Education Catalog
Courses, Certifications and Programs
It’s not about what you know. It’s about what you can do.

Qlik Education delivers coursework, tools, and programs designed to teach you the true capabilities of Qlik and how you can use them to perform your job – not just repeat memorized features and functions. By partnering with Qlik Education, you can rapidly develop, deploy and use Qlik to deliver great outcomes for your business.

Engaging Qlik Education enables your users to:

- Start using Qlik applications more quickly
- Understand the complete range of Qlik capabilities
- Interact with experienced instructors to facilitate learning
- Contribute to organizational effectiveness which increases the value of your investment in Qlik
Qlik Education offers a rich mix of training options, resources and technology, all designed to maximize success of your development, deployment and use of Qlik.

Courses are available in a variety of training formats to provide flexible learning options. Whether you are a business user, business analyst, data architect, system administrator or web developer, Qlik has a training option to meet your needs.

We will work with you to define your precise training requirements, to make sure that you or your staff get the right level of learning and performance support (learning that the user accesses in their day-to-day job) at the right time in the deployment life cycle.

Our learning content covers not only the capabilities and competencies of Qlik’s products, but also analytics and data literacy learning - complementary skills that are not Qlik specific but are required for you to perform your job.

With Qlik Education your organization will:

**Enhance performance**

Get your business users to peak productivity and maximize your ROI

**Drive collaboration**

Train groups of coworkers together so they rapidly understand how Qlik’s social visual analytics potential enable them to collaborate on analytics like never before

**Learn what’s important to you**

Along with standard courses, Qlik offers tailored workshops to train your users to use Qlik applications based on your needs and requirements

**Why Qlik Education?**

Qlik Education accelerates the adoption of data and analytics by providing environments which remove common learning barriers and provide users with a structured path to take full advantage of Qlik’s products.
Qlik Education in Figures

- Training available globally via Virtual and Blended learning
- **140K** Course completions for self-paced learning in 2022
- **5,511** skills assessments were taken in 2022
- **15** Languages self-paced content is available
- **790** certifications were earned in 2022
Training Format Options

When it comes to learning, one size does not fit all. Therefore, Qlik offers a wide variety of delivery methods to suit different learning preferences, organizational logistics, and the needs of specific Qlik user roles.

**Instructor-led**
This delivery method is a traditional, classroom training approach, where our expert instructor leads a group of students through demonstrations and hands-on exercises. You can attend instructor-led training at a public classroom location, privately (perfect option when you have a group of up to 10 users) at your office or virtually.

**Blended Learning**
Blended learning combines self-paced learning (theory, hands-on exercises and demonstrations) and virtual instructor-led live webinars. Once enrolled in the course, access to the course content is immediate. No need to wait for an upcoming class schedule! Watch the recorded sessions when you are ready and attend a live instructor webinar to get answers to your questions.

**Self-paced Training**
The Qlik Continuous Classroom is our subscription-based, self-paced training. It’s the perfect training complement to ensure success in your continuous learning journey. The Qlik Continuous Classroom is designed to provide only the learning you need, right at your fingertips – anytime, anywhere, always. Features include video-based modules, exercises and quizzes, smart search feature and collaboration tools to interact with students and instructors.
Role-based Education

All our training options are role-based, to ensure that all essential job-related tasks are covered in each role’s core courses, while tasks that apply to only certain users, as well as advanced tasks, are covered in elective master courses.

User role descriptions

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business User</td>
<td>Use pre-built applications to analyze data and make informed data driven decisions</td>
</tr>
<tr>
<td>Business Analyst</td>
<td>Create powerful, clean, cutting-edge visualizations. Learn best ways to help users explore information and gain critical insights on multiple devices</td>
</tr>
<tr>
<td>Data Architect</td>
<td>Manage and consolidate data from different tables and sources and integrate them into a clean dashboard interface</td>
</tr>
<tr>
<td>System Administrator</td>
<td>Manage security and platform architecture, including reloading and publishing of documents</td>
</tr>
<tr>
<td>Enterprise Architect</td>
<td>Architect and secure your Qlik platform, user accessibility and application access rule administration</td>
</tr>
<tr>
<td>Web Developer</td>
<td>Embed and integrate Qlik Sense using Qlik Sense APIs and extend apps with custom visualizations</td>
</tr>
</tbody>
</table>
Qlik Learning Portal

Our Qlik Learning Portal is your one-stop shop for all your learning needs. Take our pre-training assessments and post-training qualifications and certifications. Access our self-paced online courses inside the Qlik Continuous Classroom. Register for instructor-led classes and find all the supporting training materials for the class you are attending. Stay current with access to the very latest resources.

Video Tutorials

Self-Paced Training

Instructor-Led Materials

Resource Library

learning.qlik.com
Qlik Continuous Classroom

The Qlik Continuous Classroom is our self-paced training designed to provide only the learning you need, right at your fingertips—anytime, anywhere, always. We know your job does not stop; sometimes you can’t wait for the next class to learn what you need, nor do you always have the time to block days in your schedule for instructor-led training. The Qlik Continuous Classroom is the perfect training complement to ensure success in your continuous learning journey.

Look it up. Learn it. Right when you need it.
- Video-based learning modules
- Reference guides, exercises and quizzes
- Smart search for learning at point of need
- Live webinars and 1:1 instructor course support
- Personalized learning plans

Annual subscriptions

<table>
<thead>
<tr>
<th>New User</th>
<th>Individual</th>
<th>Corporate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREE FOR ALL</td>
<td>PAID</td>
<td>PAID</td>
</tr>
<tr>
<td>BA</td>
<td>DA</td>
<td>FULL ACCESS</td>
</tr>
</tbody>
</table>

- Business User
- Data Literacy
- Business Analyst (BA)
- Data Architect (DA)
- System Administrator
- How Do I’s Videos
- Other Resources*

* Qualifications exams, live webinars, 1:1 instructor course support

Private Webinars and Tailored Learning Sites are available to Unlimited customers. To learn more, contact your local Education Representative.
“My instructor was outstanding. His ability to pace himself and the class, his subject matter, expertise, patience, communication, steadfastness, ad hoc troubleshooting ability, and cheerful disposition are a rare combination.”

“Thanks to Qlik Education Services, we’ve achieved a rapid ROI. Qlik Education has helped us transform our working culture with customized designer training.”

“Qlik Continuous Classroom is another example of how Qlik is delivering innovative solutions and approaches.”
## Table of Contents

Find here all the information you need about Qlik’s portfolio of education services offerings. It is organized into five main sections:

### Qlik Sense Courses and Certifications
- Qlik Sense Course Overview
- Create Visualizations with Qlik Sense
- Data Modeling for Qlik Sense
- Deploy and Administer Qlik Sense
- Deploy and Administer Qlik Sense for SaaS
- Qlik Sense for QlikView Developers
- Create Reports with Qlik NPrinting
- Embed Analytics with Qlik Sense APIs
- Advanced Topics in Design and Development
- Advanced Calculations and Expressions
- Qlik GeoAnalytics
- Big Data Solutions with Qlik Sense
- Advanced Scripting Capabilities
- Qlik Sense Business Analyst Certification
- Qlik Sense Data Architect Certification
- Qlik Sense System Administrator Certification

### Data Integration Courses and Certifications
- Foundations of Qlik Data Integration
  - Qlik Replicate
  - Qlik Compose
  - Qlik Catalog & Qlik Enterprise Manager
- Qlik Gold Client
- Qlik Replicate Certification
- Qlik Compose Certification

### Programs
- Qlik Skills Assessment
- Qlik Custom Application Training
- Qlik Academic Program

### Data Literacy and Analytics
- Data Literacy Program Overview
- Data Literacy Launch Services
- Data Literacy Organization Benchmark Survey
- Data Literacy Leadership Workshop
- Applied Data Analytics using Qlik Sense
- Creating a Data Literate Organization
- Understanding Data Principles
- Data Literacy Certification
- Data Analytics Certification

### QlikView Courses and Certifications
- QlikView Course Overview
- QlikView Designer
- QlikView Developer
- QlikView Server Publisher
- Advanced Topics in Design and Development
- QlikView Business Analyst Certification
- QlikView Data Architect Certification
- QlikView System Administrator Certification
Qlik Sense Courses and Certifications

