicroStrategy project architecture development process at an enterprise level.

Best class experience if you have

Taken the foundation courses on p. 61

Topics

1. The Analytics Architect role
2. Share knowledge with the enterprise
   - Create a documentation repository
   - Establish training
3. Standardize requirements gathering
   - Direct data source research
   - Establish conventions and other policies
4. Guide the enterprise dimensional modeling process
   - Utilize a Fact Qualifier Matrix
   - Define logical and physical data models
5. Direct schema object development
   - Provide guidelines for fact and attribute creation, user hierarchy protocols
   - Solve complex reporting scenarios
6. Standardize dataset authoring
   - Standardize supporting objects, enterprise datasets
   - Establish update request system
7. Establish monitoring and troubleshooting guidelines
8. Define performance optimization protocols
   - Dataset optimization techniques, data transfer, memory consumption
11.033 Mobile Architect  (2 days training, 1 day certification)

Roles/personas:  Mobile Architects

Course description
In this course, you will revisit foundation mobility topics from a holistic approach of the Mobile Architect in an Intelligent Enterprise. The course focuses on the key competencies to help you succeed as a Mobile Architect and support your Intelligent Enterprise to produce a best-in-class mobile solution based on enterprise-level best practices.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Creating corporate mobile app design requirements and guidelines
- SDK for corporate branding
- Optimizing Library Mobile
- Defining an effective mobile architecture
- Implementing mobile configuration best practices
- Understanding Enterprise Mobility Management (EMM) solutions such as AppConfig compliance and security configuration keys
- Securing a mobile environment
- App monitoring strategies
- Guide mobile performance improvement
- Optimizing the app user experience

MicroStrategy products covered
- MicroStrategy Mobile
- MicroStrategy Mobile Administrator
- MicroStrategy Mobile SDK

Right for you if
You want to become the Mobile Architect at your organization to optimize, secure, and manage MicroStrategy Mobile at an enterprise level.

Best class experience if you have
Taken the foundation courses
Bring a supported mobile device to class
Installed the latest Android Studio and MicroStrategy Android SDK

Topics
1. The Intelligent Enterprise
   - The Intelligence Center and Mobile Architect
2. Mobile application standardization
   - Mobile application requirements
   - Designing and documenting apps
   - Mobile SDK: Custom branded apps
   - Data discovery: Library Mobile app
3. Mobile server, configuration, and security
   - Mobile Server lifecycle management
   - Mobile authentication and security
   - Mobile configurations, Library Mobile
4. Publishing mobile applications
   - Enterprise Mobility Management
   - Mobile app testing
   - Strategic mobile app deployments
   - Upgrading and updating Mobile SDK
5. Monitoring and troubleshooting
   - Report on user engagement: KPIs
   - Diagnostics and statistics
6. Optimizing the user experience
   - Mobile caching and app performance
   - Engaging users for app success
11.035 Services Architect (2 days training, 1 day certification)

Roles/personas: Services Architects

Course description

Explore the software development process and related tasks like deployment and source control from a holistic approach of the Services Architect in an Intelligent Enterprise. This course focuses on the key competencies to help you succeed as a Services Architect. You learn how to support your Intelligent Enterprise to develop applications, components, and plug-ins based on enterprise best practices.

Covers versions 10 through 2019 (v. 11)

Skills you gain

- Create corporate application design requirements and guidelines
- Manage skills inventory of your team
- Guide application development with coding and commenting best practices
- Best practices for creating application objects and applications
- Standards for testing apps and components
- Best practices for source control, versioning, and branching
- Best practices for communicating internally and externally

MicroStrategy products covered

- MicroStrategy SDK
- MicroStrategy REST API

Right for you if

You want to become the Services Architect at your organization to standardize, optimize, and manage MicroStrategy development at the enterprise level.

Best class experience if you have

Have taken the foundation courses

Topics

1. The Intelligent Enterprise
   - The Services Architect within the Intelligent Enterprise
2. Building a Productive Development Environment
   - Building a team
   - Tools to support the enterprise
3. Intelligent Application Lifecycle Management
   - Software development documentation
   - Collaborative communication
   - Standardizing the application lifecycle
   - Risk management
   - Requirements-gathering process
   - Design and testing processes
   - Standardizing software deployment
   - Monitoring and maintenance
   - Standardizing software deprecation
4. Design
   - Design and coding standards
   - Post-code best practices
5. Controlling Code with Source Control
   - Intelligent source control in the team
   - Versioning
6. Publishing Work Internally and Externally
   - Communication outside the team
   - Internal communication
   - Operational data for developers and testers
11.036 Platform Administrator (2 days training, 1 day certification)

Roles/personas: Platform Administrators

Course description
In this course, you will revisit the foundation platform administration topics from a holistic approach of the Platform Administrator in an Intelligent Enterprise. The course focuses on the key competencies to help you succeed as a Platform Administrator by supporting your Intelligent Enterprise in providing a well-tuned and stable analytics platform environment.

Covers versions 10 through 2019 (v.11).

Skills you gain
- Creating corporate guidelines for platform administration
- Guiding the deployment, configuration, monitoring, tuning, and troubleshooting of a MicroStrategy analytics environment using best practices
- Managing project lifecycle and cross-environment object migration planning

MicroStrategy products covered
- MicroStrategy Intelligence Server
- MicroStrategy Command Manager
- MicroStrategy Object Manager
- MicroStrategy Web
- MicroStrategy Enterprise Manager
- MicroStrategy Integrity Manager
- MicroStrategy License Manager

Right for you if
You want to become the Platform Administrator at your organization to optimize, secure, and manage the MicroStrategy enterprise platform.

Best class experience if you have
Taken the foundation courses

Topics
1. The Intelligent Enterprise
   - The Intelligence Center and the Platform Administrator
2. Standardizing the Intelligent Platform
   - Intelligent Enterprise standards
   - Standardizing requirements gathering
3. Platform Administration Planning
   - Platform architecture
   - MicroStrategy deployment options
4. Platform Configuration
   - Configuring connectivity, platform security, and Distribution Services
5. Object Migrations
   - Managing project lifecycle
   - Implementing object migrations
   - Best practices for object migrations
6. Platform Monitoring
   - Using Enterprise Manager
   - Using Integrity Manager
   - Using License Manager
7. Troubleshooting
   - MicroStrategy Diagnostics and Performance Logging tool
   - Analyzing log files
   - Diagnostics and statistics
   - Using the DB Query tool
8. Platform Optimizations
   - Product placement considerations
   - Optimizing systems for performance
MICROSTRATEGY 2019
CERTIFICATIONS
CERTIFICATIONS AT A GLANCE

CERTIFICATIONS FOR EVERYONE

Standard certification experience
Get certified when you have time available. These certifications are ideal when you want to train over weeks or months, at your own pace. For details on these ad-hoc and departmental certifications, see pages 55-56.

Fast Track certification experience
Go from zero to certified in one or two weeks flat! These certifications are identical to the standard certifications, but are delivered at a faster pace. Get ready for complete immersion. To compare delivery details for traditional and Fast Track certifications, see page 60-63.

Intelligence Center certifications
Become a crucial member of the Intelligent Enterprise. Demonstrate your expertise in these Intelligence Center roles. For details on these certifications, see page 66.
SPECIALIST STANDARD CERTIFICATION LEARNING PATHS

Ideal for individuals with limited time available. Take standard foundation classes when they fit your schedule.

