Accelerate your success with the latest training in enterprise analytics, mobility, and identity intelligence.
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- MEET “THE SCRIBES”
- MEET “THE SCHOLARS”
- MEET “THE CONCIERGES”
- MEET “THE MERCHANT AMBASSADORS”
- MEET “THE CHIEF TROUBLEMAKER”

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Leverage MicroStrategy Education to Build and Empower Your MicroStrategy Intelligence Center!

Our 2018 catalog provides you a framework to build a personalized plan to grow your knowledge and skillsets and supercharge your organization’s MicroStrategy Intelligence Center. As you take the time to review the catalog and decide how to best leverage our content, I wanted to highlight key 2018 programs:

**Free Education:** 30,000 registrations later, our *Jump Start* program continues to attract users interested in learning about Business Intelligence and MicroStrategy. Each day in the program is structured to stand on its own, allowing you to attend any one or all five days. Today, the program reflects the release of our *Dossier* feature and is available in nine languages in over 40 cities worldwide and online. We continue to build a library of video tutorials providing quick tips & tricks on the MicroStrategy platform. All of these tutorials are available via the *MicroStrategy Community* or the *MicroStrategy Education YouTube channel*. The tutorials are a resource for any MicroStrategy user regardless of their level of experience.

**In Paid Education, Everything Old Is New:** We update our content on a monthly basis and 50% or more of our content is refreshed on a yearly basis. Keeping content updated to reflect our quarterly software releases, incorporating customer feedback, and best practices ensures your MicroStrategy Intelligence Center employees always have access to learn about the latest MicroStrategy features and functionality.

**Certify Your Intelligence Center:** Your investment in MicroStrategy needs to be protected and nurtured. Role specific project certifications ensure that employees within your Intelligence Center serve as *Trusted MicroStrategy Advisors*. For that reason, we recommend customers renew their MicroStrategy certifications yearly, and now we provide multiple options to get certified:

- **Certify at Your Own Pace:** Our 2018 schedule offers our most popular courses and certification projects often, allowing you to build a personal training schedule that works for you.
- **Fast Track:** This is an efficient and expedited option to certify and we compress a lot of knowledge in a short amount of time. Depending on your role, level, and the certification you need, you can expect to get certified in 5 to 10 days.
- **Demonstrate Your Experience:** Depending on your familiarity with MicroStrategy, you may already have the knowledge you need. Pass the project with a minimum score of 80%, and you are MicroStrategy Certified.

**Enterprise E-learning:** For organizations looking to get a large number of Analysts up & running within a few hours of training, our self-paced E-courseware modules are an ideal option. Our Enterprise modules are the most cost-effective and efficient option to get employees proficient on MicroStrategy. We have made significant investments in our portfolio of Enterprise E-learning modules with a total of 12 of our most popular courses now available as self-paced modules. Talk to your MicroStrategy Account Executive to find out how our Enterprise E-learning option can help your organization!
Leverage New “Course Customization” Option: We can customize our course content to leverage your organization’s data and how your employees use the data to make decisions. Course customization is a new offering for our customers. It allows us to personalize the content for customers to reflect their brand, their datasets and tie it into real world applications and benefits. Customized classes offer employees the information and specific skill sets they need to boost their performance and ensure that your organization is making the most of its training.

NEW Education Website: Having a compelling portfolio of product offerings and content is critical but making it easily accessible is what makes the key difference. Our new Education website (via www.microstrategy.com) not only provides you details on everything above but also makes finding and registering for courses and certifications much easier. I urge you to take a quick walkthrough of our new site and make it your go-to destination for everything MicroStrategy Education!

In closing, thank you so much for taking the time to review this catalog and trusting my team and me to provide you the support you need. I look forward to working with you!

Sincerely,
Rohit Amba
SVP, MicroStrategy Global Education
ramba@microstrategy.com
Jump Start: Your MicroStrategy Education for free
10.117 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.

Skills you gain

• Refine and wrangle data to create dossiers
• Create interactive visualizations for most effective business analysis
• Analyze data effectively for a given graph type
• Share and collaborate 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’s course catalog.

Topics

1. MicroStrategy: Data driven intelligence
   • Dashboarding foundations
   • Prepare and import data
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 you MicroStrategy environment
   • Upload and prepare data
   • User and group management
   • Create and analyze a dossier
**10.118 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.

**Skills you gain**

- Introduction to basic analytical reporting objects
- Create simple reports
- Overview of boardroom-quality document creation
- Overview of 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's course catalog.

**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
10.119 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.

Skills you gain
- Overview of a BI enterprise platform and its products and tools
- Brief overview of reports and documents
- Plan simple data warehouse and reporting object mapping
- Understand the project life cycle

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

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

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
10.123 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.

Skills you gain
- Design principles and best practices for app creation
- Use documents to create a mobile app
- Overview of adding interactive app functionality
- Create and deploy 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’s course catalog

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 dossiers, interactive business intelligence dashboards, 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
10.133 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 Usher is used to create and deploy security networks.

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

MicroStrategy products covered
- Enterprise Security platform with MicroStrategy Usher

Right for you if
You want to secure your enterprise processes, people, and assets, while also learning about MicroStrategy’s product offerings and Education’s course catalog.

Topics
1. Introduction to enterprise security
   - Usher Mobile Identity platform
2. Usher Security App and badges
3. Designing the security network architecture
   - Security analysis of logical and physical assets and VPNS/firewalls
   - Design and implementation planning
   - Usherizing MicroStrategy Web
Our Comprehensive Catalog of Classes

CLASSES TO BUILD SKILLS AND CERTIFICATIONS
Course description


Skills you gain

- Learn new features and workflows
- Train others in your organization on new features and workflows
- Use new visualization and dashboarding capabilities
- Present interactive boardroom data
- Update your security standards using Usher biometrics, configuration, and FastBadge
- Drill to details, sort data, and apply 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. MicroStrategy Library and Dossier
   - Creating a dossier
   - Sharing your dossiers using MicroStrategy Library
   - Dossiers on mobile devices
2. Dashboarding and Visualizations
   - Converting a Visual Insight dashboard to a dossier
   - Data management
   - Analytical capabilities
   - Visualization improvements
   - Dossier sharing
3. MicroStrategy Web
   - Reports
   - Report Services documents
   - Web SDK
   - Preview feature: Hierarchy reporting
4. MicroStrategy Mobile
   - iOS enhancements
   - Android enhancements
5. Transaction Services
6. MicroStrategy System Manager
7. MicroStrategy Integrity Manager
8. MicroStrategy Command Manager
9. MicroStrategy Distribution Services
10. MicroStrategy Intelligence Server
   - Platform installation and deployment
   - Clustering, logging, authentication
   - In-memory analytics
   - Big Data gateways
11. MicroStrategy Office
12. MicroStrategy Enterprise Manager
13. Usher Security
   - Usher security features
   - Usher Professional and Usher Analytics

ROLE:
Platform Administrator
10.111 Overview of Enterprise Analytics (2 days)

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.