Qlik Education
Qlik Sense Course Overview

<table>
<thead>
<tr>
<th>Core Learning</th>
<th>Elective Learning</th>
<th>Self-Paced Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fundamental concepts and best practices. Competency in most frequently used job skills. Can lead to certification. Instructor-led Training and Virtual Instructor-led Training classes are available.</td>
<td>Solutions and best practices for common challenges. Specialized tasks related to job functions. On-demand, Instructor-led Training and Virtual Instructor-led Training, and customized special events are available.</td>
<td>A virtual environment for on-demand videos, online collaboration and expert instruction. Qlik Continuous Classroom courses are available.</td>
</tr>
</tbody>
</table>

**Business User**
- Custom Application Training (bespoke on-demand)

**Business Analyst**
- Create Visualizations with Qlik Sense
- Create Reports with Qlik Nprinting
- Advanced Calculations and Expressions
- Qlik GeoAnalytics®
- Advanced Topics in Design and Development

**Data Architect**
- Data Modeling for Qlik Sense
- Big Data Solutions with Qlik Sense
- Advanced Scripting Capabilities

**System Administrator or Enterprise Architect**
- Deploy and Administer Qlik Sense
- Deploy and Administer Qlik Sense for SaaS

**Web Developer**
- Embed Analytics with Qlik Sense APIs

**Instructor-led Training**
This delivery method is a traditional, classroom training approach, where our expert instructor leads a group of students through demonstrations and hands-on exercises.

**Blended Learning**
Blended learning combines self-paced learning (theory, hands-on exercises and demonstrations) and virtual instructor-led live webinars.

**Self-paced Learning**
Self-paced learning featuring video-based modules, exercises and quizzes, and tools to collaborate with instructors and students.
Create Visualizations with Qlik Sense

Description
Create Visualizations with Qlik Sense, a scenario-based course, addresses the fundamentals required to enable you for self-service visualization and discovery. The course combines demonstrations and hands-on exercises to teach the essential concepts for designing effective Qlik Sense visualizations and guided stories. You will also be given some tips to maximize your analysis within your apps. Additionally, you will look in depth at the different visualizations and select the appropriate one for your data and the type of questions you need to answer.

Class Type and Duration
- Instructor-led - 2 days
- Blended Learning - Students are provisioned access to the course for 12 months (365 days) from the course enrollment date.

Skills Learned
- Build Qlik Sense dashboards.
- Learn how to select the appropriate visualization(s) to answer your data questions.
- Perform advanced analysis in a Qlik Sense app.
- Build a simple data model and define the business logic.
- Discuss concepts of data visualization and data types and how they are implemented in Qlik Sense.
- Control selections applied to the objects.
- Share insights with Qlik Sense guided storytelling.
- Prepare the apps and share them with others.

Course Prerequisites
- Building an app tutorial
  (visit Qlik Help for more information)
- Recommended: Understanding Data Principle

Course Outline
- Analyzing data with Qlik Sense
- Preparing data for analysis
- Introducing visualizations
- Working with other visualizations and properties
- Controlling data selections
- Storytelling and finalizing the app

Audience
- Business Analysts
- Data Architects

Qualifications
- Qualification Exams are available with training purchase to prove a fundamental knowledge of Qlik Sense.
- Visit our website for more information.
Data Modeling for Qlik Sense

Description
Data Modeling for Qlik Sense is a technical course for you to learn to develop a coherent data model in Qlik Sense by loading and transforming multiple data sources. With information, tools, techniques, and activities, this course includes topics dealing with maintaining data connections, transforming source data, architecting data models, optimizing for performance, and application development in Qlik Sense.

Class Type and Duration
• Instructor-led: 3 days
• Blended Learning: Students are provisioned access to the course for 12 months (365 days) from the course enrollment date.

Course Prerequisites
• Recommended: Creating Visualizations with Qlik Sense
• Database and SQL query knowledge
• Recommended: Understanding Data Principles

Course Outline
• Modeling data with Qlik Sense
• Sourcing and loading data
• Resolving common modeling issues
• Generating data
• Combining tables
• Handling advanced modeling challenges
• Developing and Debugging
• Applying finishing touches
• Exploring security and advanced concepts

Audience
• Data Architects
• Business Analysts

Skills Learned
• Create a data model in Qlik Sense
• Use the Data Load Editor and the Data Manager
• Create and maintain data connections
• Resolve data structure issues and script errors
• Transform data for better performance
• Discuss synthetic keys and circular references
• Implement document-level security
• Add simple data validation visualizations

Qualifications
• Qualification Exams are now available with training purchase to prove a fundamental knowledge of Qlik Sense.
• Visit our website for more information.
Deploy and Administer Qlik Sense

Description
Deploy and Administer Qlik Sense is a technical course that provides you with the information, tools, techniques, and skills necessary to deploy, set up, configure, and maintain Qlik Sense Enterprise on a Windows platform. In addition, you will explore security architecture configurations, load balancing, and single sign-on methods. Take advantage of Qlik Sense's enterprise-class governance capabilities for ensuring quality, accuracy, and security of data and analytics.

Class Type and Duration
• Instructor-led
• 2 days

Course Prerequisites
• Fundamental knowledge of IT business systems and operations
• Knowledge of Windows Server OS, Active Directory (or other user directory service)
• Basic system security awareness
• Understanding of Qlik Sense or QlikView recommended
• Basic understanding of PowerShell or Command Line tools

Skills Learned
• Understand deployment plan requirements
• Understand Qlik's cloud offerings
• Deploy single and multi-node configurations
• Install Qlik Sense Enterprise on Windows with shared persistence
• Explore the Qlik Management Console (QMC)
• Add and manage users
• Understand Qlik Sense licensing model
• Configure user license access
• Import and manage apps and extensions
• Review and manage app objects
• Create and manage streams
• Understand how to publish apps and sheets
• Create tasks for app reloads and user import
• Understand Qlik Sense Enterprise security
• Manage and audit system security
• Understand data security with section access
• Configure virtual proxies
• Manage data connections
• Explain various methods for load balancing
• Manage multiple schedulers
• Discuss single sign-on concepts
• Monitor and troubleshoot typical system issues
• Explore other Deployment Considerations
• Understand how to backup a Qlik Sense site

Course Outline
• Business case
• Server Components
• Single and multi-node architecture
• Qlik Sense install and the Qlik Management Console (QMC)
• Import and manage users
• Allocate appropriate user license
• Apps, extensions, objects, streams and tasks
• Proxies & virtual proxies
• Schedulers
• Qlik Sense security

Audience
• System Administrators or Enterprise Architects

Skills Learned
• Data connections and data security
• Load balancing
• Single sign-on concepts
• Qlik’s deployed monitor apps (License and Operations)
• Server manage tools (PowerShell)
• Troubleshooting
• Backup a Qlik Sense site

Course Outline
• Business case
• Server Components
• Single and multi-node architecture
• Qlik Sense install and the Qlik Management Console (QMC)
• Import and manage users
• Allocate appropriate user license
• Apps, extensions, objects, streams and tasks
• Proxies & virtual proxies
• Schedulers
• Qlik Sense security

Audience
• System Administrators or Enterprise Architects

Description
Deploy and Administer Qlik Sense is a technical course that provides you with the information, tools, techniques, and skills necessary to deploy, set up, configure, and maintain Qlik Sense Enterprise on a Windows platform. In addition, you will explore security architecture configurations, load balancing, and single sign-on methods. Take advantage of Qlik Sense's enterprise-class governance capabilities for ensuring quality, accuracy, and security of data and analytics.
Deploy and Administer Qlik Sense for SaaS

Description
Deploy and Administer Qlik Sense for SaaS is a technical course that gives you the information, tools, techniques, and skills necessary to deploy, set up, configure, and maintain a Qlik Sense Enterprise environment hosted by Qlik Cloud. Explore single sign-on using an identity provider to maintain and manage identity information for principals while providing authentication services. Automate data transfer from on-premise to Qlik Sense SaaS. Collaborate with business users using shared or managed spaces utilizing Qlik Sense's enterprise-class governance capabilities for ensuring quality, accuracy, and security of data and analytics.

Class Type and Duration
- Instructor-led - 2 days
- Blended Learning: Students are provisioned access to the course for 6 months (180 days) from the course enrollment date.