Overview of Enterprise Analytics 11.111
Introduction to Analytics Reporting 11.112
Dashboarding and Visualizations 11.142
Overview of Enterprise Mobility 11.121
Overview of Enterprise Security 11.131
Enterprise Security Analytics 11.132
MCSA Certification Project 11.011

11 days

Administration for Enterprise Mobility 11.321
Administration for Enterprise Security 11.331
MCSA Certification Project 11.019

9 days

SDK for Customizing Analytical Applications 11.213
Portal Integration with SDK 11.212
SDK for Customizing Mobile Applications 11.221
SDK for Customizing Enterprise Security 11.231
MCSD Certification Project 11.013

7 days
MASTER STANDARD CERTIFICATION LEARNING PATHS

Ideal for individuals with limited time available. Take standard foundation classes when they fit your schedule.

2 days
Advanced Analytics Reporting 11.412

3 days
Project Architecting 11.411

2 days
Advanced Documents 11.413

2 days
Advanced Mobile Applications 11.421

1 day
Advanced Enterprise Security Analytics 11.431

2 days
Data Mining and Predictive Analytics 11.711

2 days
MCMA Certification Project 11.012

14 days
Certified Master Analyst

8 days
Analytics Performance Tuning 11.611

1 day
Advanced Big Data Administration 11.612

1 day
Advanced Administration for Enterprise Mobility 11.621

2 days
Advanced Administration for Enterprise Security 11.631

2 days
MCMA Certification Project 11.020

MCMA

12 days
Advanced SDK Customizing Visualizations 11.511

2 days
Advanced SDK for Customizing Branding 11.512

2 days
Advanced SDK for Integration and Single Sign-On 11.513

2 days
Advanced Mobile Customizations with SDK 11.521

2 days
Advanced SDK for Enterprise Security 11.531

2 days
MCMD Certification Project 11.022

MCMD

Product: ANALYTICS MOBILE IDENTITY
## SPECIALIST FAST TRACK CERTIFICATION

Go from zero to certified in one week flat.

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<tr>
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**5 days**

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<td>SDK for Customizing Enterprise Security 11.231</td>
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**5 days**

**Product:**  ■ ANALYTICS ■ MOBILE ■ IDENTITY

**MCSA**

**MCSAD**

**MCSD**
MASTER FAST TRACK CERTIFICATION

Go from zero to certified in one or two weeks flat.

**Days 1, 2, & 3**
- **Project Architecting**
  
**Days 4 & 5**
- **Advanced Analytics Reporting**
  
**Day 6**
- **Advanced Documents**
  
**Day 7**
- **Advanced Mobile Applications**
  
**Day 8**
- **Data Mining and Predictive Analytics**
  - **Advanced Enterprise Security Analytics**

**Days 9 & 10**
- **MCMA Certification Project**

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**Day 1**
- **Analytics Performance Tuning**

**Day 2**
- **Advanced Big Data Administration**

**Day 3**
- **Advanced Administration for Enterprise Mobility**
  - **Advanced Administration for Enterprise Security**

**Days 4 & 5**
- **MCMAD Certification Project**

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**Days 1 & 2**
- **Advanced SDK for Customizing Visualizations**

**Days 3 & 4**
- **Advanced SDK for Customizing Branding**

**Days 5 & 6**
- **Advanced SDK for Integration and Single Sign-On**
  - **Advanced Mobile Customizations with SDK**

**Days 7 & 8**
- **Advanced SDK for Enterprise Security**

**Days 9 & 10**
- **MCMID Certification Project**

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**Product:**
- **ANALYTICS**
- **MOBILE**
- **IDENTITY**
TRAIN A SUCCESSFUL INTELLIGENCE CENTER

ROLES

EXECUTIVES
The Business Executive sets the analytics and mobility strategy for the function. They establish the function’s priorities, programs, budget, and plan, while maintaining justification for the platform assets and resources by tracking and publishing adoption, impact, and return-on-investment.

BUSINESS USERS
Explore and interact with published analytics. Enhance applications using self-service data discovery to create custom groups, derived metrics, and dynamic filters. Foster adoption through collaboration and sharing.

ANALYSTS
Create, share, and maintain intelligence applications for the department using enterprise security, data, and application objects to help ensure a single version of the truth.

DATA SCIENTISTS
Build and publish advanced statistics, predictive models, and machine learning algorithms using libraries such as TensorFlow, R, Python, and MATLAB, that are leveraged by Analysts and Developers.

DEVELOPERS
Inject, extend, and embed intelligence into custom and third-party applications using programming languages such as JavaScript, Java, PHP, Python, SWIFT, Objective-C, C#, .Net, and other common languages.

PERSONAS

Intelligence Director
Create Intelligence environments by deploying the Intelligence Architecture, supervising the Intelligence Center, and running Intelligence Programs to support enterprise and departmental analytics and mobility applications for all constituents.

Application Architect
Create, share, and maintain intelligence applications for the enterprise. Publish standardized application objects, and promote departmental applications from self-service into the enterprise environment.

Analytics Architect
Create, publish, and optimize a federated data layer as the enterprise’s single version of the truth. Build and maintain the schema objects and abstraction layer on top of various, changing enterprise assets.

Mobile Architect
Build, compile, deploy, and maintain mobile environments and applications. Optimize the user experience when accessing applications via mobile devices. Integrate with preferred VPN, SSO, and EMM protocols.

Identity Architect
Build, compile, deploy, and maintain digital identity applications, integrated with enterprise directories. Digitally secure all existing and new logical and physical assets. Integrate authentication, communication, and telemetry into other applications.

Services Architect
Inject, extend, and embed analytics into portals, third-party, mobile, and white-labeled applications. Publish web services and data services for use by Developers in building departmental applications.

Database Architect
Design and maintain database enterprise assets. Optimize database performance and utilization based on query type, usage patterns, and application design requirements.

Platform Administrator
Install and configure the Intelligence Architecture on-premises and/or in the cloud. Maintain the security layer, monitor system usage, and optimize architecture in order to reduce errors, maximize uptime, and boost performance.

System Administrator
Set up, maintain, monitor, and continuously support the infrastructure environment through deployment on AWS, Windows, or Linux, while optimizing performance and controlling costs.
RECOMMENDED CLASSES FOR DEPARTMENTAL ANALYTICS AND MOBILITY

Business Users
Use local data, third-party data, and published federated data to build individual and departmental applications via a powerful Desktop client. Share applications locally or via departmental environments.

Get up and running
11.114 Visual Data Discovery: MicroStrategy Desktop
11.116 Introduction to Dossiers

I’m ready for more
11.112 Introduction to Analytics Reporting
11.121 Overview of Enterprise Mobility
11.141 Introduction to Documents
11.142 Dashboarding and Visualizations
11.412 Advanced Analytics Reporting
11.413 Advanced Documents
11.421 Advanced Mobile Applications

Analysts
Create, share, and maintain intelligence applications for the department using the enterprise security, data, and application objects to ensure a single version of the truth.