Skills you gain
- Learn business intelligence product offerings
- Create simple reporting objects
- Plan data warehouse and reporting object mapping
- Create basic reports, documents, and dossiers
- Understand the project life cycle
- Create objects on the fly (derived objects)
- Deploy a simple app to a mobile device
- View a document on a mobile device
- Understand where data comes from and what you can do with it

MicroStrategy products covered
- MicroStrategy Developer, MicroStrategy Web, MicroStrategy Mobile, and 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 Enterprise Platform
   - 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
   - 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 Usher
   - Usher platform
   - Usher analytics

8. MicroStrategy administration
   - MicroStrategy Web administration
   - Security
   - Monitoring
   - Automation with Command Manager and System Manager

ROLE:
Analyst
10.112 Introduction to Analytics Reporting (2 days)

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.

Skills you gain
- Analyze organizational data to make effective business decisions
- Create business reports
- Identify appropriate business concepts to evaluate calculations
- Use calculations and measures to determine actionable business decisions
- Logically plan subsets of data for analysis, using filtering techniques
- Design business reports for other users, with self-service features
- Share reports using export, print, or subscribing to report deliveries
- Identify and analyze trends, anomalies, and other important meaning in your data

MicroStrategy products covered
- MicroStrategy Web

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

Topics
1. Foundation for creating reports
   - 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

ROLE:
Business User
### 10.114 Visual Data Discovery: MicroStrategy Desktop (1 day)

**Course description**

Import data into MicroStrategy Desktop to create visually appealing interactive dossiers. Learn how to 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.

**Skills you gain**

- Import and refine data to create dashboards
- Display data within appropriate interactive visualizations for most effective business analysis
- Analyze data effectively

**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

**ROLES:**

Business User
Application Architect

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

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Course description

An introduction to dossiers, MicroStrategy Library, and MicroStrategy Workstation, this class develops the skills to leverage MicroStrategy's next generation data discovery. Learn how to create interactive dossiers that transform your data into visualizations to quickly and easily analyze trends and key performance indicators. Learn best practice design principles, how to share your insights across the enterprise through MicroStrategy Library, and how to deploy responsive mobile dossiers.

Skills you gain

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

MicroStrategy products covered


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

Topics

1. Creative and collaborative data discovery: dossiers
   - Introduction to dossiers
   - Explore a dossier
2. Visualize your data: Build a dossier
   - Dossier data sources
   - Dossier design principles
   - Understand the dossier interface
   - Create a Table of Contents
   - Create a Product Sales Analysis dossier
   - Add visualizations, formatting, and filters to your dossier
   - Optimize a converted Visual Insight dashboard for dossier
   - Introduction to MicroStrategy Library
   - Personalize and manage your Library
   - Library collaboration and communication
   - Explore Library dossier consumption and collaboration methods
4. Responsive mobile design
   - Optimize dossier for mobile consumption
   - Learn and explore the MicroStrategy Dossier App
   - Mobile Library
5. Unified authoring and administration: Workstation
   - Administration, data modeling, and content authoring in Workstation

ROLES:

- Mobile Architect
- Business User
10.121 Overview of Enterprise Mobility (2 days)

Course description
Build basic enterprise mobile applications using MicroStrategy tools. Covers the fundamentals of enterprise mobile 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, to perform basic mobile application design, development, and deployment.

Skills you gain
- Design principles for mobile apps
- Create documents with interactive graphs
- Create mobile configurations
- Add mobile-specific features to a document
- Create and deploy a mobile app to a mobile device
- Mobile app development lifecycle
- Storyboarding
- Mobile architecture basics

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
- Overview of Enterprise Analytics
- Introduction to Documents
- Students must bring a supported mobile device to class

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. Extend Mobile capabilities
   - Transaction Services
   - Mobile SDK

4. Administration and app deployment
   - The Mobile client
   - Mobile architecture
   - Mobile configuration
   - Mobile app deployment
   - Additional Mobile features

ROLES:
Business User
Application Architect
10.131 Overview of Enterprise Security (1 day)

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 Usher is used to create and deploy security networks.

Skills you gain

- Usher badges
- Usher 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 Usher
- MicroStrategy Web

Right for you if

You are a business analyst or security professional who wants to learn the fundamentals of the Usher platform

Best class experience if you have

- Overview of Enterprise Analytics

Topics

1. Introduction to Enterprise Security
   - Usher platform
2. Usher app and badges
3. Designing the security network architecture
   - Security analysis
   - Design and implementation planning
   - Usherizing MicroStrategy Web
4. Project
   - Project tasks
   - Project solutions

ROLES:

Digital Identity Architect
Application Architect

Product: ANALYTICS  MOBILE  IDENTITY  Delivery method: INSTRUCTOR LED  E-LEARNING  VIDEO
10.132 Enterprise Security Analytics (1 day)

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.

Skills you gain
- Usher Analytics out-of-the-box reports and dossiers
- Monitor access to buildings and doors
- Monitor logical access to software systems

MicroStrategy products covered
- MicroStrategy Usher
- 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 Usher Analytics
   - Overview of Usher
   - Usher architecture fundamentals
   - Overview of Usher Analytics
2. Reporting in Usher Analytics
   - Intelligence with Usher Analytics
   - Custom reporting
   - MicroStrategy object categories
   - Viewing and distributing reports
   - Building reports
   - Creating documents

ROLES:
Digital Identity Architect
Mobile Architect
Data Scientist
10.141 Introduction to Documents (2 days)

Course description

Create Report Services documents to satisfy sophisticated information requirements. Display grids and graphs simultaneously, along with text and images. Transform data into an appealing, insightful display of presentation quality. Provide highly formatted views of information such as 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.

