

# Alteryx Designer Expert Certification Exam Prep Guide





# Earning your Designer Expert Certifications takes you to further...

The world is full of dirty data and complex problems. Luckily, there are analytic adventure seekers like you who want to explore all that Alteryx Designer holds. Whether you're brand-new or a seasoned veteran, the Alteryx Certification Program provides you with ways to continue learning and a place to prove your Alteryx analytic skills.



The Designer Expert exam is designed to help you prove your skills and set you apart.

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# Exam Overview

In a platform with infinite possibilities, only a select few have ever achieved the rank of Expert. Make yourself stand out from the crowd with the Alteryx Designer Expert Certification, created to test every area of your Designer knowledge. This comprehensive, performance-based exam will build upon the elements of the Advanced Designer exam, pushing your problem-solving capabilities to their limits. For those who pass awaits the prestigious honor of being Alteryx Designer Expert Certified.

**AUDIENCE:** Anyone who is currently Advanced Certified

**EXPERIENCE LEVEL:** Expert **PRICE:** \$150 USD per attempt

**REGISTRATION:** User and Registration Guide

TIME ALLOTTED: 3 hours

**VERSION:** Alteryx Designer 2023.1

ATTEMPTS: You must wait 2 months between your first and second attempt and 3 months between

subsequent attempts

**EXAM TYPE:** Online, proctored, and performance-based

**QUESTIONS: 7** 

POINT VALUES AND QUSTION TYPES: 10 points / question, partial points are not awarded

**ALLOWED RESOURCES:** This exam is "open book," and we encourage you to be familiar with resources that are permitted for use during the exam: content on Alteryx Community, Alteryx Help Documentation, information on public websites, and sample workflows and other in-Designer resources.

**PROHIBITED RESOURCES:** You may not bring or use your own reference workflows or written notes or access any resources that are not available publicly. Any resource that requires you to log in to an account is not permitted, apart from the Alteryx Community.

**POLICY VIOLATIONS:** You may not receive assistance from another person, allow another person to take the exam on your behalf, plagiarize any exam answers, share exam content, create more than one account for additional exam attempts, or use unauthorized publications of exam answers. Review the Alteryx Certification Agreement and Policies for more details. Policy violations will result in removal of certifications and a possible ban from the Alteryx Community.

**RECERTIFICATION:** The Expert certification expires after 2 years. You may retake and pass the Expert exam OR any Master exam to renew your Expert certification.





# Performance-Based Exam Format

The exam is a performance-based assessment that allows you to prove your skill level and critical-thinking abilities in real-world scenarios. Certifications based on performance-based assessments are highly valuable because they test your ability to fully leverage a product to solve complex problems for an organization.

### **Exam Format**

The exam consists of seven real-word scenarios. In order to complete each scenario, you will perform a series of tasks in Designer. In addition to your Designer knowledge and skills, the scenarios test your critical-thinking and problem-solving abilities as you decide how to approach and solve each scenario. Instead of selecting a single answer, you demonstrate your solution to the scenario through the workflow and output files you create.

The performancebased format of the exam allows you to do what you do best: create awesome solutions in Designer.

## Exam Delivery

The exam is delivered in a browser-based Windows virtual environment that has been configured especially for the exam. The environment has Alteryx Designer installed on it, as well as all the starting files and instructions needed to complete each scenario. The computer you use to take the exam needs to meet specific requirements to ensure the exam can be delivered properly. Refer to the User Guide for specific requirements.



# Exam Outline

The Alteryx Designer Expert exam measures your ability to use the platform to solve complex analytics problems. The exam builds on the knowledge and skills assessed in the Advanced exam and widens the breadth of concepts covered to include all aspects of Designer. You should have a comprehensive knowledge of Designer and the ability to use Designer to perform complex tasks efficiently and effectively. Refer to the topics and tasks below for an overview of what may be covered on the exam.

### **In-Database Analysis**

- Create new in-database connection strings
- Connect to SQL database tables
- Stream data into an in-database workflow
- Analyze data using in-database tools and appropriate SQL syntax
- Change data types and sort data in-database
- Create and update tables in the database

### **Predictive Analysis**

- Investigate and prepare data for analysis
- Identify suitable variables for predicting a target variable
- Select predictor variables that fit given criteria
- Create training and validation datasets
- Select appropriate algorithms to model datasets
- Train models
- Compare models
- Interpret model reports
- Score new data with trained models
- Classification
- Regression
- Time series
- Optimization

### **Spatial Analysis**

- Construct and manipulate spatial objects
- Establish and quantify spatial relationships between objects
- Use spatial relationships to create new spatial objects
- Conduct complex, multistep spatial area analysis
- Leverage spatial data to determine optimal routing and delivery paths
- Evaluate spatial relationships to calculate spatial coverages

### **Analytic Apps & Macros**

- Create complex batch and iterative macros
- Create chained applications
- Create complex, dynamic applications with cascading logic and conditional functionality
- Troubleshoot and optimize provided macros
- Create an analytic application from a provided workflow

### Reporting

Create and output dynamic, batched reports with the following elements:

- Headers and footers
- Tables and charts
- Images and text
- Specific layout criteria
- Report maps



# Exam Preparation

The best way to prepare for a performance-based assessment is through practical application of your skills. Nothing can replace the many hours you've spent working through complex scenarios in your professional work. These resources can help strengthen your skills, especially in areas you may not use regularly on the job.