Get up and running
11.112 Introduction to Analytics Reporting
11.411 Project Architecting

I’m ready for more
11.911 MicroStrategy Engines and SQL
11.313 Introduction to Big Data
11.611 Analytics Performance Tuning
11.912 Advanced Data Warehousing
11.612 Advanced Big Data Administration

Data Scientists
Build advanced statistics, predictive models, and machine learning algorithms that are leveraged by analysts and developers.

Get up and running
11.412 Advanced Analytics Reporting
11.413 Advanced Documents
11.711 Data Mining and Predictive Analytics

I’m ready for more
11.132 Enterprise Security Analytics
11.411 Project Architecting
11.431 Advanced Enterprise Security Analytics

Developers
Integrate, extend, and embed intelligence into custom and third-party departmental applications.

Get up and running
11.212 Portal Integration using SDK
11.213 SDK for Customizing Analytical Applications

I’m ready for more
11.221 SDK for Customizing Mobile Applications
11.231 SDK for Customizing Enterprise Security
11.511 Advanced SDK for Customizing Visualizations
11.512 Advanced SDK for Customizing Branding
11.513 Advanced SDK for Integration and Single Sign-on
11.521 Advanced Mobile Customizations with SDK
11.531 Advanced SDK for Enterprise Security

Legend:  E E-COURSE VERSION AVAILABLE   I INSTRUCTOR-LED CLASS
INTELLIGENCE CENTER CERTIFICATION PATHS

Application Architect
Create, share, and maintain intelligence applications for the enterprise. Publish standardized application objects. Promote departmental applications from self-service into the enterprise environment.

Required Course Knowledge
11.121 Overview of Enterprise Mobility
11.131 Overview of Enterprise Security
11.141 Introduction to Documents
11.142 Dashboarding and Visualizations
11.311 Administration for Enterprise Analytics
11.313 Introduction to Big Data
11.411 Project Architecting
11.412 Advanced Analytics Reporting
11.911 MicroStrategy Engines and SQL
11.912 Advanced Data Warehousing

Required Certification
11.031 Application Architect Certification

Analytics Architect
Create, publish, and optimize a federated data layer as the enterprise’s single version of the truth. Build and maintain the schema objects and abstraction layer on top of the various changing enterprise assets.

Required Course Knowledge
11.142 Dashboarding and Visualizations
11.311 Administration for Enterprise Analytics
11.411 Project Architecting
11.412 Advanced Analytics Reporting
11.421 Advanced Mobile Applications
11.431 Advanced Enterprise Security Analytics
11.611 Analytics Performance Tuning
11.612 Advanced Big Data Administration
11.711 Data Mining and Predictive Analytics
11.911 MicroStrategy Engines and SQL
11.912 Advanced Data Warehousing

Required Certification
11.032 Analytics Architect Certification

Identity Architect
Build, compile, deploy, and maintain digital identity applications, integrated with enterprise directories. Digitally secure all existing and new logical and physical assets. Integrate authentication, communication, and telemetry into other applications.

Required Course Knowledge
11.131 Overview of Enterprise Security
11.132 Enterprise Security Analytics
11.231 SDK for Customizing Enterprise Security
11.331 Administration for Enterprise Security
11.411 Project Architecting
11.412 Advanced Analytics Reporting
11.911 MicroStrategy Engines and SQL
11.912 Advanced Data Warehousing

Required Certification
11.034 Identity Architect Certification

Services Architect
Integrate, extend, and embed analytics and mobility applications into portals, third party applications and white labelled applications. Publish web services and data services for use by developers in building departmental applications.

Required Course Knowledge
11.212 Portal Integration using SDK
11.213 SDK for Customizing Analytical Applications
11.221 SDK for Customizing Mobile Applications
11.231 SDK for Customizing Enterprise Security
11.422 Database Write-back: Mobile Transactions
11.511 Advanced SDK for Customizing Visualizations
11.512 Advanced SDK for Customizing Branding
11.513 Advanced SDK for Customizing Integration and Single Sign-on
11.521 Advanced Mobile Customizations with SDK
11.531 Advanced SDK for Enterprise Security

Required Certification
11.035 Services Architect Certification

Mobile Architect
Build, compile, deploy, and maintain mobile environments and applications. Optimize the user experience when accessing applications via mobile devices.

Required Course Knowledge
11.142 Dashboarding and Visualizations
11.132 Enterprise Security Analytics
11.221 SDK for Customizing Mobile Applications
11.311 Administration for Enterprise Analytics
11.321 Administration for Enterprise Mobility
11.411 Project Architecting
11.412 Advanced Analytics Reporting
11.413 Advanced Documents
11.421 Advanced Mobile Applications
11.422 Database Write-back: Mobile Transactions
11.621 Advanced Admin for Enterprise Mobility

Required Certification
11.033 Mobile Architect Certification

Platform Administrator
Install and configure the intelligence architecture on-premises and/or in the cloud. Maintain security layer. Monitor system usage and optimize architecture to reduce errors, maximize uptime, and optimize performance.

Required Course Knowledge
11.000 What’s New in MicroStrategy 10
11.131 Overview of Enterprise Security
11.311 Administration for Enterprise Security
11.321 Administration for Enterprise Mobility
11.411 Project Architecting
11.611 Analytics Performance Tuning
11.612 Advanced Big Data Administration
11.613 Automating Administration
11.621 Advanced Admin for Enterprise Mobility
11.631 Advanced Admin for Enterprise Security

Required Certification
11.036 Platform Administrator Certification
INTELLIGENCE CENTER CERTIFICATION PATHS (cont)

Intelligence Director
Create Intelligence environments by deploying the Intelligence Architecture, supervising the Intelligence Center, and running Intelligence Programs to support enterprise and departmental analytics and mobility applications for all constituents.

Recommended experience
- Technology degree(s) and leadership experience in business and data analysis
- Experience in IT management, with ITIL or similar technology platform
- Analysis experience with business requirements, functional specifications in a data warehousing environment
- Experience in industries such as banking or financial services
- Data governance experience

Recommended third-party certifications
- Certified Associate Project Management (CAPM)
- Project Management Professional (PMP)
- MCSE (Microsoft)
- Certified Risk and Information Systems Control (CRISC)
- Certified Governance of Enterprise IT (CGEIT)
- Certified Scrum Master (CSM)

Required MicroStrategy Course Knowledge
11.714 Intelligence Program
11.715 Advanced Intelligence Program
11.716 Departmental Intelligence Program

Required MicroStrategy Certification
Any 2 Architect role certifications
Any 1 Administrator role certification
11.037 Intelligence Director Certification

Database Architect
Design and maintain database enterprise assets. Optimize database performance and utilization based on query type, usage patterns, and application design requirements.

Recommended experience
- Degree(s) in Computer Science, Management Information Systems, or related field
- Dedicated experience managing, configuring, and maintaining RDBMS, such as MySQL, Teradata, Redshift
- Extensive knowledge of query performance tuning, backup-restore, permissions architecture, and disaster recovery procedures
- ETL-Informatica experience and certifications with v. 9.6 or higher, including Power Center and Cloud
- Experience with SQL Server, including stored procedures, triggers, views, etc.