Skills you gain

- Create boardroom-quality business documents
- Analyze organizational data to make effective business decisions
- Identify appropriate business concepts to evaluate calculations
- Logically plan subsets of data for analysis, using grouping and custom sections
- Design business reports for other users
- Add data, from a MicroStrategy report or an external data source
- Share 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

ROLES:

Business User
Application Architect
10.142 Dashboarding and Visualizations (2 days)

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.

Skills you gain
- Use appropriate graphing techniques to identify and analyze trends, anomalies, and other important meaning in data
- Select the appropriate interactive graph to display data for a specific business analysis
- Convert raw data into a clean visual display to view quality and consistent information
- Organize data in layers to connect similar information
- Create logical patterns in data using filtering techniques
- Share insights with colleagues with commenting and tagging

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

ROLES:
- Business User
- Mobile Architect
- Analytics Architect
- Application Architect
10.212 Portal Integration using SDK (1 day)

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.

Skills you gain
- Understand portal architecture and design
- Understand portlet-to-portlet functionalities
- Customize single sign-on authentication for portal and portlets
- Learn credential mapping
- Learn 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
10.111 Overview of Enterprise Analytics
10.213 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

ROLE:
Embedded Analytics Architect
10.213 SDK for Customizing Analytical Applications (2 days)

Course description
Learn how to take advantage of MicroStrategy Web APIs and SDKs to change Web behavior and look-and-feel. Create custom analytics applications and integrate analytics into any business application.

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
- Services-oriented architecture (SOA)
- Create styles, transforms, and layouts
- Visualization Builder
- External Security Module (ESM)

MicroStrategy products covered
- MicroStrategy SDK
- MicroStrategy Web

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
Java development experience
Eclipse experience

ROLE:
Developer
Embedded Analytics Architect

Topics
1. MicroStrategy SDK
   - MicroStrategy Web architecture
   - Page execution flow and customizable components
   - Plug-in architecture
2. Web Customization Editor plug-in
3. Customizing pages
   - Page configuration file
   - Page template and page sections
4. Web beans
   - Beans folder and properties
   - Styles and beans
5. Task infrastructure
   - Tasks and service-oriented architecture
6. Styles, transforms, and layouts
   - Data presentation
   - Transforms and styles
   - Layout definitions
   - Style catalog configuration file
   - Style Editor
7. Cascading style sheets
8. Visualization Builder
9. Customizing security
   - MicroStrategy Web authentication
   - MicroStrategy sessions
   - External Security Module

Product: ANALYTICS, MOBILE, IDENTITY
Delivery method: INSTRUCTOR LED, E-LEARNING, VIDEO
10.221 SDK for Customizing Mobile Applications (2 days)

Course description

Develop a deep understanding of MicroStrategy Mobile APIs & SDKs. Learn to create custom mobile applications and mobilize any existing business application.

Skills you gain

- Apple’s Xcode development environment
- Plan customizations for MicroStrategy Mobile SDK
- Mobile architecture design and components
- Rebrand a mobile app
- Associate appropriate frameworks and libraries
- Create a plug-in using Eclipse IDE
- Create mobile configurations for different devices
- Deploy 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 side

Best class experience if you have

10.213 SDK for Customizing Analytical Applications
10.121 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

ROLES:
Mobile Architect
Embedded Analytics Architect
Developer
10.231 SDK for Customizing Enterprise Security (1 day)

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

Skills you gain
- Security certificate generation and management
- Usher network creation and management
- Usher API calls
- Introduction to SAML
- Introduction to authorization and authentication workflows

MicroStrategy products covered
- MicroStrategy SDK
- MicroStrategy Usher

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

Best class experience if you have
10.131 Overview of Enterprise Security
3 email accounts accessible from your mobile device
Digital .png photo (400 x 400 pixels) of you for your badge

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

ROLES:
Digital Identity Architect
Developer
10.311 Administration for Enterprise Analytics (3 days)

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.

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
10.111 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 Usher 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

ROLES:
Mobile Architect
Platform Admin
Analytics Architect
Application Architect
10.312 Administration for MicroStrategy on AWS (2 days)

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.

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
10.311 Administration for 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

ROLE:
Platform Administrator
10.313 Introduction to Big Data (1 day)

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.

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
10.111 Overview of Enterprise Analytics

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

ROLES:
Analyst
Application Architect
10.314 Working with MicroStrategy in Linux (1 day)

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.

Skills you gain
- Understand the deployment process, best practices, and directory structure in a Linux environment
- Use the best tools to establish platform connectivity and manage your Linux environment
- Share resources in a clustered Linux environment
- Use 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
10.311 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

ROLE:
Platform Administrator
10.321 Administration for Enterprise Mobility (1 day)

**Course description**

Gain practical knowledge necessary to deploy, configure, manage and optimize the performance of mobile applications either via the Cloud or on premise.

**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**

10.121 Overview of Enterprise Mobile

Must bring a supported mobile device to class

**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

**ROLE:**

Mobile Architect
10.331 Administration for Enterprise Security (1 day)

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.

Skills you gain

- User badges
- Security architecture and components
- Usher 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 Usher

Right for you if

You are an administrator or security professional who wants to set up and manage the Usher Identity platform

Best class experience if you have

10.111 Overview of Enterprise Analytics
10.131 Overview of Enterprise Security

Topics

1. Introduction to enterprise security
   - Traditional security methods
   - Enhancing the security of traditional measures
   - Software-based security measures
   - Usher use cases
   - Responsibilities of a MicroStrategy Usher administrator
2. Usher architecture and deployment
   - Usher workflows
   - Usher deployment
   - Usher implementation scenarios
3. Usher administration
   - Creating an Usher security 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 Usher
   - Deleting an Usher network
   - Gateway configuration
4. Security
   - Security in the Usher platform
   - Client-level security
   - Data transmission-level security
   - Usher server-level security
   - Usher gateway-level security

ROLE:
Digital Identity Architect
10.411 Project Architecting (3 days)

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.