Course Prerequisites
- Fundamental knowledge of IT business systems and operations
- Knowledge of 3rd party identity providers; Awareness of using API keys for system integration
- Understanding of Qlik Sense or QlikView recommended
- Basic understanding of PowerShell or Command Line tools

Audience
- System Administrators

Skills Learned
- Understand Qlik Sense differences between editions cloud
- Explore the cloud hub
- Understand user roles and permissions
- Explore integration of an Identity Provider
- Explore the Management console
- Understand how to utilize and manage Spaces
- Review how to publish apps
- Understand how to reload app data
- Review how to host QlikView documents
- Understand how to host external files via generic links

Course Outline
- Qlik Sense Cloud Editions
- System Administration Overview
- User Management
- Space and App Management
- Extending Qlik Sense
- Advanced Administration and App Analyzer

Review email server setup
Understand how to setup Alerts and Subscriptions
Extend Qlik Sense capabilities with Webhooks
Review how to upload on-premise data with Qlik Data Transfer
Utilize the Qlik-cli to perform administration functions
Understand performance and optimization with the App Analyzer
Qlik Sense for QlikView Developers

Description

Qlik Sense for QlikView Developers is designed to enable Qlik Sense skills in those already familiar with QlikView. This technical course teaches the basics of designing and developing Qlik Sense applications, including data modeling and creating visualizations, and gives a complete overview of the product's unique features.

Class Type and Duration

- Instructor-led
- 1 day

Course Prerequisites

- A high level of proficiency with QlikView

Audience

- QlikView Business Analysts
- QlikView Data Architects

Skills Learned

- Explain Qlik Sense architecture and components
- Analyze data with smart search
- Explore Qlik Sense best practices
- Design and create Qlik Sense apps
- Create a data model in Qlik Sense
- Leverage visual data profiling to build data associations
- Manipulate the data using the Data Manager
- Use Geo Data within a Qlik Sense app
- Use the Data Load Editor
- Create and maintain data connections
- Create Master items in the library
- Design and create Qlik Sense Visualizations
- Publish and secure apps using Section Access
- Migrate a QV document to a Qlik Sense app
- Big data with Qlik Sense (On Demand App Generation) (Reference only)
- Advanced Analytics with Qlik Sense (Reference only)
- Use the Insight Advisor to generate visualizations

Course Outline

Part 1 – Getting started with Qlik Sense
- Qlik Sense deployment architecture
- Working with Qlik Sense

Part 2 – Loading data
- Loading data – Data Manager
- Loading data – Data Load Editor

Part 3 – Intro to Qlik Sense concepts
- Overview of Qlik Sense concepts
- Build a Qlik Sense app

Part 4 – More Qlik Sense Concepts
- Overview of Dashboard and Visualization Extensions
- Sharing your insights
- Publishing and SA security
- QlikView Converter
- Big data with Qlik Sense
- Advanced Analytics with Qlik Sense
Create Reports with Qlik NPrinting

Description
The Create Reports with Qlik NPrinting course is intended for business analysts who need to be able to build and distribute static reports based on Qlik Sense products. The course will cover: Web Console configuration, generation of reports, NewsStand environment, report distribution options, and user access management.

Class Type and Duration
- Instructor-led
- 1 day

Course Prerequisites
Familiar with generic Qlik Sense application design

Audience
- Business Analysts

Skills Learned
- Explain how Qlik NPrinting fits within the Qlik portfolio.
- Explain the product components and architecture.
- Describe the installation process (to provide context).
- Configure Qlik NPrinting Web Console.
- Create Qlik NPrinting Apps and data connections.
- Develop reports based on single and multiple sources.
- Apply filters and conditions to Qlik NPrinting reports.
- Manage recipients and distribute reports in multiple ways.
- Create users and security roles.
- Distribute reports with data reduction based on recipients.

Course Outline
Qlik NPrinting overview
- Introduction to Qlik NPrinting
- Qlik NPrinting process flows

Report development
- PowerPoint reports
- Word reports
- Excel reports
- PixelPerfect reports
- HTML reports
- Filters and other reports

Report access and distribution
- Publishing reports
- Security (Optional)
Embed Analytics with Qlik Sense APIs

Description
This course will provide students with a good understanding of how to integrate and embed data analytics in applications, portals and other products using the Qlik Analytics Platform®.

Class Type and Duration
- Instructor-led
- 2 days

Course Prerequisites
- Experience working with JavaScript frameworks to build web applications
- Basic understanding and knowledge of Qlik Sense
- Basic understanding of infrastructure

Audience
Partners or Customers who are looking to embed and integrate Qlik Sense analytical capabilities into their applications, portals, and other business systems.

Skills Learned
- Identify various authentication capabilities for integration
- Learn how to deploy Qlik Sense integrations in a multi-server setup
- Develop Qlik Sense visualization extensions
- Develop Qlik Sense web application mashups
- Understand how to use the Qlik Dev Hub
- Understand how to create open-source projects
- Understand various Qlik capabilities like On Demand App Generation (ODAG) and Qlik data eXchange (QVX)
- Learn what related capabilities exist beyond the scope of this course

Course Outline
- Qlik Sense overview
- API overview
- Qlik Dev Hub
- Visualizations overview
- Extensions
- Multi Server setups
- Authentication
- Introduction to Windows / .Net applications
- Web approach (aka Mashups)
- On Demand App Generation (ODAG)
- Open-Source Projects
- Where to go next
**Advanced Topics in Design and Development**

### Description
Are you ready to take your skills to the next level? Advanced Topics in Design and Development is a specialized course that discusses advanced technical concepts including: applying expressions and functions, writing data load script, and data modeling strategies. It provides hands-on examples and demonstrates how these concepts can be applied to various business cases.

### Class Type and Duration
- Instructor-led
- 2 days

### Course Prerequisites
- Fundamental knowledge of the Qlik products (QlikView or Qlik Sense) and their related concepts.
- Basic understanding of the Qlik script, Qlik expressions, and functions.
- It is recommended that the students have also attended the business analyst and/or data architect core courses.
- Proficient with building applications, creating dashboards, and performing basic Extract-Transform-Load (ETL) transformations using the data load script.
- At least six months experience working with Qlik as a business analyst or data architect

### Audience
- Business Analysts
- Data Architects

### Skills Learned
- Implement front-end solutions with advanced Qlik expressions and calculations.
- Perform advanced set analysis operations, using advanced search expressions and element functions.
- Perform comparative analysis using alternate states.
- Use advanced Qlik functions and visualizations to perform Pareto (ABC), Basket, and Monte Carlo analyses.
- Explain inter-record functions and manual accumulations.
- Apply clustering and classification techniques to perform sales analysis. Use advanced Qlik scripting techniques to resolve data load issues.
- Use loops and nested loops to load and analyze multiple files.
- Apply multiple Load prefixes in various analysis case examples.
- Transform the data model by applying subroutines to allow script reusability.
- Create multiple QlikViewData (QVD) file layers.
- Optimize the data load process by applying incremental loads.
- Explain and apply debug processes.
- Use system error variables for debugging purposes.
- Discuss advanced technical concepts and solutions in real life scenarios.

### Course Outline
- Advanced set analysis
- Comparative analysis
- Advanced calculations
- Advanced transformations in script
- Incremental loads and QlikView Data (QVD) files
- Debugging and troubleshooting
**Qlik Sense Elective Topic:**

**Advanced Calculations and Expressions**

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Advanced Calculations and Expressions follows on from the Create Visualizations with Qlik Sense course and covers the effective and expanded usage of variables and expressions with Qlik Sense. Although simple expressions can be made with ease in Qlik Sense without any typing, more complex expressions require some thorough understanding about their structure. With complex expressions, considerations arise for maintainability and flexibility. Variables allow you to develop complex and easy to maintain expressions. This course enables you to get your questions answered.</td>
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<table>
<thead>
<tr>
<th>Class Type and Duration</th>
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</thead>
<tbody>
<tr>
<td>• Instructor-led</td>
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<td>• 1 day</td>
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<table>
<thead>
<tr>
<th>Course Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create Visualizations with Qlik Sense</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Business Analysts</td>
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<table>
<thead>
<tr>
<th>Support Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Exercise files</td>
</tr>
<tr>
<td>• Takeaway documents</td>
</tr>
<tr>
<td>• Related Qlik Continuous Classroom Modules</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Skills Learned</th>
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</thead>
<tbody>
<tr>
<td>• Utilizing string functions within an expression</td>
</tr>
<tr>
<td>• Defining and using variables in expressions</td>
</tr>
<tr>
<td>• Creating nested expressions and aggregations</td>
</tr>
<tr>
<td>• Using “set” expressions to define data sets</td>
</tr>
<tr>
<td>• Creating advanced set expressions</td>
</tr>
<tr>
<td>• Understanding performance implications</td>
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<table>
<thead>
<tr>
<th>Course Outline</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Introduction to string functions</td>
</tr>
<tr>
<td>• Working with variables</td>
</tr>
<tr>
<td>• Nested aggregations</td>
</tr>
<tr>
<td>• Introduction to set expressions</td>
</tr>
<tr>
<td>• Advanced set expressions</td>
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</tbody>
</table>
Qlik Sense Elective Topic:  
Qlik GeoAnalytics

Description
Qlik GeoAnalytics is an advanced suite of location intelligence tools that is made available as an add-on product to Qlik Sense. This course covers how to best utilize Qlik GeoAnalytics, including how to work with location-based data, how to leverage the variety of layer types, how to add multiple map layers, and how to perform geospatial operations like aggregate, geometric, lookup, and routing.