Recommended third-party certifications
- IBM Certified Database Administrator – DB2
- Microsoft SQL Server database certification (MCSE, MCSE, MTA)
- Oracle Certified Professional, MySQL Database Administrator
- SAP HANA
- Teradata Database Certified DBA
- AWS Certified Solutions Architect – Professional, AWS Big Data Specialty
- Cloudera Certified Associate
- MongoDB Certified DBA Associate

Required MicroStrategy Course Knowledge
11.612 Advanced Big Data Administration
11.911 MicroStrategy Engines and SQL
11.912 Advanced Data Warehousing

System Administrator
Set up, maintain, monitor, and continuously support the infrastructure environment through deployment on AWS, Windows, or Linux. Optimize performance while controlling costs.

Recommended experience
- Degree(s) in Engineering, Mathematics, Economics, Statistics, Finance, or related field
- Business intelligence/analyst experience, including business intelligence tools, techniques, and technology
- Certifications in applicable computer hardware environment(s) and A+ certified
- Knowledge of Microsoft OS (Windows 2012, Windows 10), Office 365, Active Directory, and desktop applications
- Knowledge of AWS

Recommended third-party certifications
- MCSE: Cloud Platform and Infrastructure (Microsoft)
- Microsoft Office Specialist
- Oracle Linux System Administrator (Oracle)
- RHCE (Red Hat)
- Server+ (CompTIA)
- VCP6-DCV (VMware)
- AWS Certified Solutions Architect – Associate
- IBM Certified System Administrator
- A + (CompTIA)
- Cisco Certified Network Associate
- Microsoft Certified Systems Administrator (MCSA)

Required MicroStrategy Course Knowledge
11.000 What’s New in MicroStrategy 10
11.311 Administration for Enterprise Analytics
11.331 Administration for Enterprise Security

Optional MicroStrategy Course Knowledge
11.312 Administration for MicroStrategy on AWS
11.314 Working with MicroStrategy in Linux
11.321 Administration for Enterprise Mobility
11.611 Analytics Performance Tuning
11.612 Advanced Big Data Administration
11.621 Advanced Admin for Enterprise Mobility
11.631 Advanced Admin for Enterprise Security

Required Certification
11.038 System Administrator Certification
EDUCATION ACCESS OPTIONS

The successful implementation and deployment of any project is dependent on the knowledge and skills of those implementing. Empower your workforce, facilitate enterprise success, and stay up to date with MicroStrategy Education with a variety of Education purchase options.

Our teams will work with you to provide the right Education offering. To find out how to get started, talk with your Account Executive or contact the Education department directly at education@microstrategy.com. You can also visit us online through the MicroStrategy learning portal at microstrategy.csod.com.

PERENNIAL EDUCATION PASSES (PEPs)

The Perennial Education Pass (PEP) is a 12-month user subscription that provides unlimited access to our comprehensive course catalog.

Benefits:
- Access to instructor-led delivery online and in global MicroStrategy locations, E-learning modules, and recorded instructor-led courses
- Stay ahead or advance your skills with our quarterly course updates and new course additions
- Learn at your own pace
- Build and validate knowledge with Learning paths, and certifications for Analysts, Developers, and Administrators

TRAINING UNITS (TUs)

Our clients’ needs are unique—their Education packages should be, too. Training Units are 12-month “gift cards” that are ideal for customers who wish to have MicroStrategy instructors onsite for training Developers, Administrators, and power users, or customers implementing MicroStrategy for the first time.

Benefits:
- Access to customer onsite training delivery for up to 20 students at 54 Training units/days
- Access to all training options you have with a PEP and ideal for customers who do not plan to purchase more than five days of total training
ENTERPRISE E-COURSEWARE

We recognize that time and adoption are commodities for our customers. Our Enterprise E-courseware offering is ideal for organizations with more than 30 web licenses who are looking to drive MicroStrategy adoption across the enterprise.

Benefits:
• Self-paced learning that mirrors Instructor-led courses
• Simulations in MicroStrategy environments
• Quizzes to track progress
• Host on internal LMS system
• Tiered pricing based on number of MicroStrategy web licenses
• Discounted pricing for customers who want to “upgrade” to the new E-courseware version of a purchased course

Available E-courseware Modules:
11.111 Overview of Enterprise Analytics
11.112 Intro to Analytics Reporting
11.113 Visual Data Discovery: Visual Insight
11.114 Visual Data Discovery: MicroStrategy Desktop
11.116 Introduction to Dossiers
11.121 Overview of Enterprise Mobility
11.142 Dashboarding and Visualizations
11.411 Project Architecting
11.412 Advanced Analytics Reporting
11.413 Advanced Documents: Interactivity and Joining Datasets
11.421 Advanced Mobile Applications
11.711 Data Mining and Predictive Analytics

COURSE CUSTOMIZATION

In conjunction with on-site training (private engagements), MicroStrategy can also customize workshops and exercises for your specific training purposes. While customization is not available for every class (or every dataset or environment), we will work with you to evaluate the most compelling possibilities for your organization.

Benefits:
• Customization costs and timelines are specifically tailored for each unique customer
• Customize training to meet your needs using your data
• Teach concepts using reports and data users are familiar with

INDIVIDUAL PURCHASE

Our Learning Portal powered by CornerStone also serves as an e-commerce system and allows you to purchase the content you want, when you want.

Benefits:
• Supports credit card, invoice, and POs
• Pay as you go
FAST TRACK CERTIFICATIONS

Our project-based certifications are the standard for becoming Trusted MicroStrategy Advisors within your organization, your Intelligence Center, and the BI industry.

Benefits:

- Get certified in one to two weeks depending on your certification needs
- Save 50% or more compared to the traditional certification path
- Perfect option for customers only interested in certifications and not the full catalog of courses
FAQ AND CATALOG SUMMARY
MICROSTRATEGY EDUCATION FAQ

COURSE REGISTRATION AND PAYMENT

Q. What is the MicroStrategy Learning Portal?
A. The Learning Portal is an online Learning Management System where you can register, purchase and manage all of your education needs. Each user has their own transcript showing completed and upcoming classes. You can access the Learning Portal at: https://microstrategy.csod.com

Q. How do I register for a Jump Start class?
A. You can learn more about the Jump Start program and register for the free classes nearest your location at: www.microstrategy.com/us/services/education/jump-start-classes#

Q. How do I register for a paid class?
A. You can register, pay for, and manage all your classes within the Learning Portal, located at: https://microstrategy.csod.com

Q. What are the benefits of taking your paid courses if you offer free content with Jump Start and your “How-to” tutorials?
A. Jump Start classes offer an overview of MicroStrategy’s powerful business intelligence software features. Jump Start includes hands-on experience that lets you work with our collaborative dashboarding tool and dossiers. This hands-on, interactive experience also demonstrates how easy reporting can be for all users. Jump Start lets you experience our robust mobile apps that un tether employees from their computers, and introduces MicroStrategy Identity, our secure identity platform.

Our paid courses take you deep into the rich functionality available for all MicroStrategy features and tools. With our paid courses, you will learn how to take advantage of all that MicroStrategy offers for your business intelligence software experience. Paid classes have proven to significantly increase end user adoption and come with certified exams, expert instructor-led classes, and a wide variety of self-paced learning options to suit every educational need.

Q. I don’t have time to dedicate full days to training right now. Is there still an option that can help me learn more about the tool?
A. Absolutely! We have a growing offering of our full-length courses that have been turned into self-paced options. These are modeled off the same great content as instructor-led courses, but allow you to work at your own pace. These interactive modules can also be embedded in your company's LMS for tracking purposes and include quizzes and hands-on simulations, as well as the ability to bookmark and search for meaningful topics.