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

ROLES:

Mobile Architect
Digital Identity Architect
Analyst
Analytics Architect
Applications Architect
10.412 Advanced Analytics Reporting (2 days)

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.

Skills you gain
- Create non-aggregatable metrics
- Create level metrics to compare contributions
- Create transformation metrics to offset values
- Use advanced mathematical functions in metric calculations
- Combine elements from different attribute to filter data
- Use dynamic dates to filter data
- Use pass-through functions to filter data
- Create attributes and metrics on the fly
- Optimize performance with Intelligent Cubes
- Determine the order of calculation
- Determine 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
   - Tools and interfaces
2. Base formulas and advanced subtotals
   - Base formulas
   - 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
   - Advanced metrics in the Formula Editor
   - 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

ROLES:
- Business User
- Data Scientist
- Mobile Architect
- Digital Identity Architect
- Analytics Architect
- Application Architect
10.413 Advanced Documents: Interactivity and Joining Datasets (2 days)

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.

Skills you gain
- Create a document with pixel-perfect formatting
- Add interactivity to documents
- Combine data from multiple sources in a single document, and specify data joins
- Layer data and multiple documents
- Link documents to other documents, reports, and web pages
- Design documents for multiple users
- Combine 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 Documents
- Overview of Enterprise Analytics

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

ROLES:
- Digital Identity Architect
- Business User
- Mobile Architect
- Application Architect
- Data Scientist
10.421 Advanced Mobile Applications (2 days)

Course description
Learn about advanced mobile application features such as docked panel selectors, navigation templates, and cutting-edge Mobile widgets. Create custom, code-free home pages.

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 applicable tasks for Mobile administrators to help you design a powerful and effective mobile app.

Skills you gain
• Add complex interactive analysis to a Mobile app
• Configure an app with code-free customizations
• Robust app navigation functionality
• Make personal design decisions for app creation
• Apply design principles for a polished app
• Overview of app performance analysis tools

MicroStrategy products covered
• MicroStrategy Web
• MicroStrategy Mobile

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
• Visual Data Discovery – Visual Insight
• Overview of Enterprise Mobility
• Advanced Documents

Topics
1. Create a robust app
• Introduction to advanced Mobile applications
• 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 to Mobile apps: 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 your mobile device
• Enable My Reports folder

4. Understand the impact of Mobile administration
• User notifications, subscriptions, and alerts
• Improve the user experience by understanding Mobile statistics
• Prepare content for offline mode
• Deploy a MicroStrategy Mobile app

ROLES:
Mobile Architect
Business User
Analytics Architect
10.422 Database Write-back: Mobile Transactions (2 days)

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

Skills you gain
- Create freeform SQL queries
- XQuery code to submit transactions through web services
- Create transaction reports
- Create data tables in a data warehouse that can have data written back to them
- Create documents
- Configure database write-back transactions
- Create transaction-enabled mobile apps
- Configure transactions for off-line functionality

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

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

Best class experience if you have
- Overview of Enterprise Mobile
- Must bring 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

ROLES:
Mobile Architect
Embedded Analytics Architect
10.431 Advanced Enterprise Security Analytics (1 day)

Course description
Learn about identity intelligence, and how to gather and use telemetry services to understand your user behavior and actions. Take advantage of Usher Professional 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.

Skills you gain
- Install Usher and Usher Professional 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 Usher

Right for you if
You are an advanced analyst, administrator, or security professional who wants to create custom or complex analytics and fully utilize Usher Analytics and Usher Professional features

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

Topics
1. Identity Intelligence
   - Usher platform
   - Identity Intelligence
   - Identity Intelligence via the Usher platform
   - Usher deployment options
   - Configuring Usher Analytics and Usher Professional
2. Usher Professional
   - Usher Pro app
   - Managing user access
   - Photo policy assessment
   - Usher Professional Analyst role
3. Security analytics
   - Usher Analytics
   - Improving Usher data quality
   - Real time reporting with Usher Analytics
   - Location tracking
   - Viewing gateway badge statistics
   - Viewing members who use your badges

ROLES:
Digital Identity Architect
Analytics Architect
Data Scientist
10.511 Advanced SDK for Customizing Visualizations (2 days)

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.

Skills you gain
- Analyze and write code in JavaScript
- Modify XML files, HTML, and CSS
- Use the Visualization SDK API
- Introduction to D3 and SVG
- Create a D3 visualization and a plug-in
- Convert a D3 visualization to consume MicroStrategy data
- Define 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
10.111 Overview of Enterprise Analytics
10.213 SDK for Customizing Analytical Applications
JavaScript experience

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.

Skills you gain
- Analyze and write code in JavaScript
- Modify XML files, HTML, and CSS
- Use the Visualization SDK API
- Introduction to D3 and SVG
- Create a D3 visualization and a plug-in
- Convert a D3 visualization to consume MicroStrategy data
- Define 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
10.111 Overview of Enterprise Analytics
10.213 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

ROLES:
Embedded Analytics Architect
Developer

Product:
- ANALYTICS
- MOBILE
- IDENTITY

Delivery method:
- INSTRUCTOR LED
- E-LEARNING
- VIDEO
10.512 Advanced SDK for Customizing Branding (2 days)

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.

Skills you gain
• Eclipse IDE and the Web Customization Editor
• Write Java classes
• XML configuration files
• URL API and CSS
• Transforms, styles, new events, and add-ons
• Service-Oriented Architecture (SOA)
• Use 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
10.213 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

ROLES:
Embedded Analytics Architect
Developer
10.513 Advanced SDK for Integration and Single Sign-on (2 days)

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. Includes hands-on exercises throughout the class.

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
   • External Security Module (ESM)
   • Creating a custom ESM
   • Mapping a custom ESM to be used with MicroStrategy Web
   • Using a custom ESM for customizing authentication workflow
3. Validating users
   • How SSO uses 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

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

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
10.111 Overview of Enterprise Analytics
Java and HTML experience

ROLES:
Embedded Analytics Architect
Developer
10.521 Advanced Mobile Customizations with SDK (2 days)

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.