This course enables business analysts to leverage Qlik GeoAnalytics with their mapping and location based analytical needs.

Class Type and Duration
- Instructor-led
- 1 day

Course Prerequisites
Create Visualizations with Qlik Sense

Audience
- Business Analysts

Support Materials
- Exercise files
- Takeaway documents
- Related Qlik Continuous Classroom Modules

Skills Learned
- Understanding of Qlik GeoAnalytics
- Understanding configuration options
- Resolving location errors and data mismatches
- Configuring map layers and applying multiple layers
- Using the Qlik GeoAnalytics connector to configure and process geospatial operations

Course Outline
- Introduction to GeoAnalytics
- Creating Map Layers
- Configuring Aggregate Operations
- Resolving Location Errors and Data Mismatches
- Configuring Map Settings
Qlik Sense Elective Topic:
Big Data Solutions with Qlik Sense

**Description**
Big Data Solutions follows on from the Data Modelling for Qlik Sense course and explores the vision and capabilities of Qlik Sense for handling Big Data. With handling Big Data not only technical aspects are relevant, but also conceptual aspects come into play. While Qlik has various solutions for Big Data, including Direct Discovery, Incremental Load, On-Demand App Generation (ODAG), and using NoSQL data sources, this course will focus on Implementing On-Demand App Generation (ODAG). Students will first learn how to organize and extract data for analysis using QlikView Data (QVD) files, followed by how to develop and apply On-Demand App Generation (ODAG) solutions, including how to chain documents and how to limit the amount of data being loaded in-memory.

**Class Type and Duration**
- Instructor-led
- 1 day

**Course Prerequisites**
Data Modeling for Qlik Sense

**Audience**
- Data Architects

**Support Materials**
- Exercise files
- Takeaway documents
- Related Qlik Continuous Classroom Modules

**Skills Learned**
- Organizing extracted data for analysis in Qlik Sense using QlikView Data (QVD) files
- Apply On-Demand App Generation (ODAG) when developing Qlik Sense Enterprise apps
- Developing On-Demand App Generation (ODAG) document chains

**Course Outline**
- Working with QlikView Data (QVD) file
- Introduction to On-Demand App Generation (ODAG)
- Reducing the Amount of Data Loaded with On-Demand App Generation (ODAG)
- Document Chaining with On-Demand App Generation (ODAG)
# Qlik Sense Elective Topic:
## Advanced Scripting Capabilities

**Description**
Advanced Scripting Capabilities follows on from the Data Modeling with Qlik Sense course. This course covers advanced scripting capabilities including working with dates, solving data classification problems, handling problems associated with loading data from crosstables and generic databases, and learning to propagate values, generate accumulated amounts, and work with simulations. This course also covers creating and loading QlikView Data (QVD) files and implementing a QlikView Data (QVD) file layer structure for optimal application development and load performance.

<table>
<thead>
<tr>
<th>Class Type and Duration</th>
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<tbody>
<tr>
<td>Instructor-led</td>
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<tr>
<td>1 day</td>
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<table>
<thead>
<tr>
<th>Course Prerequisites</th>
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<tbody>
<tr>
<td>Data Modeling for Qlik Sense</td>
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<table>
<thead>
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<table>
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</thead>
<tbody>
<tr>
<td>Working with dates</td>
</tr>
<tr>
<td>Solving data classification problems</td>
</tr>
<tr>
<td>Controlling loop iterations and program flow</td>
</tr>
<tr>
<td>Generating values for character and numeric data</td>
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<tr>
<td>Converting null values</td>
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<tr>
<td>Creating and loading QlikView Data (QVD) files</td>
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<tbody>
<tr>
<td>Working with Dates in the Data Load Script</td>
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<tr>
<td>Classifying Data</td>
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<tr>
<td>Working with Crosstables and Generic Loads</td>
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<tr>
<td>Generating Missing Data</td>
</tr>
<tr>
<td>Working with QlikViewData (QVD) files</td>
</tr>
</tbody>
</table>

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Qlik Sense Business Analyst Certification

Description
The Qlik Sense Business Analyst Certification Exam tests your knowledge of creating and delivering Qlik Sense applications. This exam tests your ability to interpret business requirements, prepare the data, design the application user interface, build the user interface and deliver the application. Visit our [website](https://www.qlik.com) for more information.

Format
- Comprehensive scenario-based questions
- 50 multiple choice questions
- 2 hours

Audience
- Business Analysts

Exam Prerequisites
- Experience developing production-quality applications in Qlik Sense
- Experience creating dimensions, measures and objects for the master library
- Visualization and user interface design experience and understanding of design best practices

Benefits
With Qlik certification, you can benchmark your skills against an established and objective level of competency, as well as confirm your level of expertise. The program also helps to ensure consistency and quality of services and support.

Once you have earned your Qlik Sense Business Analyst certification, you are eligible to earn the [Qlik Sense SaaS Business Analyst](https://www.qlik.com) and [Qlik Sense SaaS Administrator Endorsements](https://www.qlik.com).

Visit our [website](https://www.qlik.com) for more information.

Exam duration and number of questions is subject to change.
For the latest information, search for “Qlik Sense Certification” on qlik.com.
Qlik Sense Data Architect Certification

Description
The Qlik Sense Data Architect Certification Exam tests your knowledge of developing and managing data models used to create Qlik Sense visualizations. This exam tests your ability to translate business requirements into technical requirements, to design, create and validate the data model, and build the master library. Visit our website for more information.

Format
- Comprehensive scenario-based questions
- 50 multiple choice questions
- 2 hours

Audience
- Data Architects

Exam Prerequisites
- Experience developing at least two production-quality applications in Qlik Sense
- Ability to write Qlik Sense LOAD scripts and validate data
- Basic understanding of Extract-Transform-Load (ETL)
- Create and use connectors to various data sources
- Understand the QlikView Data (QVD) files layer and architecture of the Qlik platform
- Ability to architect data to provide optimal performance
- Familiar with SQL and relational databases

Benefits
With Qlik certification, you can benchmark your skills against an established and objective level of competency, as well as confirm your level of expertise. The program also helps to ensure consistency and quality of services and support.

Once you have earned your Qlik Sense Data Architect certification, you are eligible to earn the Qlik Sense SaaS Data Architect Endorsement. Visit our website for more information.

Exam duration and number of questions is subject to change. For the latest information, search for "Qlik Sense Certification" on qlik.com.
Qlik Sense System Administrator Certification

Description
The Qlik Sense System Administrator Certification Exam tests your knowledge of managing a Qlik Sense environment. This exam tests your ability to set up the environment, configure access, configure apps, tasks and the content library, manage the environment, and troubleshoot problems and errors. Visit our [website](https://qlik.com) for more information.

Format
- Comprehensive scenario-based questions
- 50 multiple choice questions
- 2 hours

Exam Prerequisites
- At least 6 months experience as an administrator of a Microsoft Windows Server-based environment
- Experience working with Qlik Sense sites and the Qlik Management Console, to provide data and application governance, library maintenance, as well as user and application security
- Experience managing the policies and options that run the Qlik Sense servers and apps
- Experience creating rules and managing the visualization streams
- Knowledge of networking and Active Directory configuration, proxies, intermediate web servers, load balancers, etc.
- Familiarity with Windows tools and logs created (e.g., Event Viewer, Services Console, DCOM Console, Windows Registry)
- Experience using NSLookUp, Telnet, Ping, NetStat, Fiddler, and other browser tools to troubleshoot connectivity, interoperability, configuration, performance, etc.