Q. How often is your course content updated?
A. Classes are updated every quarter throughout the year to reflect MicroStrategy’s latest software features and best practices. You can take classes throughout the year that are specific to your role to use the most cutting-edge methods and tools. You can also take our “What’s New” class to get a comprehensive look at new features across all roles and software products, which also paves opportunity to lead your organization in adopting efficient workflows.

Q. Why do course sessions get canceled?
A. One primary reason for class cancellation is low enrollment. You can influence this by encouraging your co-workers to sign up with you, enabling a larger set of your team members to benefit from the skills and knowledge our expert instructors provide.

Q. Why don’t I see my evaluation on my transcript?
A. Reasons you will not be able to see your transcript:
Roster not yet submitted—for project certifications, rosters are not submitted until grades are submitted.
Evaluation window has passed—the evaluation period will begin the morning of the last day of class and will end four calendar days later.
Payment

Q. What is a PEP?
A. A Perennial Education Pass (PEP) is a 12-month user subscription that provides unlimited access to our comprehensive course catalog. PEPs are priced at $3,500 per user, making them the best value in MicroStrategy Education.

Q. How is a PEP different from a TU?
A. With Training Units (TUs), you can purchase $100 gift cards and redeem them on any course, certification, or private training for your team. Anticipating increased training this year? Buy TUs in bulk to ensure employee skills align with your strategic goals.

Q. Can I purchase individual courses?
A. Know the exact course you need to take? You can purchase courses à la carte through the MicroStrategy Learning Portal. Each day of training costs $700.

Q. Is there a reason why I cannot complete my credit card purchase in Cornerstone?
A. Currently, our Learning Portal does not accept transactions made with credit cards from: British Columbia, Manitoba, Ontario, Prince Edward Island, and Saskatchewan.

For purchases made with cards outside this list, please contact education@microstrategy.com

Q. Where can I get more information on my purchasing options?
A. The latest details about these options can be found at: https://www.microstrategy.com/us/services/education#purchasing-options

CERTIFICATIONS

Q. What are the different options to get certified?
A. MicroStrategy offers a set of role-based certifications for each of our core solutions. Analysts, developers, and administrators may choose to be certified on our analytics, mobility, and security solutions.

MicroStrategy offers six certifications:

Specialist
- MicroStrategy Certified Specialist Analyst (MCSA)
- MicroStrategy Certified Specialist Administrator (MCSAD)
- MicroStrategy Certified Specialist Developer (MCSD)

Master
- MicroStrategy Certified Master Analyst (MCMA)
- MicroStrategy Certified Master Administrator (MCMAD)
- MicroStrategy Certified Master Developer (MCMD)

These certifications are offered as stand-alone projects that you may work towards with individual courses unique to the role (these paths can be found on our certifications page) OR you may choose our newly launched Fast Track Certification option.

The Fast Track Certifications are rigorous five to 10 day sessions of fast paced material. Courses are condensed to focus on the content most likely to prepare you for the certification project, which falls on the last day of the course. This is quickly growing to become a popular option as it is a one-stop-shop, but make note of the high intensity!

Q. Do I have to take classes to take a certification project?
A. It is not required to take the supporting classes. However, the suggested classes are strongly recommended, as they prepare participants for the certification projects.

What do certifications involve?

Q. What language(s) are available for certification projects?
A. All certification projects are currently offered in English only.

Q. How long is a certification project?
A. For a specialist level certification, the project is one day, while a master level certification project takes two days.
Q. What resources are allowed during a certification project?
A. You may use your course manuals, MicroStrategy online help, MicroStrategy product manuals, and the MicroStrategy Knowledge Base for assistance in completing the project. However, you may not ask anyone for assistance. See the certification manual for more specific rules on your certification.

Q. What is the passing grade for a certification project?
A. 80%.

After the certification

Q. How long does it take to get my grade back after I complete a certification project?
A. Per MicroStrategy's policy, certifications are graded within 10 working days of completion.

Q. What happens if I do not pass the certification project?
A. If you do not pass a certification project, you must re-attempt it and pass it to get your certification. You may want to refresh your knowledge base by attending the recommended classes.

Q. How do I prove my certification to a third party?
A. You can print your transcript and certificate from The Learning Portal, or you can use the MicroStrategy Certified badge you earned on your résumé or business card. Make sure you follow the badge usage guidelines.

Q. Why should I renew my certification yearly?
A. MicroStrategy releases software feature updates every quarter throughout the year along with annual major feature releases. Classes and certifications are regularly updated to reflect these new and improved features and tools. Annual certification renewal is highly recommended to stay current with the best methods and tools to implement the most effective business intelligence solutions.

Versions of certifications

Q. Why do certifications no longer require comprehensive exams?
A. MicroStrategy raised the standards for certification by using a project based approach to evaluate the skills of a candidate for certification. This way, you can prove your knowledge in a practical way rather than a series of theoretical questions.

Q. Why did you transition from knowledge exam certifications to project based certifications?
A. MicroStrategy Education is strongly committed to offering hands-on certifications where you can show proof of your expertise on MicroStrategy software. Project-based exams certify that a student has successfully completed real-world tasks based on challenging specifications. Rigorous certifications complement our expert instructors who provide a comprehensive depth of training that cannot be matched anywhere else.

Q. What happens to my v9 certification? Is it still valid?
A. Yes, you are still certified in v9. With the advent of MicroStrategy 10, we encourage you to be certified in version 10 to augment your MicroStrategy experience.

Q. I am a Certified Platform Engineer (CPE) in v9. Is there a v10 Engineer certification?
A. No. MicroStrategy does not offer a certification that includes all other certifications in one. Because of the wide variety of roles, each participant determines the area of expertise they want to certify in and selects a unique certification to do so.

MORE INFO

Q. Who should I contact for general questions about MicroStrategy’s education offerings or to schedule training?
A. You can email us at education@MicroStrategy.com or reach us toll free, Monday-Friday at 1-877-232-7168 from 3am EST-5pm EST.
### CATALOG SUMMARY

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**Product:** ★ ANALYTICS ★ MOBILE ★ IDENTITY  |  **Delivery method:** ☑ INSTRUCTOR LED ☑ E-LEARNING ☑ VIDEO

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# CATALOG SUMMARY

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Product: ANALYTICS, MOBILE, IDENTITY  | Delivery method: INSTRUCTOR LED, E-LEARNING, VIDEO

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MICROSTRATEGY EDUCATION TEAM
MEET “THE SCRIBES”

MicroStrategy Education’s Curriculum Development team

Our residential nerds and misfits responsible for bringing you a ton of awesome content.

Davida Kosa
Manager, Curriculum Development

Davida is an 18-year veteran of MicroStrategy, with experience all the way back to MicroStrategy 6.x. She leverages her software technical support experience in her class creations; her MicroStrategy content has earned industry awards. Davida uses her spare time to counsel Eagle Scouts on awards and scholarships.

Gilles Duval
Senior Curriculum Developer

Gilles has programming skills from VB 6 to Java and .NET. He recently added Swift to the list, along with graphical skills in many tools. With a background in math from academia, Gilles is a published author on VB programming. He has more than a decade of providing technical, math, and computer science training, and brings his bi-lingual French/English expertise and his dedication and discipline (including time commitments as a reserve officer in the Canadian Reserve Army) to MicroStrategy’s Education material.