Skills you gain
- Xcode and debugging techniques
- Create a mobile app and write code in Swift
- Mobile configurations in Mobile Server
- URL API for mobile
- Third-party app to generate branding assets
- Splash screen, intro animations, fonts
- Basic HTML, CSS, and JSON files
- Custom fonts in a mobile application
- XML documents
- Create a new Swift class with binding
- Install a toolchain in Xcode and use a toolchain to compile applications
- Custom appDelegate for a mobile app
- Use 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
10.121 Overview of Enterprise Mobility
10.213 SDK for Customizing Mobile Applications
Swift experience
Two mobile devices (iPhone and/or iPad)

Topics
1. Introduction
   - Overview of MicroStrategy SDK
   - 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

ROLES:
Embedded Analytics Architect
Developer
10.531 Advanced SDK for Enterprise Security (2 days)

Course description
Customize your applications to incorporate Usher’s security features using Usher’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 advance customization techniques, including coding examples.

Skills you gain
- QR authentication workflow
- OpenSSL to generate security certificates
- JavaScript, basic HTML, and CSS
- Implement a custom PACS adaptor and the Usher 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
- MicroStrategy SDK
- MicroStrategy Usher

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

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

Topics
1. Introduction and overview of Usher SDK
   - Overview of Usher SDK
   - Usher platform architecture overview
2. Usherizing custom applications
   - QR code authentication workflow
   - Customizing authentication using Usher
   - Application flow
3. Usherizing a Physical Access Control System (PACS)
   - Custom PACS adapter for Usher
   - Physical access key
   - Building a PACS adapter
   - Usher PACS API
   - Walk-through: Implementing a custom PACS
   - Walk-through: Using a more robust PACS: UsherPACS
   - Categorizing the resources that are integrated with Usher
4. Usherizing beacons
   - Beacons
   - Using beacons with PACS
5. Custom applications for beacons
   - The vision
   - Base project
   - Tweaking the base project
   - Challenges

ROLES:
Embedded Analytics Architect
Developer
10.611 Analytics Performance Tuning (2 days)

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.

Skills you gain
- Improve system performance using techniques such as caching and SQL optimization
- Create high-performance documents for end users
- Implement mobile performance improvement strategies
- Configure 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

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

ROLES:
Digital Identity Architect
Platform Administrator
Analytics Architect
Analyst
10.612 Advanced Big Data Administration (1 day)

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.

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

10.313 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

ROLES:

Analyst
Platform Administrator
Analytics Architect
10.613 Automating Administration (1 day)

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 such tasks 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.

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

10.311 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

ROLE:

Platform Administrator
10.621 Advanced Administration for Enterprise Mobility (1 day)

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.

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
10.311 Administration for Enterprise Analytics
10.321 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

ROLES:
Mobile Architect
Platform Administrator
10.631 Advanced Administration for Enterprise Security (1 day)

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

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

MicroStrategy products covered
- MicroStrategy Usher

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

Best class experience if you have
10.331 Administration for Enterprise Security

Topics
1. Usher installation and configuration
   - Usher platform components
   - Usher deployment options
   - MicroStrategy Cloud installation on AWS
   - On-premise installation
   - Configuring an Usher system
   - Recommended configurations
   - Usher components and commonly used ports
2. Managing users and access: Usher network
   - Defining user access: Usher networks
   - Usher network functionality
   - Usher gateway creation and implementation processes
   - Managing gateways
   - Digital certificate expiration notifications
3. Usherizing your environment
   - Usher workflows
   - Usherizing logical resources
   - Usherizing physical access resources
   - Adding users to the system
   - Diagnostics recommendations

ROLES:
Digital Identity Architect
Platform Administrator
10.711 Data Mining and Predictive Analytics (2 days)

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.

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

ROLES:
Data Scientist
Analytics Architect
10.911 MicroStrategy Engines & SQL (2 days)

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.

Skills you gain
- SQL analysis
- SQL optimization techniques
- Create complex queries with SQL, using subqueries and intermediate tables
- Understand SQL behavior based on different objects on a report
- Manage 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
10.412 Advanced Analytics Reporting
10.411 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

ROLES:
Analyst
Analytics Architect
Application Architect
10.912 Advanced Data Warehousing (2 days)

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.

Skills you gain
• Create data models
• Model complex hierarchies
• Implement role attributes and slow-changing dimensions
• Design schemas for optimal performance
• Create logical views
• Optimize 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

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

ROLES:
Analyst
Analytics Architect
Application Architect
10.032 Analytics Architect (2 days training, 1 day certification)

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.

Skills you gain
- Establish enterprise standards and project documentation
- Implement a project update tracking system
- Guide requirements gathering and data exploration
- Standardize the dimensional modeling process
- Create guidelines for schema object development
- Establish dataset creation standards
- Develop dataset monitoring and troubleshooting protocols
- Institute 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

ROLE:
Analytics Architect
10.033 Mobile Architect  (2 days training, 1 day certification)

Course description
In this course, you 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.

Skills you gain
- Create corporate mobile app design requirements and guidelines
- Leverage SDK for corporate branding
- Optimize Library Mobile
- Define an effective mobile architecture
- Implement mobile configuration best practices
- Understand Enterprise Mobility Management (EMM) solutions
- Secure a mobile environment
- App monitoring and troubleshooting strategies
- Guide mobile performance improvement
- Optimize 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 on p. 61
- A supported mobile device in class

**Topics**
1. The Intelligent Enterprise
   - The Intelligence Center and the Mobile Architect
2. Mobile application standardization
   - Mobile application requirements
   - Designing and documenting apps
   - Mobile SDK: Create custom branded apps
   - Mobile data discovery: Library Mobile app
3. Mobile server, configuration, and security
   - Mobile Server lifecycle management
   - Mobile authentication and security
   - Mobile configurations
   - Configure Library Mobile
4. Publishing mobile applications
   - Governing the mobile workforce: EMM
   - Mobile app testing
   - Strategic mobile app deployments
   - Upgrading and updating Mobile SDK
5. Monitoring and troubleshooting
   - Report on user engagement: KPIs
   - Diagnostics and statistics
   - Troubleshooting
6. Optimizing the user experience
   - Mobile caching
   - Mobile app performance
   - Engaging users for app success

**ROLE:**
Mobile Architect
MicroStrategy 10 Certifications
CERTIFICATIONS AT A GLANCE

CERTIFICATIONS FOR EVERYONE

Standard certification experience
Get certified when you have time available, when the classes fit your schedule. 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 57-58.