Audience
- System Administrators

Benefits
With Qlik certification, you can benchmark your skills against an established and objective level of competency, as well as confirm your level of expertise. The program also helps to ensure consistency and quality of services and support.

Exam duration and number of questions is subject to change. For the latest information, search for “Qlik Sense Certification” on qlik.com.
Qlik Data Integration Courses and Certifications

Qlik Education
Foundations of Qlik Data Integration

Description
This training offering includes access to Qlik Replicate and Qlik Compose blended courses and Qlik Catalog, Qlik Enterprise Manager self-paced modules. [REGISTER HERE.](#)

Synchronizing Data with Qlik Replicate will provide a comprehensive introduction to the Qlik Replicate product, implementation considerations as well as ongoing operational know-how. This includes an overview of the product GUI, prerequisites for installation, configuring tasks, applying transformations, setting up notifications, using APIs, and monitoring the environment.

Provisioning Data with Qlik Compose will introduce the Qlik Compose product and its capabilities. This includes installation prerequisites, connection and authorization setup, reviewing the data model, defining mappings and any transformation needed. Also includes operational topics such as scheduling and monitoring.

These blended learning courses will include self-paced learning with theory and lab demonstrations as well as instructor-led, live webinars. Once enrolled in the course, access to the course content is immediate. No need to wait for an upcoming class schedule! Watch the recorded sessions when you are ready and attend a live instructor webinar to get answers to your questions. This course has an open registration schedule, and no defined start and end date. Upon completion of the course, students will receive a digital badge.

Class Type and Duration
- Blended learning - Students are provisioned access to the course for 12 months (365 days) from the course enrollment date.

Course Prerequisites
- None

Audience
- Data Architects
- Database Administrators
- Data Analysts

Course Outline

**Qlik Replicate**
- Qlik Replicate Overview
- Installing Qlik Replicate and Understanding the Data Folder
- Create a Source Endpoint in Qlik Replicate
- Create a Target Endpoint with Qlik Replicate
- Understanding Tasks and Task Settings in Qlik Replicate
- Understanding Transformations in Qlik Replicate
- Understanding Error Handling in Qlik Replicate
- Learn about Control Tables in Qlik Replicate
- Explore Data Types in Qlik Replicate
- Examine Notifications and the Job Scheduler in Qlik Replicate
- Explore Log Stream
- Logging and Troubleshooting Qlik Replicate

**Qlik Compose**
- Getting Started with Qlik Compose
- Qlik Compose for Data Warehouses
- Qlik Compose for Data Lakes
- Advanced Practice
- Additional Labs
Qlik Gold Client Training

Description
Gold Client classroom training is for project team members and includes an overview of the software, support access and portal and software security as well as a software demo, training to enable customer to copy additional data as needed, and access to Gold Client support portal containing all user guides and ability to submit support tickets. Contact us for scheduling and pricing.

Class Type and Duration
• Instructor-led
• 3 days

Course Outline
• Kickoff Meeting/Demo
• Hands-on Training Sessions
• Use Case Discussion
• Security Meeting
• Training Recap
• Data Validation Session

Audience
• Project Sponsor
• Project Manager
• System / Application Architect
• Administrator / Support Team
**Qlik Replicate Certification**

### Description
The Qlik Replicate Certification Exam measures your ability to design, manage, and troubleshoot within the Qlik Data Integration Replicate platform. Visit our [website](#) for more information.

### Format
- 60 multiple choice questions
- 2 hours

### Audience
- Data Engineers
- Database and Storage Admins
- System Admins
- Software Developers

### Exam Prerequisites
- At least one year of practical experience with the Replicate platform
- Expertise in using the platform to onboard different sources and address different targets
- Comprehensive understanding of what comprises the Replicate platform

### Benefits
With Qlik certification, you can benchmark your skills against an established and objective level of competency, as well as confirm your level of expertise. The program also helps to ensure consistency and quality of services and support.

Exam duration and number of questions is subject to change. For the latest information, search for "Data Integration Certification" on qlik.com.
Qlik Compose Certification

Description
The Qlik Compose Certification Exam measures your ability to design, implement, and support automated data warehouse and data lake solutions within the Qlik Data Integration Compose platform. Visit our [website](#) for more information.

Format
- 55 multiple choice questions
- 2 hours

Audience
- Data Warehouse Architect
- Data Lake Architect
- Data Engineer

Exam Prerequisites
- At least 2-3 years of experience implementing data warehouse and/or data lake solutions
- Familiarity with data warehouse architectures and all phases of the data warehouse development life cycle
- Ability to interpret business requirements into viable solutions

Benefits
With Qlik certification, you can benchmark your skills against an established and objective level of competency, as well as confirm your level of expertise. The program also helps to ensure consistency and quality of services and support.

Exam duration and number of questions is subject to change. For the latest information, search for “Data Integration Certification” on qlik.com.
Data Literacy and Analytics

Qlik Education
Today, data literacy is as important as reading or writing. But the world is facing a major skills gap. That's why we're on a mission to help people and organizations understand, analyze, and use data with confidence.

In our information-driven world, every individual needs to know how to transform data into actionable insights fast. And we mean every individual—students, entry-level employees, managers, C-level executives, and everyone in-between. Our goal is to give you the tools, learning, and strategies you need to achieve data literacy for all.

**Learn the new language of business**

The program delivers the following benefits for individuals and organizations:

**Data literacy for everyone**

Regardless of your role, skill level, or the BI tools you use, this program has something to offer—from data skill building to fostering a culture of data literacy in your organization.

**Make confident data-informed decisions**

Improve your decision-making skills by learning to ask the right questions from your data, interpret your findings, and take informed action.

**Gain an edge in the era of data**

Data literacy is a critical skill to develop a more effective workforce while also helping students become more attractive job candidates.

For more information and to get started: qlik.com/GetDataLiterate
Benefits
- Empower your users by providing them with the skills and motivation they need to make data-informed decisions
- Increase user adoption and ROI for your technology investments
- Train-the-trainer, leveraging best practices and proven methodology

Features
- Planning and Strategy Sessions: Advisory and Consulting on how to launch, maintain and measure the effectiveness of a data literacy program.
- Executive Briefing / Workshop:
  - What is data literacy? What is business impact of Data Literacy? How to motivate and incentivize employees to use data?
  - Participant pre and post assessment
  - Prescriptive student learning plans
  - Instructor-led classes
  - Participant office hours
  - Program assessment and evaluation

Delivery and Duration
- Virtual
- Blended Learning Experience (Online & Instructor-Led)
- 12-Weeks

Description
Organizations deploying Qlik’s Data Literacy Launch Services will benefit from an increased data literate organization, a culture better prepared and ready to use data, in addition, adopt data and analytical strategy, as a means of driving top and bottom-line performance. Working with Qlik’s Data Literacy advisors, organizations’ program leaders will develop the skills needed to launch, maintain and measure the impact of a data literacy program. Participants will have a better understanding of foundational data concepts, how to ask analytical questions, analytical techniques, a framework for making data-informed decisions and application of these skills and techniques in business scenarios.
# Data Literacy Program:

## Data Literacy Organization Benchmark Survey

### Description

Compare your organization against Qlik’s Corporate Data Literacy Index and obtain a baseline of your organization’s Data Literacy Skills (Human Capital), Data-Informed Decision-Making behaviors and Data Dispersion. Utilizing Qlik’s Data Literacy Survey, Chief Data Officers, Business Leaders, Enterprise Learning Leaders and Analytics Leaders will understand more about their employees’ skills & behaviors towards data, strengths & gaps and areas to prioritize & target.