### WATCH:

- What is Time Series Forecasting? (Data Science Learning Path)
- <u>Preparing Time Series Data</u> (Data Science Learning Path)
- ETS and ARIMA (Data Science Learning Path)
- <u>Selecting and Scaling Models</u> (Data Science Learning Path)
- Time Series Modeling

### **READ:**

- How to Use the ARIMA Tool
- How to Use the ETS Tool
- Champagne Analytics: A Time Series Tutorial
- Back to the Future: ARIMA and Forecasting with Covariates

### SOLVE:

- 2019 Grand Prix US Heat 1
- When Will Community Hit 1,000,000 Posts

### Ways to Prepare:



Watch training videos and Interactive Lessons



Read blogs, articles, and documentation



Solve Weekly Challenges



# REGRESSION AND CLASSIFICATION

### **WATCH:**

- Predictive Modeling (Data Science Learning Path)
- Predictive Analytics Fundamentals (Data Science Learning Path)
- Creating a Predictive Model (Data Science Learning Path)

### **READ:**

- What is a Confusion Matrix?
- Holdouts and Cross-Validation: Why the Data Used to

**Evaluate Your Model Matters** 

- Tool Mastery: Score Tool
- Model Comparison Tool
- Cross-Validation Tool
- Data Preparation and Investigation
- Using the Data Investigation Tools
- Tool Mastery: Association Analysis

Exam Tip: Quickly read through all scenarios at the beginning of the exam. Start with the scenario you're most confident in and go from there.



### **WATCH:**

- Prescriptive Optimization
- Flex Your Prescriptive Optimization Muscles

### **READ:**

- Tool Mastery: Optimization Tool
- Legolytics Optimizing Cost
- Prescriptive Analytics: Unleash the Optimization Tool

### **SOLVE:**

• Optimized Flower Arrangements





### **WATCH:**

• In-Database Workflows

### **READ:**

- How Do the In-Database Tools Work
- In-Database Overview
- Connect In-DB Tool
- Join In-DB Tool
- Formula In-DB Tool

### **LEARN AND PRACTICE SQL WITH W3SCHOOLS:**

- SELECT statement
- WHERE clause
- CASE statement
- Wildcards

### **SQL Functions:**

- CAST
- CONVERT
- FORMAT
- DATEDIFF
- ISNULL

Exam Tip: When beginning a scenario, carefully read the instructions in their entirety. Starting to work on the scenario before reading it all the way through may lead to the wrong approach and wasted time





### **WATCH:**

- Reporting Interactive Lessons
- Not Your Standard TPS Report

### **READ:**

• Tool Mastery: Interactive Chart Tool

### **SOLVE:**

- Take a Look, It's in a Book
- Cats and Dogs
- The Truth is Out There



### **WATCH:**

- Analytic Applications Interactive Lessons
- Chained Applications

### **READ:**

- Tool Mastery: Radio Button Tool
- Tool Mastery: Check Box Tool
- Tool Mastery: Drop Down Tool

### **SOLVE:**

- Getting Into the Weeds
- Let's Get Crafty
- Personality Quiz
- Tire Size Calculator
- Gotta Catch em All
- Ideal Gases Don't Exist

Exam Tip: Each scenario is a complex problem that requires multiple steps to solve. Pay attention to the details of the scenario so you don't accidentally leave out an important step or solution requirement.





### **WATCH:**

- Macros Interactive Lessons
- Thinking Like a Programmer with Advanced Macros
- Advanced Macro Development

### **READ:**

- Tool Mastery: Control Parameter Tool
- Macro Development: Iterative Macros
- Conditional Processing with Detours

### **SOLVE:**

- Every Vote Counts
- Troubleshooting a Broken Macro
- Rectangle Tangle
- A Not so Wild Wildcard
- Prove the Birthday Paradox

Exam Tip: We suggest reviewing all the prep resources before taking the exam. They may even come in handy as resources to use during the exam!



### **WATCH:**

- Spatial Interactive Lessons
- Spatial Analytics for Intermediate Users

### **SOLVE:**

- Market Overlap
- US Grand Prix Prelims: NASA Location Analysis
- Know Your Boundaries
- **Updating Brazil**
- <u>Hedge Detection</u>
- Spatial County Coverage



# **Appendix**

**Alteryx Academy** – The Academy team provides Training content and programs to help the Alteryx Community users become accomplished and highly skilled Alteryx Designer users.

**Alteryx Certification Homepage** – The Certification page reflects the user's specific information; all available certifications will be listed as well as FAQ and Prep guides

**Alteryx Support** – Team within Alteryx that provides Standard, Advanced, and Premium levels of support to the Alteryx Community. Users are able to submit a case, read articles, and access helpful documentation for no cost.

**Certification** – Achievement earned by an individual to verify their legitimacy and competence to perform a job. A certification from Alteryx refers to a passing score on one of the full certification exams.

**Credly** – A well-known digital badge management software. It's an end-to-end solution for creating, issuing, and managing digital credentials. Every certification within our portfolio has a Credly badge associated with it to be shared virtually. Credly is also the home of our pdf certificates.

**Micro-Certification** – Achievement earned by an individual to verify their legitimacy and competence to perform a job. A micro-certification from Alteryx refers to a passing score on one of the smaller certification exams.

**Open Book** – Exam is not proctored, and test taker is allowed to use training, notes, and resources listed in this prep guide.

**Question types**: Multiple Choice – One Correct answer, Multiple Select – At least two correct answers and one incorrect answer, Matching, Practical Application - Questions in the practical application section gauge your ability to use the tools above to solve problems. Practical application questions require you to connect to a provided data set in Alteryx Designer to solve the problem.