BECOME AN EXPERT IN YOUR PRIMARY ROLE

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 61.
SPECIALIST STANDARD CERTIFICATION LEARNING PATHS

Ideal for individuals with limited time available. Take standard foundation classes when they fit your schedule.
MASTER STANDARD CERTIFICATION LEARNING PATHS

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

**Advanced Analytics Reporting 10.412**
- 2 days

**Project Architecting 10.411**
- 3 days

**Advanced Documents 10.413**
- 2 days

**Advanced Mobile Applications 10.421**
- 2 days

**Advanced Enterprise Security Analytics 10.431**
- 1 day

**Data Mining and Predictive Analytics 10.711**
- 2 days

**MCMA Certification Project 10.012**
- 2 days

**MCMA**
- 14 days

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**Analytics Performance Tuning 10.611**
- 2 days

**Advanced Big Data 10.612**
- 1 day

**Advanced Administration for Enterprise Mobility 10.621**
- 1 day

**Advanced Administration for Enterprise Security 10.631**
- 2 days

**MCMA Certification Project 10.020**
- 2 days

**MCMAD**
- 8 days

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**Advanced SDK Customizing Visualizations 10.511**
- 2 days

**Advanced SDK for Customizing Branding 10.512**
- 2 days

**Advanced SDK for Integration and Single Sign-On 10.513**
- 2 days

**Advanced Mobile Customizations with SDK 10.521**
- 2 days

**Advanced SDK for Enterprise Security 10.531**
- 2 days

**MCMD Certification Project 10.022**
- 2 days

**MCMD**
- 12 days

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Product:  ■ ANALYTICS  ■ MOBILE  ■ IDENTITY
SPECIALIST FAST TRACK CERTIFICATION

Go from zero to certified in one week flat.

Day 1: Overview of Enterprise Analytics 10.111
Day 2: Introduction to Analytics Reporting 10.112
Day 3: Dashboarding and Visualizations 10.142
Day 4: Overview of Enterprise Mobility 10.121

Day 1 & 2: Portal Integration with SDK 10.212
Day 3: Dashboarding and Visualizations 10.141
Day 4: Overview of Enterprise Security/Enterprise Security Analytics 10.131/10.132
Day 5: MCSA Certification Project 10.011

Product: ANALYTICS

Day 1: Administration for Enterprise Analytics 10.311
Day 3: Introduction to Big Data 10.313
Day 4: Administration for Enterprise Mobility 10.321
Day 5: Administration for Enterprise Security 10.331

Day 1 & 2: SDK for Customizing Analytical Applications 10.213
Day 3: Portal Integration with SDK 10.212
Day 4: SDK for Customizing Mobile Applications 10.221
Day 5: MCSA Certification Project 10.019

Product: MOBILE

Day 1: MCSAD Certification Project 10.019
Day 4: Administration for Enterprise Mobility 10.321
Day 5: Administration for Enterprise Security 10.331

Day 1: SDK for Customizing Analytical Applications 10.213
Day 3: Portal Integration with SDK 10.212
Day 4: SDK for Customizing Mobile Applications 10.221
Day 5: MCSD Certification Project 10.013

Product: IDENTITY

Day 1: MCSAD Certification Project 10.019
Day 4: Administration for Enterprise Security 10.331
Day 5: Administration for Enterprise Security 10.331

Day 1: MCSD Certification Project 10.013
Day 4: SDK for Customizing Mobile Applications 10.221
Day 5: MCSD Certification Project 10.013

5 days

MCSA

MCSAD

MCSD
MASTER FAST TRACK CERTIFICATION

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

Day 1, 2 & 3
- Project Architecting 10.411
Day 4 & 5
- Advanced Analytics Reporting 10.412
Day 6
- Advanced Documents 10.413
Day 7
- Advanced Mobile Applications 10.421
Day 8
- Data Mining and Predictive Analytics 10.711
- Advanced Enterprise Security Analytics 10.431
Day 9 & 10
- MCM Certification Project 10.012

10 days
- MicroStrategy Certified Master Analyst
- MCMA

Day 1
- Analytics Performance Tuning 10.611
Day 2
- Advanced Big Data 10.612
Day 3
- Advanced Administration for Enterprise Mobility 10.621
- Advanced Administration for Enterprise Security 10.631
Day 4 & 5
- MCMAD Certification Project 10.020

5 days
- MicroStrategy Certified Master Administrator
- MCMAD

Day 1 & 2
- Advanced SDK Customizing Visualizations 10.511
Day 3 & 4
- Advanced SDK for Customizing Branding 10.512
Day 5 & 6
- Advanced SDK for Integration and Single Sign-On 10.513
Day 7 & 8
- Advanced Mobile Customizations with SDK 10.521
- Advanced SDK for Enterprise Security 10.531
Day 9 & 10
- MCM Certification Project 10.022

10 days
- MicroStrategy Certified Master Developer
- MCMD

Product: ANALYTICS, MOBILE, IDENTITY
TRAIN A SUCCESSFUL INTELLIGENCE CENTER

DEPARTMENTAL ROLES

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

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.

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

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

APPLICATIONS

ANALYSTS
Create, share, and maintain intelligence applications for the department using enterprise security, data, and application objects to 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
Integrate, extend, and embed intelligence into custom and third-party departmental applications, using common programming languages such as JavaScript, Java, PHP, Objective C, C#, .Net, and other modern languages.

INTELLIGENCE CENTER

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.

Digital 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.