### Benefits
- Benchmark yourself against Qlik’s Corporate Data Literacy Index of 600+ public facing organizations across industries and regions
- Identify gaps and strengths in data skills and behaviors across the organization
- Target and prioritize training and technology investments to drive data-driven behaviors

### Features
- Access to Qlik’s 50+ question Data Literacy Organization Survey
- Guidance on Executive target survey population
- Analysis of survey data
- Benchmark against Qlik’s Corporate Data Literacy Index
- Executive Readout
- Export of survey data

### Delivery and Duration
- Virtual
- 4-to-6 weeks
- 1-hour a week commitment by program stakeholder
Data Literacy Program:

Data Literacy Leadership Workshop

**Description**
Critical and analytical thinking are key skills in today’s data-driven world and help make effective leaders. Qlik’s Data Literacy Leadership Workshop is flexible being able to be delivered in one-day or two half-days, leaders will develop and enhance their ability to leverage data, and lead teams to leverage data through an immersive experience consisting of lectures, case study discussions, collaborative exercises and interactive experiential simulations incorporating teamwork and collaboration proving first-hand use with Data-Informed Decision Making.

**Class Type and Duration**
- Instructor-led
- 1 day or 2 half day

**Course Prerequisites**
None

**Audience**
Executives and Sr. Managers, who would benefit from a better understanding of how to leverage analytics in decision making

**Skills Learned**
- Value of Data Literacy to organizations
- Role of leadership in data and analytics
- Characteristics of a data-driven culture
- Utilize the four levels of analytics properly from a beginning
- How to drive positive behaviors for the use of data within your organization?
- What is data-driven process?
- Framework for making decisions with data
- Learning to ask good (analytical business) questions
- Developing stronger business KPIs Interpreting visualizations perspective
- Communicating with Data
- Data and Analytics Strategy

Qlik
Applied Data Analytics using Qlik Sense

Description
This intensive 15-week, blended learning course focuses on data analytics and data literacy, and the effective use in a Qlik Sense application. In addition, you will learn the fundamentals of building Qlik Sense apps, visualizations and design best practices. This unique delivery approach will provide a collaborative learning environment led by our expert instructors including shared experiences with other customers. This is a hands-on course which includes, live virtual instructor-led sessions, self-paced learning, interactive forum discussions, reinforcement quiz checkpoints, lessons and activities with data sets, business cases and an activity-building project due at the end of the course. By completing this course, you will learn topics relating to data analytics, data literacy, and data-informed decision-making. You will obtain knowledge on topics addressed in our Understanding Data Principles and Create Visualizations with Qlik Sense courses.

Class Type and Duration
- Blended Learning Course: Virtual Instructor-led Training + self-paced learning (English instruction only)
- 15-week course, with an average 4-hour weekly commitment including learning and activities
- Includes: Full-Access 12-month Qlik Continuous Classroom subscription and an e-copy of Kevin Hanegan's book, Turning Data into Wisdom: How We Can Collaborate with Data to Change Ourselves, Our Organizations, and Even the World.

Course Prerequisites
None

Audience
- Business Analysts
- Data Architects
- Business Users with a growth mindset who want to advance their skills data analytics and turn data into insights.

Skills Learned
- Identify the potential value that data analytics provides organizations
- Understand how analytics helps organizations gain insights from their data
- Differentiate the 4 components of an analytic framework
- Understand common use cases for analytics
- Define metrics that measure outcomes aligned to organizational strategy
- Differentiate between leading and lagging measures
- Evaluate whether metrics are balanced across the system
- Describe the characteristics of a Key Performance Indicator
- Determine which level of measurement given data belongs to
- Assess data formatting needed to answer analytic questions
- Determine correct aggregation methods to use based on your metric
- Identify proper data transformations required based on your data and your metric
- Determine the proper visualization based on the data and the question being asked
- Design and create visualizations in Qlik Sense
- Identify guidelines for choosing appropriate visual design elements
- Identify best practices for Qlik Sense visualization design
- Understand the various capabilities that can be used during diagnostic analytics
- Understand the key functionality required for diagnostic analytics using Qlik Sense
- Perform advanced analysis in Qlik Sense
- Leverage storytelling to visually communicate

Course Outline
- Week 1 – The Power and Potential of Data Analytics
- Week 2 - Asking Analytic Questions and Acquiring the Right Data
- Week 3 - Determining your Key Performance Indicators (KPIs)
- Week 4 - Understanding Data Fundamentals and Loading Data in Qlik Sense
- Week 5 - Choosing and Creating Appropriate Data Visualizations in Qlik Sense – Part I
- Week 6 - Choosing and Creating Appropriate Data Visualizations in Qlik Sense – Part II
- Week 7 - Applying Transformations, Calculations, and Expressions in Qlik Sense – Part I
- Week 8 - Applying Transformations, Calculations, and Expressions in Qlik Sense – Part II
- Week 9 - Utilizing an Analytics Framework
- Week 10 - Performing Diagnostic Analytics
- Week 11 - Applying the Human Element
- Week 12 - Uncovering Bias with Data
- Week 13 - Visually Communicating Insights and Storytelling in Qlik Sense
- Week 14 - Understanding Advanced Analytics
- Week 15 – Final project review and presentations.

Course Prerequisites
None

Audience
- Business Analysts
- Data Architects
- Business Users with a growth mindset who want to advance their skills data analytics and turn data into insights.

Skills Learned
- Identify the potential value that data analytics provides organizations
- Understand how analytics helps organizations gain insights from their data
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- Week 14 - Understanding Advanced Analytics
- Week 15 – Final project review and presentations.
Data Literacy Program:
Creating a Data Literate Organization

Description
Creating a Data Literate Organization is an introductory, instructor-led course designed to provide attendees with a strong understanding of the principles, culture, and skills needed to create a data literate organization.

Class Type and Duration
- Instructor-led
- 1 day

Course Prerequisites
Desire to learn and build key skills in data literacy, data and analytical culture, and decision making with data

Audience
Anyone who uses data to help make decisions in an organization.

Skills Learned
- Understand the key characteristics of data and analytical strategies
- Apply data literacy to organizations
- Apply data literacy to one’s own personal career
- Tie data and analytics to business goals and objectives
- Help an organization evolve its culture to succeed with data
- Grow trust within data and analytics
- Ask good questions of data to gain insight from data
- Overcome cognitive bias
- Construct sound business and analytical questions
- Drive curiosity within an organization
- Begin the process of building and utilizing data storytelling
- Create a culture of data literacy
- Utilize the four levels of analytics properly from a beginning perspective

Course Outline

Part 1 – Data Literacy Overview
- Current state of data in the world
- Data structure and trust within organizations
- Democratization of data
- Data and analytical strategy
- The four levels of analytics and associated roles in data and analytical strategy
- State of data literacy in the world
- Defining and learning data literacy and its characteristics

Part 2 – Data Literacy Culture
- Value of data literacy to organizations
- Role of leadership in data and analytics
- Key characteristics of a data literate culture
- Role of the Chief Data Officer

Part 3 – Data-Informed Decision Making
- Data-informed, decision-making framework
- Six-phase approach to making decisions with data
- Learning to ask good questions of data
- Applying mental models to decision making
Analytics:
Understanding Data Principles

Description
Understanding Data Principles is an introductory, instructor-led course focusing on beginning concepts in statistics and analytics, and their importance in the world today. This course provides learners an opportunity to explore various preliminary topics concerning why statistics and analytics are important in today’s data environment, allowing students to develop a foundation for strong analytical knowledge. In addition, this course will help organizations become more data literate, allowing them to differentiate themselves from their competition.

Class Type and Duration
• Instructor-led
• 1 day

Course Prerequisites
None

Skills Learned
• Increased knowledge of Data Literacy
• Increased knowledge regarding data and aggregations
• Understanding of the analytical mind-set
• Foundational thoughts of analytics: signal and noise, probability, and inference
• Purpose of distribution analysis, the standard deviation
• Stronger understanding of sampling and bias, including a look into polling
• Dive into hypothesis testing and false positive and false negatives errors
• A look into correlation and causation, including regression analysis

Audience
Anyone beginning in analytics and statistics, and for those already trained in these fields looking for a refresh.

Course Outline
• Data Literacy
• Data and aggregations
• Analytical mindset
• Signal and noise, probability, statistical inference
• Distributions and standard deviation
• Sampling and bias
• A/B testing and Type I and II errors
• Correlation vs causation
• Scatter plot analysis
• Regression analysis
# Data Literacy Program:

## Data Literacy Certification

### Description

The Data Literacy Certification Exam is a product-agnostic exam which measures your ability to interpret business requirements; understand and transform data; design, build, and interpret visualizations; and analyze, act on, and share results. To take the exam, visit [this page](#) in the Qlik Learning Portal (login with Qlik Account).