Michal Maliszewski
Principal E-learning Curriculum Developer

Michal is a software engineer with expertise in object-oriented languages, databases, and Adobe Creative Cloud tools. Michal’s experience in film and video game production informs his work crafting MicroStrategy eLearning courses. Michal is certified in C#, ASP.NET, SQL Server, and Visual Studio .NET. His passion for graphic design and multimedia extends outside the office, where he has published award-winning photography.

Nima Soleimani
Curriculum Developer

Nima has experience as a Technical Support Engineer and technical writer and holds a Master’s degree in IT with a Business Intelligence concentration. In addition to creating learning experiences at MicroStrategy, he serves as a Technical Communications Subject Matter Expert for Western Governors University, establishing core competencies for technical communication courses and constructing assessments for IT students.

Lauren Burger
Manager, Curriculum Development

Lauren comes from leading a MicroStrategy implementation at hospitals and health systems, including HIPAA certification, to anonymize and use medical data for business analysis. She earned the MicroStrategy Certified Specialist Analyst and Master Analyst certifications, and has completed numerous advanced SQL courses. She has extensive volunteer hours teaching area ESL students, supporting Women in STEM groups, and working at the Mary Center in Washington, D.C., for low income residents, among others. Lauren is bilingual in Spanish and English and was rated a University Top Language Teacher for Chilean college students.

Roxana Schoen
Senior Director, Education

Roxy oversees a team with a combined 67 years of experience at MicroStrategy. During her 15 years at MicroStrategy, Roxy has lead various teams, shaping software design content into user-friendly and accessible reference and training material. Roxy is a MicroStrategy Certified Master Administrator. While working on her Master’s degree, she was awarded Grad Student of the Year. Her paper on copyright law was presented at a UVA technology conference. Her competitive spirit has helped her win many national awards within several disciplines of equestrian competitions, including Dressage and Eventing.
Sanaa Abdel-Qader  
*Curriculum Developer*

Sanaa brings experience as a Systems Engineer working with UI and coding websites to MicroStrategy. Sanaa has a dual degree in Information Systems and Operations Management, as well as Human Resources, and is adding to this with a Master’s in Education. When she is not writing or studying, Sanaa spends her time volunteering at the ASPCA and Mary Washington Hospital working with service animals and patients.

Reza Ghandchi  
*Curriculum Developer*

Reza has extensive data warehousing knowledge with experience as a Senior Data Warehouse Consultant for the United State Postal Service. He was a Data Warehouse Architect for WorldCom and designed a MicroStrategy data mart. Reza was an independent business intelligence consultant for 13 years, and is a Certified Platform Administrator, MicroStrategy Certified Engineer, MicroStrategy Certified Project Designer, and a PowerBuilder Certified Developer. His analytical and data-focused outlook help him win amateur chess matches.

Emily Farr  
*Curriculum Developer*

Emily comes from a consulting background with a focus in strategy and operations. Before joining MicroStrategy, she was a Training Analyst for Federal IT and Management consulting, writing education courses for government employees on IT and regulatory systems. Emily is trained in Design Thinking and Agile and SCRUM methodologies. Earlier in her career, she was a Business Analyst at Deloitte, working with health care clients to improve their strategy, processes, and technology. In her spare time, Emily enjoys continuing her education by reading about psychology and learning techniques. She also practices yoga and is working to get her teaching certification.

MEET “THE SCHOLARS”

*MicroStrategy Education’s Training Delivery team*

They bring a combined 100 years of MicroStrategy experience and can teach 40 courses in 15 different languages.

Anahi Serrano  
*Senior Training Consultant*

Anahi brings experience from her diverse teaching background to her passion as a MicroStrategy Educator. Anahi is a MicroStrategy Certified Designer. Her leadership and teaching abilities extend to her free time as the assistant director of her church choir.

Doug TerBush  
*Training Consultant*

Doug has over a decade of MicroStrategy experience as a developer, consultant, and instructor. In various roles, he supported a variety of industry clients in health care, health insurance, and retail. He was a Business Intelligence Analyst for Electronic Arts, a leading global interactive entertainment software company. Doug is certified in Linux and dimensional modelling, and is a Certified MicroStrategy Engineer and Developer. He is dedicated to service and technology; Doug is a US military veteran having served as an Explosive Ordnance Disposal Technician in the Army.

Francisco de la Cruz  
*Training Consultant*

Francisco is an engineer with a background in business intelligence. He has past experience as a consultant at Accenture, focusing on data and analytics. Francisco is a certified MicroStrategy Designer and Developer, and an IBM WebSphere Integration Developer. He led several analytics teams for Grupo Nacional Provincial SAB, one of Mexico’s largest insurance companies. Francisco is an MBA candidate at EGADE Business School, the #1 ranked business school in Latin America. He is an avid world traveler and brings his international experience to MicroStrategy Education.
Joe Timchenko  
*Manager, Americas Education Delivery*

Joe comes from a background in economics and data modeling and holds a Master of Public Policy in Economics from Pepperdine University. He was a Data Analyst for Luth Research, supporting data analysis with R, SPSS, and Excel. Joe has programming expertise in SQL, Apache, and PHP. He is a MicroStrategy Certified Designer. Joe’s passion for language extends outside of programming—he speaks English, Spanish, earned a Russian Language Certification, and is learning Armenian and Portuguese.

Luiz Walther di Pietro Filho  
*Training Consultant*

Luiz has been a technical trainer for 13 years working across Latin America. He has experience as a Field Service Engineer with OSIsoft, a Customer Service Consultant for NeoGrid, and a Training Analyst for Duratex S/A. Luiz is a MicroStrategy Certified Designer, MicroStrategy Certified Developer, and is certified in Microsoft Server Virtualization, Microsoft SQL Server Database Development, DELE B2, and TOEIC. Luiz has a background in Electrical Engineering and an MBA in Industrial Automation, and continues flexing his engineering skills by repairing computers and electrical appliances.

Richard Kapupu  
*Training Consultant*

Richard comes from a business intelligence background, working with MicroStrategy at Bell Canada. He taught Applied Mathematics, Economics, and Business Management at a preparatory school in Swaziland before completing his Master’s in Electronic Business Technologies. Richard is a MicroStrategy Certified Designer and has certifications in SAP, SAS programming and statistics, PGCE, data modeling, text analytics with sentiment analysis, and an International Computer Driving License. His language skills are legendary: he speaks English, French, SiSwati, Zulu, and is teaching himself Chinese.

Stephen Goodson  
*Senior Training Consultant*

Stephen founded a consulting firm specializing in the securities industry and was a data analyst and trainer specializing in mortgage and debt securities for a decade. Stephen has extensive knowledge of business intelligence tools such as Bio Technology, Hyperion Solutions, and Oracle. Stephen is a MicroStrategy Certified Designer and Oracle Certified Expert as an Oracle Hyperion System 9 BI+ Administrator.