Embedded Analytics Architect
Integrate, extend, and embed analytics into portals, third-party, mobile, and white-labelled 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. All while optimizing performance and controlling costs.
RECOMMENDED CLASSES FOR DEPARTMENTAL ANALYTICS AND MOBILITY

**Business Users**
Use local data, 3rd 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
10.114 Visual Data Discovery: MicroStrategy Desktop
10.116 Introduction to Dossiers

I’m ready for more
10.112 Introduction to Analytics Reporting
10.121 Overview of Enterprise Mobility
10.141 Introduction to Documents
10.142 Dashboarding and Visualizations
10.412 Advanced Analytics Reporting
10.413 Advanced Documents
10.421 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
10.112 Introduction to Analytics Reporting
10.411 Project Architecting

I’m ready for more
10.911 MicroStrategy Engines and SQL
10.313 Introduction to Big Data
10.611 Analytics Performance Tuning
10.912 Advanced Data Warehousing
10.612 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
10.412 Advanced Analytics Reporting
10.413 Advanced Documents
10.711 Data Mining and Predictive Analytics

I’m ready for more
10.132 Enterprise Security Analytics
10.411 Project Architecting
10.431 Advanced Enterprise Security Analytics

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

Get up and running
10.212 Portal Integration using SDK
10.213 SDK for Customizing Analytical Applications

I’m ready for more
10.221 SDK for Customizing Mobile Applications
10.231 SDK for Customizing Enterprise Security
10.511 Advanced SDK for Customizing Visualizations
10.512 Advanced SDK for Customizing Branding
10.513 Advanced SDK for Integration and Single Sign-on
10.521 Advanced Mobile Customizations with SDK
10.531 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
10.114 Visual Data Discovery: MicroStrategy Desktop
10.121 Overview of Enterprise Mobility
10.131 Overview of Enterprise Security
10.141 Introduction to Documents
10.142 Dashboarding and Visualizations
10.311 Administration for Enterprise Analytics
10.313 Introduction to Big Data
10.411 Project Architecting
10.412 Advanced Analytics Reporting
10.911 MicroStrategy Engines and SQL
10.912 Advanced Data Warehousing

Required Certification
10.031 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
10.142 Dashboarding and Visualizations
10.311 Administration for Enterprise Analytics
10.411 Project Architecting
10.412 Advanced Analytics Reporting
10.421 Advanced Mobile Applications
10.431 Advanced Enterprise Security Analytics
10.611 Analytics Performance Tuning
10.612 Advanced Big Data Administration
10.711 Data Mining and Predictive Analytics
10.911 MicroStrategy Engines and SQL
10.912 Advanced Data Warehousing

Required Certification
10.032 Analytics Architect Certification

Digital 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
10.131 Overview of Enterprise Security
10.132 Enterprise Security Analytics
10.231 SDK for Customizing Enterprise Security
10.311 Administration for Enterprise Analytics
10.411 Project Architecting
10.412 Advanced Analytics Reporting
10.911 MicroStrategy Engines and SQL
10.912 Advanced Data Warehousing

Required Certification
10.034 Digital Identity Architect Certification

Embedded Analytics 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
10.212 Portal Integration using SDK
10.213 SDK for Customizing Analytical Applications
10.221 SDK for Customizing Mobile Applications
10.231 SDK for Customizing Enterprise Security
10.422 Database Write-back: Mobile Transactions
10.511 Advanced SDK for Customizing Visualizations
10.512 Advanced SDK for Customizing Branding
10.513 Advanced SDK for Customizing Integration and Single Sign-on
10.521 Advanced Mobile Customizations with SDK
10.531 Advanced SDK for Enterprise Security

Required Certification
10.035 Embedded Analytics 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
10.116 Introduction to Dossiers
10.142 Dashboarding and Visualizations
10.132 Enterprise Security Analytics
10.221 SDK for Customizing Mobile Applications
10.311 Administration for Enterprise Analytics
10.321 Administration for Enterprise Mobility
10.411 Project Architecting
10.412 Advanced Analytics Reporting
10.413 Advanced Documents
10.421 Advanced Mobile Applications
10.422 Database Write-back: Mobile Transactions
10.621 Advanced Admin for Enterprise Mobility

Required Certification
10.033 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
10.000 What’s New in MicroStrategy 10
10.311 Administration for Enterprise Analytics
10.312 Administration for MicroStrategy on AWS
10.314 Working with MicroStrategy in Linux
10.411 Project Architecting
10.611 Analytics Performance Tuning
10.612 Advanced Big Data
10.613 Automating Administration
10.621 Advanced Admin for Enterprise Mobility
10.631 Advanced Admin for Enterprise Security

Required Certification
10.036 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**
- 10.714 Intelligence Program
- 10.715 Advanced Intelligence Program
- 10.716 Departmental Intelligence Program

**Required MicroStrategy Certification**
- Any 2 Architect role certifications
- Any 1 Administrator role certification
- 10.037 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
- Terradata Database Certified DBA
- AWS Certified Solutions Architect – Professional, AWS Big Data Specialty
- Cloudera Certified Associate
- MongoDB Certified DBA Associate

**Required MicroStrategy Course Knowledge**
- 10.612 Advanced Big Data
- 10.911 MicroStrategy Engines and SQL
- 10.912 Advanced Data Warehousing

**Optional MicroStrategy Course Knowledge**
- 10.311 Administration for Enterprise Analytics
- 10.411 Project Architecting
- 10.611 Analytics Performance Tuning

**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, 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**
- 10.000 What’s New in MicroStrategy 10
- 10.311 Administration for Enterprise Analytics
- 10.331 Administration for Enterprise Security

**Required Certification**
- 10.038 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 and create project success 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 & in global MicroStrategy locations), E-learning modules, & 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 & validate knowledge with Learning paths, and certifications for Analysts, Developers & Administrators

PEPs are priced at $3,500 per named user and are perfect for organizations that plan on more than five days of training for individuals on an annual basis.

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.

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.