### Format

- Comprehensive scenario-based questions
- 70 questions
- 2.5 hours

### Audience

Anyone who works with data and wishes to measure their data literacy skills

### Exam Prerequisites

**Qlik Continuous Classroom:**
- All courses in the Overview of Data Literacy section
- All courses in the Data Fundamentals section
- All courses in the Data-Informed Decision-Making section
- Under the Analytical Techniques section, the Understanding Signal and Noise and Correlation vs Causation courses

**Books:**
- *The Functional Art* by Alberto Cairo
- *Data Visualization* by Andy Kirk

### Benefits

Validate your skills to read, work with, analyze, and argue with data.
## Analytics:

### Data Analytics Certification

#### Description

The Data Analytics Certification Exam measures your analytic and statistics knowledge, from a basic to advanced level. The exam is product-agnostic and covers four categories of analytics: Data Foundations, Foundational Analytics, Interpretation of Analytics, and Advanced Analytics. To take the exam, visit [this page](#) in the Qlik Learning Portal.

#### Format

- Comprehensive scenario-based questions
- 70 questions
- 2 hours

#### Audience

Recommended for Data Analysts and Data Scientists

#### Exam Prerequisites

**Qlik Continuous Classroom:**
- All courses in the Overview of Data Literacy section
- All courses in the Data Fundamentals section
- All courses in the Analytical Techniques section
- All courses in the Data-Informed Decision-Making section
- All courses in the Advanced Analytics section

Since there are many topics covered in this comprehensive exam, additional resources are recommended, for example the podcast, Data Skeptic.

#### Benefits

Validate your technical ability within the world of data, analytics, data science, and data literacy. The exam covers technical aspects of statistics and analytics, including the ability to use data visualizations appropriately.
QlikView Courses and Certifications

Qlik Education
# QlikView Course Overview

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<th>Self-Paced Learning</th>
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<tbody>
<tr>
<td><strong>Business User</strong></td>
<td><strong>QlikView Designer</strong></td>
<td><strong>Custom Application Training</strong> (bespoke on-demand)</td>
</tr>
<tr>
<td>Instructor-led and Virtual Instructor-lead Training classes are available.</td>
<td>On-demand, Instructor-led Training, Virtual Instructor-lead Training and customized special events are available.</td>
<td>Qlik Continuous Classroom courses are available.</td>
</tr>
<tr>
<td><strong>Business Analyst</strong></td>
<td><strong>Advanced Topics in Design and Development</strong></td>
<td><strong>Qlik Continuous Classroom for Business Analyst</strong></td>
</tr>
<tr>
<td><strong>Data Architect</strong></td>
<td><strong>QlikView Designer</strong></td>
<td><strong>Qlik Continuous Classroom for Data Architect</strong></td>
</tr>
<tr>
<td><strong>System Administrator or Enterprise Architect</strong></td>
<td><strong>QlikView Developer</strong></td>
<td><strong>QlikView Server Publisher</strong></td>
</tr>
<tr>
<td><strong>Solutions and best practices for common challenges. Specialized tasks related to job functions.</strong></td>
<td><strong>Advanced Topics in Design and Development</strong></td>
<td><strong>Qlik Continuous Classroom courses are available.</strong></td>
</tr>
</tbody>
</table>

## Self-paced Learning
Self-paced learning platform featuring video-based modules, exercises, and quizzes, and tools to collaborate with instructors and students.

## Instructor-led Training
This delivery method is a traditional classroom training approach, where our expert instructor leads a group of students through demonstrations and hands-on exercises.

## Blended Learning
Blended learning combines self-paced learning (theory, hands-on exercises, and demonstrations) and virtual instructor-led live webinars.
QlikView Designer

Description
Having the knowledge and understanding of the critical concepts and design components needed to create a QlikView document is essential to building effective and powerful QlikView documents. QlikView Designer is a scenario-based course that utilizes a business case scenario to lead the participant through the processes and steps needed to build a QlikView document. The course is a combination of lecture/demonstration followed by hands-on activities.

Class Type and Duration
- Instructor-led
- 2 days

Skills Learned
- Demonstrate basic knowledge of a QlikView data model in QlikView
- Explain how to best layout and design your QlikView application
- Explain basic use of QlikView sheet objects
- Identify, based on data provided, which chart will provide the best visual representation of data to the user

Course Prerequisites
- Basic knowledge of computer concepts
- Knowledge of Key Performance Indicators
- Recommended: Understanding Data Principles

Course Outline
- Get Started with QlikView
- Loading Data
- Visualizations
- Enhancing your document
- Adding extras
- Delivering & next steps

Audience
- Business Analysts
- Data Architects
QlikView Developer

Description
QlikView Developer is a must if you are building QlikView applications. Knowledge of the data model, creation of the proper data connections and scripting fundamentals are critical to creating QlikView applications that provide your organization with powerful business discovery tools. QlikView Developer provides you with an opportunity to learn by doing through a series of lectures and hands-on exercises focused on developing QlikView applications. Beginning with the QlikView environment and covering topics such as data modeling, synthetic keys and how to use the script editor, the Developer course will prepare you to take your QlikView applications to the next level. The course concludes with a business case where you can practice your skills in building a QlikView application from the beginning using identified key performance indicators.

Class Type and Duration
- Instructor-led
- 3 days

Course Prerequisites
- Recommended: QlikView Designer
- Recommended: Understanding Data Principles

Skills Learned
- Create a data model in QlikView
- Build a QlikView application
- Resolve data structure issues
- Access the Debugger
- Define the advanced uses of the script editor
- Use Transformative Functions in the script
- Discuss Synthetic Keys

Course Outline
- Development & Deployment
  - Connect, select and load
  - Loading data from the database
  - Synthetic keys
  - Basic data model and Table Viewer
  - Adding text data
  - Basic data transformation
  - Generating data in QlikView script
  - Scripting considerations
  - Master calendar
- Mapping tables
- Data model optimization
- Scripting and data model challenges
- Loading budget data
- Advanced calculations in sheet objects
- Metadata
- QlikView Data (QVD) file
- Performance optimization
- QlikView security

Audience
- Business Analysts
- Data Architects
# QlikView Server Publisher

## Description

Laying a strong foundation for QlikView is critically important for allowing your organization to better manage, monitor and deploy QlikView business discovery applications to business users. The QlikView Server Publisher course is for System Administrators to develop and sharpen their skills in product installations, deployment methods and security integration with the QlikView platform.

The course progresses from a basic, single-server installation to more advanced configurations involving QlikView Server and Publisher, including advanced scalability, connectivity and management of larger, more complex enterprise deployments.

## Class Type and Duration

- Instructor-led
- 3 days

## Course Prerequisites

- Hands-on experience with server technology

## Audience

- System Administrators
- Consultants responsible for QlikView Server implementations

## Skills Learned

- Understand the architecture and components of QlikView Server and Publisher
- Complete a standard installation and configure QlikView Server and Publisher on a single server
- Add, manage, distribute and secure QlikView applications
- Complete advanced administration tasks using a multiple QlikView Server and Publisher configuration
- Identify the configuration options for the clustering of QlikView Servers
- Identify tools that monitor and manage the QlikView Server Publisher environment
- Backup a QlikView site

## Course Outline

- Deployment types and installation
- Server components and architecture
- Managing Licenses
- QlikView server configuration – Qlik Management Console
- Security
- User and document management
- Sharing QlikView Objects
- QlikView Publisher
- Logging and monitoring and troubleshooting
- Advanced administration
- Multi-Server and distributed deployments
- Backup a QlikView Site
Advanced Topics in Design and Development

Description

Are you ready to take your skills to the next level? Advanced Topics in Design and Development is a specialized course that discusses advanced technical concepts including applying expressions and functions, writing data load script, and data modeling strategies. It provides hands-on examples and demonstrates how these concepts can be applied to various business cases.