Bee Hua Goh  
*Training Consultant*

Bee has 20 years of teaching and consulting experience, with 18 years as a Senior Lecturer and Consultant at the National University of Singapore (NUS). She has taught e-project management, sustainability, economics, IT, research methodology, and technology design. As a consultant, she was the Principal Investigator for constructing a non-residential cost-index for Singapore, and a Technical Consultant to SPRING Singapore and Infocomm Development Authority of Singapore. She is a MicroStrategy Certified Analyst, Designer, and Platform Administrator, and holds a PhD in Philosophy with a focus in Building Economics and Statistics from the University College of London. Bee takes her teaching skills home to train her dog, Brad.

Chantal Moss  
*Training Consultant*

Chantal comes from a programming background, creating customized software and leading Infodeck Solutions and JAS Forwarding at Delphi. She was a Consultant at MicroStrategy for two years before moving to Education, bringing hands-on MicroStrategy knowledge to her training. Chantal is a MicroStrategy Certified Engineer and Designer. She has a B.S. in Computer Programming and has taken courses in SQL, data integration, data modeling, and solutions architecture. Chantal channels her creative energy outside of teaching through sewing textiles.
Greg Butler
Senior Training Consultant

Greg has over 30 years as a technical trainer. He specialized in database administration, data management, SQL, and schemas as a trainer at IBM. He is certified in DB2, Informix, and is a MicroStrategy Certified Engineer and Designer. Greg hones his interpersonal skills outside the classroom as a portrait photographer.

Peter Brown
Senior Training Consultant

Peter brings more than 40 years of IT experience to the Education training team. Starting in process control, Peter moved to ERP systems such as SAP and Oracle, working with companies like Apple, Iomega, and Nike. Peter has a Bachelor’s in Science with Honors, in Data Processing and Industrial Studies from the Loughborough University of Technology. He is a MicroStrategy Certified Engineer. Peter is trilingual, fluent in English, Swedish, and Dutch. Outside of work, Peter is an avid gardener, working on a community garden and teaching others in his allotment group gardening techniques.

Sachiko Suehiro
Training Consultant

Sachiko’s background in Systems Engineering supports her quality training for MicroStrategy Education. After working as a System Engineer for a Japanese IT vendor, she moved to work as a Business Intelligence Consultant, implementing BI products to customers. Within this role, Sachiko also organized and taught classes on BI technology for both her colleagues and customers. Sachiko is a MicroStrategy Certified Master Analyst and Master Administrator.

Juan Martin Castro
Training Consultant

Before joining the MicroStrategy Education team, Martin was a Senior Business Intelligence Analyst for Century Link with a focus on finance, creating in-depth reports on revenue and profit and loss variations. Martin’s strong background in BI includes a certification from the University of Buenos Aires specializing in BI foundations, Machine Learning, and advanced research techniques such as neural networks and Big Data. Martin is a certified Oracle Database SQL expert and MicroStrategy Specialist Analyst. In his spare time, he volunteers his teaching expertise at a local IT Institute, training students in VBA, ETL techniques, and process automation.

Igor Freitas
Training Consultant

Igor was a consultant with MicroStrategy Brazil, working with clients like Target, Wells Fargo, and Avon. He managed database migration from UDB to Teradata and set up MicroStrategy projects. He was also a business intelligence consultant with the financial services firm GFT Group. Igor brings his computer science background to his classrooms, along with certifications as a MicroStrategy Certified Document Developer, Project Designer, and Developer. Igor also holds a Business Intelligence Certification from the University of California Irvine and IBM Cognos certification. He speaks English, Spanish, and Portuguese. Igor is a top-rated instructor and uses his international experience to help his students gain confidence and the knowledge they need to use MicroStrategy successfully.

Tiffany Gonzalez
Training Consultant

Tiffany has more than a decade of experience working in technical support and training. She holds a Computer Science and Technology Education teaching license from the Department of Defense. She is also licensed to teach mathematics and business and technology. In her spare time, Tiffany hones her coaching experience by coaching cheerleading as a volunteer in Charlotte, North Carolina.

Mette Miller
Training Consultant

Mette brings her extensive experience in business intelligence training and education to MicroStrategy, having worked as an international technical rainer for a data analytics start-up, a higher education sales associate, and a multilingual tutor. She graduated magna cum laude with degrees in Communication Studies and Spanish. She is a MicroStrategy Certified Master Analyst, and has Spanish language certifications from the Pontificia Universidad Catolica de Valparaiso, Chile and Universidad Nacional de Costa Rica. In her free time, Mette volunteers at her local church working with the Austin community with education, childcare, mentorship, and food supply initiatives. Before finding her calling in technical training, Mette was a TV and film screenwriter in Los Angeles.
Jason Hudson  
*Training Consultant*

Jason started his journey in technology sixteen years ago as an analyst and then a Business Intelligence manager. Before coming to MicroStrategy, he was a development consultant, working with enterprises such as Timex and the Department of Energy. Jason is certified in OBIEE Reports and Dashboard Developer, SharePoint Administration, IBM Content Collector Administration, and is an Oracle SQL developer. When Jason isn’t teaching, he spends time programming and being the neighborhood laptop repairman, as well as spending time with his family and solving crossword puzzles.

Gina Sidhu  
*Training Consultant*

Gina has more than a decade of experience in data analytics and financial services. She began her career as a Systems Analyst and Software Engineer, then moved into a consulting role. Before coming to MicroStrategy, her consulting was focused on audit and fraud analysis, training auditors and forensic investigators on effective data analytics. Gina is bilingual, speaking English and Malay. She is a MicroStrategy Certified Master Analyst. Gina is also a PADI certified scuba diver and spends her free time exploring the underwater world.

Kisun Kim  
*Training Consultant/Suseok*

KiSun has a background in business intelligence system management, with expertise in Hadoop, Oracle, Cloudera, and Pentaho BI Stack. In his free time, KiSun uses his BI skills as a User Group Manager for Pentaho Korea. He was a senior BI designer and developer at Hyundai, and an IT manager for Dongbu CNI. KiSun is certified in Engineer Information Processing and ITIL Foundation – Office of Government Commerce.

Myriam Rielau  
*Senior Training Consultant*

Myriam has been a MicroStrategy Education Consultant for seven years. She brings experience to her classes that spans assisting companies with CRM business processing and RFP evaluations. Myriam is a MicroStrategy Certified Platform Administrator and Certified Engineer. She leverages her patience and keen eye for detail as an amateur gardener.

Pedro Marco Ortega  
*Training Consultant*

Pedro has an extensive background in database management, with expertise in SQL, Oracle, and Cloudera. He was an Oracle Development and Administrative trainer for customers such as Telefónica Móviles and Madrid-Barajas Airport. Pedro is a MicroStrategy Certified Developer, an Oracle Database 12c Administrator Certified Associate, an Oracle Database SQL Certified Expert, a Cloudera Certified Administrator for Apache Hadoop, and an Oracle PL/SQL Certified Associate. Pedro uses his expertise in Java and HTML in his spare time working on computer programs and websites.

Shizuka Harada  
*Training Consultant*

One of our newest instructors, Shizuka comes from a business intelligence background focused on software analytics training. She is a MicroStrategy Certified Designer. Shizuka spends her free time as the lead drummer in the Tokyo Pipe Band, a Scottish bagpipe band.

Stefano Sartorio  
*Training Consultant*

Stefano is a Computer Scientist with 17 years of experience at MicroStrategy, in teaching and as a Senior Sales Engineer. He was a consultant with Sybase, focusing on database engineering, configuration, and tuning. Stefano thrives in front of an audience—he plays trumpet in groups ranging from his local philharmonic group to a large jazz ensemble.