With Training Units (TUs), you can purchase $100 “gift cards” and redeem them on courses, certifications or type of training delivery most applicable for your team. Anticipating more training needs this year? Buy TUs in bulk to ensure employee skills will be developed to align with your strategic goals. Pricing for individual courses can be found on the summary page of the catalog.
ENTERPRISE E-COURSEWARE OFFERING

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 and 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:
- 10.111 Overview of Enterprise Analytics
- 10.112 Intro to Analytics Reporting
- 10.113 Visual Data Discovery: Visual Insight
- 10.114 Visual Data Discovery: MicroStrategy Desktop
- 10.116 Introduction to Dossiers
- 10.121 Overview of Enterprise Mobility
- 10.142 Dashboarding and Visualizations
- 10.411 Project Architecting
- 10.412 Advanced Analytics Reporting
- 10.413 Advanced Documents: Interactivity and Joining Datasets
- 10.421 Advanced Mobile Applications
- 10.711 Data Mining and Predictive Applications

Pricing:
- **First time E-courseware purchase**
  - Up to 249 licenses: $10K
  - 250-499 licenses: $20K
  - 500+ licenses: $30K

- **Upgraded E-courseware purchase**
  - Up to 249 licenses: $7.5K
  - 250-499 licenses: $15K
  - 500+ licenses: $20K

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 and using your data
- Teach concepts using reports and data users are familiar with

Pricing:
- **$1,500/day of customization**

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 PO’s
- Pay as you go

Pricing:
- **$700/day of class training**
- **$700/day for project certifications**
- **$300 per E-learning module**
- **$500 per recorded course**
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 within a week or maximum two weeks depending on your certification needs
- Save 50% or more compared to pursuing the traditional certification path
- Perfect option for customers only interested in certifications and not the full catalog of courses

Pricing:

**Specialist level certification: $2,000**

**Master level certification: $3,000**

**Intelligence Center role certification: $2,100**

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**FAST TRACK COST COMPARISON**

How Fast Track certifications can save time and money.

<table>
<thead>
<tr>
<th>CERTIFICATION</th>
<th>ROLE</th>
<th>LEVEL</th>
<th># OF DAYS</th>
<th>STANDARD OFFERING</th>
<th>FAST TRACK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>COST W/PEP</td>
<td>COST W/O PEP</td>
</tr>
<tr>
<td>MCSA</td>
<td>Business Users</td>
<td>Specialist</td>
<td>11</td>
<td>Free</td>
<td>$7,700</td>
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<tr>
<td>MCMA</td>
<td>Architects</td>
<td>Master</td>
<td>14</td>
<td>Free</td>
<td>$9,800</td>
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<tr>
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<td>Specialist</td>
<td>9</td>
<td>Free</td>
<td>$6,300</td>
</tr>
<tr>
<td>MCMAD</td>
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<td>Master</td>
<td>8</td>
<td>Free</td>
<td>$4,900</td>
</tr>
<tr>
<td>MCSD</td>
<td>Developers</td>
<td>Specialist</td>
<td>7</td>
<td>Free</td>
<td>$4,900</td>
</tr>
<tr>
<td>MCMD</td>
<td>Developers</td>
<td>Master</td>
<td>12</td>
<td>Free</td>
<td>$8,400</td>
</tr>
</tbody>
</table>

Courses are condensed for Fast Track certifications and students are responsible for self-study topics outlined during Fast Track training. All certifications are included with the $3500 purchase of a PEP.
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 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

Course registration

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 untether employees from their computers, and introduces MicroStrategy Usher, 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 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 business intelligence role or feature area 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 cancelation is low enrollment. You can influence this by encouraging your co-workers to sign up with you, enabling a larger set of your team 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 4 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 will be developed to 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 and they are as follows:

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 5-10 days 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 for the certification projects by providing you with the proper knowledge in the various topics related to the certification project.
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**

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 on 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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<th>DE</th>
<th>JA</th>
<th>IT</th>
<th>PT</th>
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## Catalog Summary

**Product:**
- Analytics
- Mobile
- Identity

**Delivery Method:**
- Instructor Led
- E-Learning
- Video

### Classes:

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MicroStrategy Education Team
MEET “THE SCRIBES”

MicroStrategy Education’s Curriculum Development team

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

Davida Kosa
Senior Curriculum Developer

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.

Rakesh Arora
Senior Principal Curriculum Developer

With 17 years at MicroStrategy, Rakesh has experience in SDK, project architecting, consulting, and education. He has an engineering background and is a licensed Professional Engineer. He leverages his competitive side on the cricket field.

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, with 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
Curriculum Developer

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 the Mary Center in Washington DC for low income residents, among others. Lauren is bi-lingual Spanish/English and was rated a University Top Language Teacher for Chilean college students.

Roxana Schoen
Senior Director, Curriculum Development

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.
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 masters 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.

Asmaa Chatibi
Training Consultant

Asmaa has 7 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.

Bee Hua Goh
Training Consultant

Bee has 20 years 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 on 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.

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.
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 has been a MicroStrategy Education Consultant for 7 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 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.

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, focused on 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.

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 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.

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 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.
Tony brings 8 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.

MEET “THE CONCIERGES”
MicroStrategy Education’s Operations team

Xiaodong (Tony) Zhang
Training Consultant

Tony brings 8 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.

Iga Reszke
Education Operations Coordinator

Iga has a background in technical translation, specializing in texts on nuclear reactors and nuclear energy. She has worked with various CEOs in the energy sector, and has also been a tutor for high school students who struggle with chemistry. Her dedication to helping customers receive the best experience extends outside of MicroStrategy as a licensed cosmetologist where she works with clients to achieve healthy skin.

Sonia Chowdhury
Education Operations Coordinator

Sonia is earning her Masters 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.

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.

Iga Reszke
Education Operations Coordinator

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Romualda Cwiek
Education Operations Coordinator

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Hyon-A Wyss
Education Operations Manager

Hyon-A’s background in international banking operations informs her Education Operations management. She earned the MicroStrategy Certified Specialist Analyst certification and is tri-lingual in English, French, and Korean. Hyon-A directed a non-profit dedicated to tutoring at-risk children in Washington, DC and balances her life with a commitment to the arts – painting, writing, and museums.
MEET "THE MERCHANT AMBASSADORS"

MicroStrategy Education’s Sales Team

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.

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.

Amanda Rakenthaler  
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.

MEET “THE CHIEF TROUBLEMAKER”

MicroStrategy Education’s Senior Vice President

Rohit Amba  
Senior 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.
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