Class Type and Duration

- Instructor-led or Virtual Instructor-led*
- 2 days

Course Prerequisites

- Fundamental knowledge of the Qlik products (QlikView or Qlik Sense) and their related concepts.
- Basic understanding of the Qlik script, Qlik expressions, and functions.
- It is recommended that the students have also attended the business analyst and/or data architect core courses.
- Proficient with building applications, creating dashboards, and performing basic Extract-Transform-Load (ETL) transformations using the data load script.
- At least six months experience working with Qlik as a business analyst or data architect

Skills Learned

- Implement front-end solutions with advanced Qlik expressions and calculations.
- Perform advanced set analysis operations, using advanced search expressions and element functions.
- Perform comparative analysis using alternate states.
- Use advanced Qlik functions and visualizations to perform Pareto (ABC), Basket, and Monte Carlo analyses.
- Explain inter-record functions and manual accumulations
- Apply clustering and classification techniques to perform sales analysis Use advanced Qlik scripting techniques to resolve data load issues.

Audience

- Business Analysts
- Data Architects

Course Outline

- Advanced set analysis
- Comparative analysis
- Advanced calculations
- Advanced transformations in script
- Incremental loads and QlikView Data (QVD) files
- Debugging and troubleshooting

Use loops and nested loops to load and analyze multiple files.
- Apply multiple Load prefixes in various analysis case examples.
- Transform the data model by applying subroutines to allow script reusability.
- Create multiple QlikViewData (QVD) file layers.
- Optimize the data load process by applying incremental loads.
- Explain and apply debug processes.
- Use system error variables for debugging purposes.
- Discuss advanced technical concepts and solutions in real life scenarios.
QlikView Business Analyst Certification

Description
The QlikView Business Analyst Certification Exam focuses on the user interface design of QlikView applications. The certification is suggested for all roles involved in the approach, design and layout of the QlikView application user interface. This exam gauges your ability to gather and interpret requirements, identify and analyze data sources and design and develop the application user interface. Visit our [website](#) for more information.

Format
- Comprehensive scenario-based questions
- 50 multiple choice questions
- 2 hours

Audience
- Business Analysts

Benefits
With Qlik certification, you can benchmark your skills against an established and objective level of competency, as well as confirm your level of expertise. The program also helps to ensure consistency and quality of services and support.

Exam Prerequisites
- Basic knowledge of Business Intelligence, reporting, data analysis
- Experience working with QlikView to design applications
- Visualization and user interface design experience

Exam duration and number of questions is subject to change. For the latest information, search for “QlikView Certification” on qlik.com.
# QlikView Data Architect Certification

## Description

The QlikView Data Architect Certification Exam tests the technical skills necessary to develop (design and script) and deploy QlikView applications. The exam focuses on the technical aspects of developing a QlikView application and is suggested for those in technical roles such as sales engineering, support and implementation. This exam measures your ability to gather and interpret requirements, identify and analyze data sources, create the associative data model, design and develop the application user interface and deliver the QlikView application. Visit our [website](https://www.qlik.com) for more information.

NOTE: Passing the QlikView Data Architect exam grants you both the Data Architect and Business Analyst certifications.

## Format

- Comprehensive scenario-based questions
- 60 multiple choice questions
- 2 hours

## Audience

- Business Analysts
- Data Architects

## Exam Prerequisites

- Advanced knowledge of Business Intelligence, reporting, and/or data analysis
- Knowledge of SQL and/or other scripting languages, data modeling, data visualization and advanced QlikView functions
- Practical experience working with QlikView to design and develop applications
- User interface design experience

## Benefits

With Qlik certification, you can benchmark your skills against an established and objective level of competency, as well as confirm your level of expertise. The program also helps to ensure consistency and quality of services and support.

Exam duration and number of questions is subject to change. For the latest information, search for "QlikView Certification" on qlik.com.
QlikView System Administrator Certification

Description
The QlikView System Administrator Certification Exam confirms you have the appropriate technical infrastructure knowledge, perform administrative tasks, troubleshoot problems and errors, and the skills and experience to support QlikView deployments. It also verifies that you understand the best approaches to set up and run QlikView Server and Publisher installations in complex IT environments.

The certification is suggested for IT system administration professionals. Visit our website for more information.

Format
• Comprehensive scenario-based questions
• 60 multiple choice questions
• 2 hours

Audience
• System Administrators

Exam Prerequisites
• Experience working with QlikView Server and Publisher
• Knowledge and experience with Microsoft Windows Server based environments, Windows Firewall, Windows IIS and IIS Management Console
• Experience with tools to troubleshoot connectivity, interoperability, configuration and performance, such as nslookup, telnet, ping, netstat, etc.
• Basic SQL and ODBC/OLEDB connections
• Windows Services Applet
• Knowledge of basic NTFS rights and Windows Network file share setup

Benefits
With Qlik certification, you can benchmark your skills against an established and objective level of competency, as well as confirm your level of expertise. The program also helps to ensure consistency and quality of services and support.

Exam duration and number of questions is subject to change. For the latest information, search for “QlikView Certification” on qlik.com.
Programs

Qlik Education
Qlik Skills Assessment

Description

Don’t know where to start with your training? The Qlik Skills Assessment is a complimentary resource for all users that helps you quickly and easily evaluate your ability to design, develop, or administer Qlik applications. Upon completing the free assessment, you’ll receive an email with a personalized recommendation for the training courses that will help you expand your skills. Test your skills today!

Benefits

• Understand where you are on your Qlik learning journey for free
• Determine which Qlik training class to begin with, based on your current skills
• Measure the skill level of your team and determine where there are gaps
• Take the assessment multiple times
• Measure progress before and after training

Features

• Available for Qlik Sense, Data Literacy and Data Analytics
• Select the role that best fits what you do: Business Analyst, Data Architect and System Administrator
• Take the test at qlik.com/skills-assessment
• Receive custom training plan with recommended courses to help you further develop your Qlik skills
• Team assessment also available (contact your local training manager to schedule)
Custom Application Training

Description
Custom Application Training is designed specifically for business users and delivers everything you need to ensure they are ready to start using Qlik as quickly and effectively as possible. With custom training designed for your Qlik applications, your organization increases application adoption and the overall value of your investment in Qlik. For more details on the program, please visit our Custom Application Training page. For questions, contact us.

Benefits
- Empower your users by providing them with the skills and motivation they need
- Increase user adoption and ROI for your application
- Leverage expert training resources to make your application highly relevant to your users

Features
- Learning consultant and instructional designer work with you throughout the engagement, from training design through rollout
- Customized training videos and reference materials designed specifically for your Qlik application
- Launch kit including best practices guide and communication templates for launching your training program

Looking for Customized business user training and tailored training workshops delivered by Qlik Instructors? Business User Accelerator Package might be the right fit for you.
To Learn more, contact us.
Qlik Academic Program

Description

The bar is rising when it comes to success. Students preparing for careers in today's challenging, global, data-driven environment need to know more. They're required to have exceptionally strong analytical and data literacy skills, plus the right tools to keep pace with rapid change and faster decision making. Our Qlik Academic Program meets personal and professional needs, giving students and educators must-have resources to succeed. Both take advantage of the most up-to-date data analytics curriculum, education, training, and platform. Our program extends to qualified university educators, students, and researchers interested in discovery and generating insights using free Qlik software and resources to become the next generation of experts leading with data. To apply for the program, visit our Academic Program website. For questions, please contact academicprogram@qlik.com.

Benefits

- We help students advance their analytical and data literacy skills within every academic discipline.
- We help educators deliver a richer learning experience by providing complimentary, powerful tools and resources.
- We help universities improve the value of their programs and stay competitive in a fast-paced, data-driven environment.

Features

Joining the program grants access to the following for free:

- Access to Qlik Sense Business valid for one year
- Access to the Qlik Continuous Classroom online learning content
- Earn a Qlik Sense Qualification by applying your skills and testing your knowledge. Receive a printable certificate and a digital badge
- Data Analytics curriculum featuring lecture notes, on-demand videos, handouts, activities and a real-world, interactive business use case
- Access to Qlik Community Academic Program Space, a forum for educators and students to access resources, collaborate with others and share experiences
- Customer support

Program Qualifications

The Qlik® Academic Program is open to any accredited university-level institution worldwide. Participation will be considered for:

- Educators and students using Qlik for academic purposes within a qualified academic institution.
- Researchers using Qlik for academic research, involving students associated with a qualified academic institution. The research may not be funded by grant money, nor can it be used for profit. Participants may not share their software with anyone outside of the research assignment, including the university administration.
To learn more about our education offerings or to register for a course, go to qlik.com/training.

Please contact us for additional information.