Hans-Joachim (Hanjo) Diedrich  
*Senior Training Consultant*

Hanjo has been a MicroStrategy Educator for over a decade with a focus on data warehouse architecture, administration, and SDK. He is a MicroStrategy Certified Engineer and Analyst. He is also a Certified Project Designer, Certified Report Designer, Certified Dashboard and Mobile Designer, and Certified Platform Administrator. When Hanjo isn’t helping students improve their MicroStrategy skills, you can find him tackling home-improvement projects.
Karl Doll  
*Manager, International Education Delivery*

Karl is an 18-year MicroStrategy veteran. His previous MicroStrategy teaching experience informs his work managing the international education delivery team. Karl is a MicroStrategy Certified Designer and has expertise in data warehouse architecture, report and document development, and administration. He flexes his management and teaching skills outside of work as a basketball coach and player.

Xiaodong (Tony) Zhang  
*Training Consultant*

Tony brings eight years’ experience in the IT and business intelligence field as a training consultant to his instructor role at MicroStrategy. Before coming to MicroStrategy, Tony was an IT consultant for Ernst and Young, a voice engineer for Avaya, a business communications company, and a BI consultant for SAP. Tony is an Oracle Certified Professional and Java SE 6 Programmer.

Sophie da Silva  
*Training Consultant*

Sophie has experience as a Business Analyst and Trainer for SAP business objects at SAP’s Campus France. She comes from a diverse decade of experience at the Egide Group that informs her role as a Training Consultant, serving as the International Mobility Officer, Deputy Head at the Scholarships Program, and a Contract Manager. Sophie is trilingual in English, French, and Portuguese, and used her language skills as a volunteer data analytics instructor at the University of Science and Technology in Togo. Sophie’s classes benefit from her quick wit and presentation skills learned from her experience as an improv theater actor.

Sonia Chowdhury  
*Education Operations Coordinator*

Sonia is earning her Master’s in Information Technology with a concentration in Cyber Security while working full-time at MicroStrategy. She has advanced programming skills from JAVA to VBA coding. Sonia is a polyglot, speaking over six languages. She is certified as a Green Belt Lean Six Sigma. Sonia spends her free time tutoring GED students and perfecting her nature photography skills.

Alex Kolankiewicz  
*Education Operations Coordinator*

Alex comes from a strategic business consulting background, where he undertook everything from designing and building websites, managing operations, and developing strategic marketing plans. Alex is an outdoorsman with a green thumb—he volunteers at the state arboretum maintaining their trails and gardens and completed the northern portion of the Virginia Appalachian trail this year.

Lucy Palys  
*Education Operations Coordinator*

Lucy has a decade of teaching experience. She taught English to business customers, such as Coca Cola, Telepizza, CH2M, and Inditext. She tutored students on English certification exams, GMAT, FCE, and on general speaking skills. Lucy has translated catalogs, magazines, and books into English, and was a SEVIS Compliance Coordinator for CIEE, a study abroad company. She uses her coordination skills in her free time to organize concerts and work as an assistant on a radio crew.
MEET "THE MERCHANT AMBASSADORS"

MicroStrategy Education's Sales Team

Swami Rajamanickam
Sales Manager, Education

Swami brings 35 years of global IT industry experience to the Education team, including work in pre-sales, consulting, and project management. Swami has been Regional Director for a leading information infrastructure solution provider, expanding their education services business across the APAC region. Swami has also taught business intelligence courses throughout Singapore, on data visualization, business analytics, and Big Data applications. Swami holds a Master's Degree in Software Engineering from National University of Singapore, a postgraduate diploma in Electronics Design Technology from Indian Institute of Science, and a Bachelor's Degree with Honors in Electronics and Communication Engineering from the National Institute of Technology. Swami is a professional member of the Singapore Computer Society, helping found the Business Analytics Chapter, and a member of the Digital Proficiency Subcommittee. In his free time, Swami volunteers with SkillsFuture Singapore, mentoring mid-career IT professionals.

Michelle Galatis
Senior Sales Manager, Education

Michelle comes from an IT background leading software training programs for the Patent and Trademark office. A former MicroStrategy Curriculum Developer, Michelle owned content for MicroStrategy Mobile, Transaction Services, and dashboarding. While serving as a team lead at a major retail corporation, she was chosen to participate in the Backpacker program, working in Europe where she developed leadership skills and a love of traveling.

Amanda Rekenthaler
Sales Associate, Education

Amanda's extensive background in event planning informs her role as a Sales Associate, supporting customers to help them plan their MicroStrategy Education needs and ensure they are informed of Education offerings. Amanda has coordinated and planned events from large-scale corporate conventions to county fairs. She dedicates her spare time to mastering her yoga practice.

Amy Cho
Education Operations Coordinator

Amy brings her experience as a Patient Care Coordinator to her Education Operations team. As a care coordinator, Amy utilized her positive and effective communication skills with patients to ensure they were prepared for surgery and understood their follow-up care. She has extensive experience working with Electronic Health Record systems and managing sensitive patient data, which gives her industry insight into MicroStrategy's reporting and security technologies. Amy's communication skills include being bilingual in English and Korean, and she is a talented singer in both languages.

Romualda Cwiek
Education Operations Coordinator

Roma's background in education informs her role as an Education Operations Coordinator. She speaks Polish, English, German, and French, and keeps her mind sharp outside of work playing chess.
Rohit Amba
Executive Vice President, MicroStrategy Global Education

Rohit leads the MicroStrategy Global Education team, leveraging two decades of experience in operations and education. He founded Grok Advisors, a consulting firm advising education clients such as universities and textbook companies in RFP submissions, business development, sales, operations, and strategy. Rohit served as General Manager of the digital textbook business for Flatworld Education and led the Student Acquisition and Development team at K12, an online education company. He has also held various roles at AOL focused on customer acquisition and retention. Rohit is a published author on effective leadership. His drive for success and problem-solving have helped grow MicroStrategy Education course content by 90%. His coaching and management skills extend to his personal life with his well-behaved German shepherds.

Asmaa Chatibi
Sales Manager, Education

Asmaa has seven years’ experience working with software providers. She was a market intelligence analyst, a trainer, and a project manager at AMI, a competitive intelligence and text mining software company. She is a MicroStrategy Certified Analyst and Administrator, and has a certification in Blended Learning Fundamentals. Asmaa has a Master’s degree in Communication with a focus on Competitive Intelligence and Risk Analysis. At MicroStrategy, she uses her creativity to build custom training programs and flexes her creative side in her spare time writing poetry.

Ryann Hart
Sales Associate, Education

Ryann comes from a background in MicroStrategy Education Operations with extensive experience in first-class customer service. Before coming to MicroStrategy, Ryann managed multiple development and training programs. Ryann served as an AmeriCorps member for underprivileged middle school students, and extends her commitments to more than a decade of cheerleading. She is a current member of the nonprofit Cheer DC.

MEET “THE CHIEF TROUBLEMAKER”

MicroStrategy Education’s Senior Vice President

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For more information please contact your Account Executive about Enterprise training for your organization or email education@microstrategy.com and/or call 1-877-232-7168.