# Alteryx Machine Learning Fundamentals Micro-Credential Exam Prep Guide



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# Start Your Analytics Superhero Journey Here

The world is full of dirty data and complex problems. Luckily, there are analytic superheroes like you who harness their Alteryx powers for good. Whether you are 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 Alteryx Machine Learning Fundamentals Micro-Credential is designed for analysts who would like to demonstrate basic knowledge about machine learning concepts and advance their career using machine learning.



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## Exam Overview

The Alteryx Machine Learning Fundamentals Micro-Credential tests your knowledge of basic machine learning concepts. In this exam, you will demonstrate an understanding of key terms and concepts in machine learning, when to use machine learning, and how to prepare data for modeling.

**AUDIENCE:** Experienced analysts

**EXPERIENCE LEVEL:** Beginner knowledge of

machine learning

**PRICE:** Free

**EXAM TYPE:** Online, on demand

TIME ALLOTTED: 1 hour

**VERSION:** The exam does not require using Alteryx

Designer

**ATTEMPTS:** 1 attempt every 7 days

**QUESTIONS: 40** 

**QUESTION TYPES:** Multiple-choice, multiple-

response, and matching

The Alteryx Machine
Learning Fundamentals
Micro-Credential exam is
designed to help you
validate your knowledge,
skills, and abilities. It is free,
online, on demand, and
open book.

**POINT VALUES:** 1 point each for multiple-choice, multiple-response, and matching questions. Partial credit is awarded for multiple-response and matching questions.

**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, and information on public websites, as well as sample workflows and other resources found in Designer.

**PROHIBITED RESOURCES:** You may not receive assistance from another person, allow another person to take the exam on your behalf, plagiarize any exam answers, or use unauthorized publications of exam answers. Review the <a href="Alteryx Certification Agreement and Policies">Alteryx Certification Agreement and Policies</a> for more details.

**RECERTIFICATION:** The Alteryx Machine Learning Fundamentals Micro-Credential expires after 2 years. To renew your certification, you must retake the exam. No other Alteryx Certification exams will renew your Machine Learning Fundamentals Micro-Credential.

## Exam Outline

The exam measures your knowledge and skills related to the following objectives:

#### I. Machine Learning Concepts: 40%

- 1. Demonstrate an understanding of key terms used in machine learning.
- 2. Assess the appropriate machine learning model type to use based on the type of problem.
- 3. Identify when to use machine learning and outline the machine learning process.
- 4. Identify the Alteryx product best suited for a specific purpose.

#### II. Data Preparation and Analysis: 35%

- 1. Explain how to handle missing values in a dataset.
- 2. Describe how to prepare datasets for modeling.
- 3. Summarize the characteristics and statistical properties of a dataset suitable for machine learning.

#### III. Evaluation and Interpretation of Models: 25%

- 1. Demonstrate how to evaluate a machine learning model.
- 2. Explain machine learning model tuning and interpret an automated machine learning (AutoML) model.

# Steps to Certification Success

#### **LEARN**

- 1. Begin with the interactive lesson <u>Defining Data</u>. This lesson eases you into a deeper understanding of what counts as data.
- 2. Start working through the <u>Machine Learning interactive lessons</u>. This material introduces fundamental concepts in machine learning including how to ask a machine learning question, prepare data for modeling, and evaluate models.
- 3. Continue with the <u>Data Science Learning Path</u>. The interactive lessons and hands-on exercises in this learning path cover machine learning and data science concepts in more detail.

#### **PREPARE**

- Review the exam outline to understand exactly what is on the exam, gauge your current understanding and skill level, and identify areas where you might need extra review and study.
- 5. Explore the Alteryx Community Analytics and Data Science blogs.



#### **TEST**

6. <u>Take the exam</u>. Do not worry if you do not pass on your first try! **Use the time before your next** attempt to review the prep material and the prep guide.

Passing the exam is not the end—it is just the beginning. To continue your certification journey, consider the other introductory certifications: Alteryx Foundation Micro-Credential and the Alteryx Designer Core Certification. Also consider sharing your knowledge on the Alteryx Community or join a User Group.

# Test Tips



## Read Carefully

Read each question carefully before you answer. The details matter! Read twice and solve once.



#### **Use Your Resources**

Search for answers using Alteryx Community, Help Documentation, and internet browsers.



#### Pace Yourself

Spend up to 90 seconds on each question. If you finish early, go back and check your answers. Use the full hour.



## **Answer Every Question**

In the exam platform, use the **Bookmark** feature to flag questions you would like to come back to and review later. Select **See all questions** to review all unanswered and bookmarked questions.



### Reflect, Review, Refine

After the exam, reflect on the tools and topics that you were unsure about. Review the category results you receive at the end of the exam. Refine your skills and never stop learning.

# Exam Prep Resources

## Interactive Lessons: Defining Data

The <u>Defining Data interactive lesson</u> defines data to demystify exactly what counts as data these days. In this lesson, you examine common filetypes and datatypes before touching on metadata. You also review common visualizations and the benefits they provide for sharing your findings. This lesson is a cornerstone of understanding basic data analytics and provides an excellent foundation for more advanced data science and machine learning concepts.

## Interactive Lessons: Machine Learning

Start working through the <u>Machine Learning interactive lessons</u>. This material will introduce fundamental concepts in machine learning and how to ask a machine learning question, prepare data, and evaluate models.

## Data Science Learning Path

Continue with the <u>Data Science Learning Path</u>. The interactive lessons and hands-on exercises in this learning path will cover machine learning and data science concepts in more detail. Focus on the following introductory lessons within this learning path:

- Predictive Modeling
- Predictive Grouping
- What is Time Series Forecasting?

## Weekly Challenges

<u>Weekly Challenges</u> are a great way to learn Designer and apply your conceptual knowledge. While there are no practical application questions on the Machine Learning Fundamentals exam, the more you work with data and applied machine learning concepts, the more you will learn!

There are over 300 Weekly Challenges organized by skill level and topic. Please note that some of the following challenges are more advanced but even exploring the associated datasets is good practice!

Weekly Challenges: Predictive Analysis practice



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## **Alteryx Certification Program**

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Ready to begin preparing for an exam? Check out the <u>Exam Prep</u> area to access prep guides, practice tests, and learning suggestions.

**Get Certified** 

As a global leader in analytics automation, Alteryx unifies analytics, data science, and business process automation in one end-to-end platform to accelerate digital transformation. Organizations of all sizes, all over the world, rely on the Alteryx Analytic Process Automation Platform to deliver high-impact business outcomes and rapidly upskill their modern workforce.